CCCS GUIDELINES ON MARKET DEFINITION

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1 INTRODUCTION

1.1 These guidelines provide the analytical framework on how the Competition and Consumer Commission of Singapore ("CCCS") may define markets when investigating possible infringements of the section 34 and 47 prohibitions under the Competition Act (Chapter 50B) ("the Act"). These guidelines should be read together with the *CCCS Guidelines on the Substantive Assessment of Mergers 2016* for the purposes of market definition relating to section 54 prohibitions.

1.2 Market definition and the measurement of market shares are important in the process of determining:

- whether agreements, decisions between associations of undertakings or concerted practices have as their object or effect an appreciable prevention, restriction or distortion of competition in a market under the section 34 prohibition, or
- whether an undertaking with substantial market power amounting to a dominant position **in a market** has abused its market power under the section 47 prohibition.

Once the relevant market has been defined, market shares can be measured. The other aspects of competition analysis, including the potential for new entry into the market, will then be considered.

1.3 In cases where it may be apparent that an activity is unlikely to have an appreciable adverse effect on competition, or that the undertaking under investigation does not possess substantial market power within any sensible market definition, it would not be necessary to formally establish a definition of the market.

1.4 These guidelines are not a substitute for the Act, the regulations and orders. They may be revised should the need arise. The examples in these guidelines are for illustration. They are not exhaustive, and do not set a limit on the investigation and enforcement activities of the CCCS. In applying these guidelines, the facts and circumstances of each case will be considered. Persons in doubt about how they and their commercial activities may be affected by the Act may wish to seek legal advice.

1.5 A glossary of terms used in these guidelines is attached.

Purpose of Market Definition

1.6 Market definition is the first step in a full competition analysis. It is also a key step in providing the framework for analysis through identifying the competitive constraints acting on a seller of a given product.

1.7 Market definition can be used to identify relatively quickly, cases where agreements do not have an appreciable adverse effect on competition or where undertakings clearly will not possess market power because they face significant competition. Where an agreement involves undertakings, whose combined share of the relevant market is low, the agreement is unlikely to raise competition concerns relating to the section 34 prohibition, unless it contains for example, price-fixing, bid-rigging, market-sharing, or output limitations. An investigation relating to the section 47 prohibition of an individual undertaking whose market share is low can normally be closed at an early stage unless other relevant factors provided strong evidence of dominance. This is because an undertaking with low market share will usually not possess substantial market power.

2 MARKET DEFINITION

Market

2.1 A market is commonly understood to consist of both buyers and sellers of a product in a certain geographical area. However, the term "market" has a specific meaning for competition law purposes. The essential task in market definition is to define all the products on the demand side that buyers regard as reasonable substitutes for the product under investigation ("focal product"), and then to identify all the sellers who supply the focal and substitute products, or who could potentially supply them – this is the relevant market. This exercise of market definition includes defining the geographical reach of the relevant market, which may extend beyond the area under investigation and in which the focal product is sold ("focal area").

2.2 The **hypothetical monopolist test** ("the test") is a conceptual approach used to define markets. The test (in essence, a "price-elevation" test) tries to identify all the products that buyers regard as reasonably substitutable for the focal product. Once those substitute products are identified, all those undertakings that could potentially supply the focal product and substitutes can be identified. These are the competitors that actually constrain the exercise of market power.

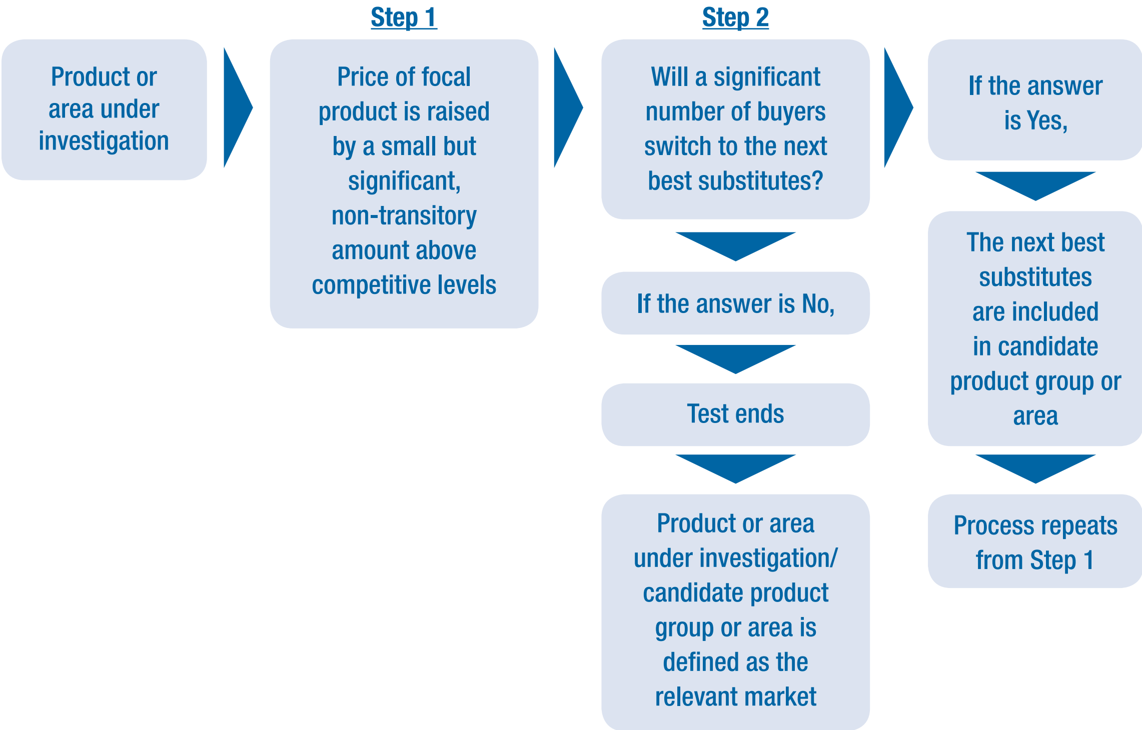
2.3 In essence, the test seeks to establish the relevant market by including in the market all the products and their sellers that constrain the exercise of market power and then, determine if a hypothetical monopolist that controls this defined market would be able to act without constraint.

2.4 The relevant market is therefore the smallest product group (and geographical area) such that a hypothetical monopolist controlling that product group (in that area) could **profitably** sustain "supra competitive" prices, i.e. prices that are at least a small but significant amount above competitive levels. That product group (and area) is usually the relevant market for competition law purposes.

2.5 If, for example, a hypothetical monopolist over a candidate product group could not profitably sustain supra competitive prices, then that product group would be too narrow to be a relevant market. If, on the other hand, a hypothetical monopolist over a subset of a candidate product group could profitably sustain supra competitive prices, then the relevant market would usually be narrower than the candidate product group.

2.6 The test starts with a narrow definition of the product and geographic market. This would normally be the focal product or the area in which the focal product is sold. Using this narrow definition, the following question is asked: whether a significant number of buyers will switch to other products (or areas), that are the next best substitutes, if the price of the focal product is raised by a small but significant, non-transitory amount above competitive levels. If the answer is yes, these other products (or areas) should be included in the definition of the market because these other products (or areas) potentially constrain the exercise of market power. The group of products (or areas) is widened to include those products (or areas) and their sellers and the same question is asked again.

2.7 This question is repeated and the market is widened until the point is reached when a significant number of buyers do not respond to the small but significant increase in price by switching to other products (or areas). The relevant market containing the principal constraints on the exercise of market power is then used to assess the impact of that agreement or conduct under investigation, or to assess whether an undertaking is dominant in that market. The following diagram provides an illustration of this process.



2.8 An increase of about 10% above the competitive price will be used for the test. The actual percentage increase used may vary depending on the particular facts of each case.

2.9 It should be emphasised that defining a market in strict accordance with the test's assumptions is rarely possible. Even if the test could be conducted precisely, the relevant market is in practice no more than an appropriate frame of reference for competition analysis. The test provides a conceptual framework within which evidence on competitive constraints can be gathered and analysed.

Practical Issues

2.10 In practice, defining a market requires an assessment of the various types of evidence and the exercise of judgement. It may not be necessary to define the market uniquely, where there is strong evidence that the relevant market is one of a few plausible market definitions, and the assessment on competitive impact is shown to be largely unaffected whichever market definition is adopted.

2.11 A market definition should normally contain two dimensions: the product market and the geographic market. It is often practical to define the relevant product market first and then to define the relevant geographic market.

3 THE PRODUCT MARKET

3.1 Defining the relevant product market involves determining which products would be regarded by buyers as substitutes for the focal product on the demand side and then determining, on the supply side, who currently supply such products and also who could potentially supply them at short notice by, for example, switching production from other products.

Demand-Side

3.2 Product market definition starts by considering the products which the parties to an agreement produce, or the products which are the subject matter of an abuse of dominance complaint. The effects of a price increase above competitive levels are considered in order to determine the relevant market for these products.

3.3 The hypothetical monopolist test will usually be carried out using a 10% increase in price above competitive levels. This figure may vary depending on the facts of each case. The price increase must be large enough that a response from buyers is reasonably likely, but not so large that the price rise would inevitably lead to a substantial shift in demand, and so lead to markets being defined so widely that market shares convey no meaningful information on market power.

3.4 If a significant number of buyers switch to substitute products following the increase in price above competitive levels, these substitute products would be included in the definition of the product market. Not all potential substitutes are considered. It is when a significant number of buyers are willing to substitute to a different product and assert pressures to prevent the "hypothetical monopolist" from exercising its market power, that these substitute products will be included in the market definition.

3.5 Products may be viewed as substitutes although they do not have similar physical or other characteristics. Their prices also need not be similar. For example, if two products serve the same function but one is of a higher price and quality than the other, they might be included in the same market. This is because even though one product is of a higher price and quality than the other, a price increase in the product of a higher quality could be such that buyers no longer feel that the quality difference between the two products outweigh their price differential. Hence a price increase in one product could lead to buyers switching to the other product.

3.6 The important issue is whether a hypothetical monopolist could profitably **sustain** prices above competitive levels. The more quickly buyers can switch, the greater the constraint on the exercise of market power. Depending on the case, products for which buyers take longer than one year to switch in response to a price increase are generally not included in the same market. Other factors such as significant buyer switching costs[1] will be taken into account. The relevant time period used in the assessment of switching behaviour may be significantly shorter than one year, for example, in industries where transactions are made very frequently. A case by case analysis of switching is therefore appropriate.

3.7 Evidence on substitution by buyers can be obtained from a variety of sources, for example, trade associations, buyers, competitors, and market research reports. In particular, buyers can be interviewed directly to determine their reaction to a hypothetical price increase. However, answers to these hypothetical questions should be treated with caution. Survey evidence might also provide information on buyer preferences that would help to assess substitutability. For example, evidence on how buyers rank particular products, whether and to what extent brand loyalty exists, and which characteristics of products are important in their decision to purchase.

3.8 Evidence from undertakings active in the market and their commercial strategies may also be useful. For example, company documents may indicate which products the undertakings under investigation believe to be the closest substitutes to their own products. Company documents such as internal communications, public statements, and studies on buyer preferences or business plans may provide other useful evidence.

[1] From a buyer's point of view, switching costs can be defined as the real or perceived costs that are incurred when changing seller but which are not incurred by remaining with the current seller.

3.9 Other possible types of information that the CCCS may consider as evidence on substitution include:

- **Switching costs:** Buyers could be deterred from substitution because of the high costs involved. High switching costs relative to the value of the product would make substitution unlikely.

- **Patterns in price changes:** Supplementary evidence can be gathered from patterns in price changes. If two products share a similar pattern of price changes unrelated to changes in cost or general price inflation, this may indicate (although it is not proof) that these two products could be close substitutes. Similarly, if the prices of two products diverge over time without significant levels of substitution, then this could indicate that these products may not be in the same market. However, price divergence may also reflect changes in quality, and in this case, the products could be considered to be in the same market.

- **Own or cross price elasticities:** The own price elasticity of demand provides estimates of the percentage change in demand for a product (for example, the focal product) arising from a change in its price. The cross price elasticity of demand measures the percentage change in demand for a product (for example, a rival product) in response to a change in price of another product (for example, the focal product). In general, if there is little change in the amount of a product bought by buyers as a result of a change in price (either in the price of the product itself or the rival product) then this could imply that there is limited substitutability.

- **Product characteristics:** Evidence on product characteristics may provide useful information where buyer substitution patterns are likely to be influenced significantly by those characteristics. Where the objective characteristics of products are very similar and their intended uses the same, this would be good evidence that the products are close substitutes However, the following qualifiers should be noted. First, even where products apparently have very similar characteristics and intended use, switching costs and brand loyalty may affect how substitutable they are in practice. Second, although products display similar physical characteristics, this does not necessarily mean that buyers would view them to be close substitutes. For example, buyers of peak season (school vacations) tour packages may not view off-peak tour packages as a close substitute. Third, products with very different physical characteristics may be close substitutes if they have a very similar use from a buyer's point of view.

- **Price:concentration relationship:** Evidence on price:concentration relationship may also be informative. Price: concentration studies examine how the price of a product in a distinct area varies according to the number (or share of supply) of other products sold in the same area. These studies are useful where data is available for several distinct areas with varying degrees of concentration. For example, if observations of prices in several geographical areas suggest that when two products are sold in the same area, prices are significantly lower than when they are not, this might suggest that the two products are close substitutes (provided that it is possible to distinguish this from the effect of other factors which might explain the price differences).

Price Discrimination

3.10 In some cases, an undertaking may be able to charge some buyers (i.e. captive buyers[2]) a higher price than others (i.e. non-captive buyers[3]), where the price difference is not related to higher costs of serving those buyers. This is called price discrimination. Price discrimination is only possible when the undertaking is able to differentiate between captive and non-captive buyers, and there is no arbitrage between them. The hypothetical monopolist could be able to discriminate between buyers due to a variety of reasons, for example:

- It is not in all cases that buyers are able to switch from one product to another. The switching costs could be so high that buyers are locked in to purchasing a particular product. For example, a buyer might use a product as an input to its production process and switching to a rival product might mean increased costs and lower quality production, as well as adjustments to its production process.
- Buyer demand may differ at different times, for example, demand for taxi services after midnight is much less price sensitive than demand for the same service during other times of the day.
- Buyer demand for an input may differ depending on the purpose for which it is used.

[2] Captive buyer is defined as a buyer who is unable to switch from one product to another.

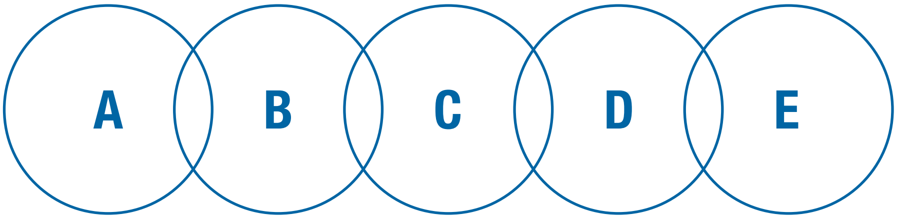
[3] Non-captive buyer is defined as a buyer who has the ability to substitute one product for another. A hypothetical monopolist may be able to practise price discrimination if it can differentiate between captive and non-captive buyers by charging higher prices to captive buyers and lower (competitive) prices to non-captive buyers for the same product or service.

3.11 Where a hypothetical monopolist is able to charge different prices for captive and non-captive buyers, separate relevant markets could be created. For example, tour agencies could price discriminate between travellers who travel during peak season (during the school vacations) and those who are able to travel during off-peak season (during the school term). These could be two separate markets.

3.12 Where an undertaking is unable to price discriminate, this may lead to the relevant market being wider than the focal product or focal area. For example, sellers may face price constraints such that they must set a uniform price across products or across geographical areas. Although it might in theory be profitable for a hypothetical monopolist to raise price in the focal area, perhaps because substitutes are unavailable there, the existence of a price constraint may make such a price rise unprofitable, because it would require that prices be raised in other areas where substitutes are present. Price constraints may thus lead to the relevant market being widened beyond the focal area. In a given case, evidence on the extent to which prices are constrained and the effect of the constraint on substitution would need to be considered when assessing the appropriate relevant market.

Chains of Substitution

3.13 The existence of chains of substitution where the price of one product constrains the price of another product, which in turn constrains the price of a further product, might lead to the definition of a relevant market, which includes products or areas at the boundaries of the market which are not directly substitutable for the focal product. Hence a chain of substitution could exist, in which a series of five differentiated products (A to E) can be linked. (Please see diagram below.) The closer the two products are to each other in the chain, the more substitutable they are from the point of view of buyers. The important consideration is therefore whether, via these chains of substitution, the ability to raise the price of the focal product, for example product B, would be constrained by product E. An important point to note is that in such situations, there should be no breaks in the chain that would indicate the existence of separate markets.



3.14 To illustrate further, buyers may regard products A and C as very good substitutes for product B and they may view product D as a very poor substitute for product B, but a good substitute for product C. Buyers may also view product E as a good substitute for product D, but a very poor substitute for product C, and a much poorer substitute for product B. An example could be memory sticks with different storage capacities.

3.15 Even though all products in the chain are substitutes, this does not mean that the whole chain is the relevant market. For example, it may be that a hypothetical monopolist of three products next to each other in the chain could profitably sustain prices 10% above competitive levels. In short, the hypothetical monopolist test is a way of determining what range of products in the chain constitutes the relevant product market.

Supply-Side

3.16 Undertakings might be prevented from charging higher prices if other undertakings currently not supplying the product in question could easily switch production or otherwise supply the product within a short time period. In other words, substitution can occur on the supply side as well. Supply-side substitution can be thought of as a special case of entry that occurs quickly (generally less than one year); effectively (generally on a scale large enough to affect prices); and without the need for substantial sunk investments[4]. Supply-side substitution addresses the questions of whether, to what extent, and how quickly, undertakings could start supplying a market in response to a hypothetical monopolist attempting to sustain supra competitive prices.

3.17 For example, depending on the different types of coating used, different grades of paper can be produced for different purposes. Buyers may not view the different types of paper as substitutable, but because they are produced using the same plant and raw materials, it may be relatively easy for sellers of one grade of paper to switch production to another grade. Hence a hypothetical monopolist in one grade of paper might not be able to profitably sustain prices above competitive levels because sellers currently producing other grades would switch production to that grade of paper.

3.18 Undertakings that can potentially supply the product in less than 12 months would normally be considered as part of the relevant market.

3.19 Indications of supply-side substitution could include:

- Ease of substitution: Potential sellers could be interviewed as to whether substitution is possible in terms of technical feasibility, substitution costs and the time taken to switch production. The key consideration is whether it would be worthwhile to switch production given a 10% price increase above the competitive price.
- Evidence as to existing capacity: Undertakings may be prevented from switching production because of a lack of spare capacity to supply the new products. Undertakings could also face difficulties in obtaining necessary inputs or finding distribution outlets.
- Buyer preference: Even though new undertakings may be able to supply the new products, buyers might not choose to buy the products. The views of buyers on how loyal they are to existing products and whether they would consider buying from new sellers could be relevant. More generally, buyers may also be able to provide information regarding potential sellers.

3.20 Whether a potential competitive constraint is labelled a supply-side constraint (and so part of market definition) or potential entry (and so not within the market) should not matter in an overall competitive assessment. If there is serious doubt about whether possible supply-side substitution should be taken into account, for example, when supply-side substitution does not take place quickly and easily, the market will be defined only on the basis of demand-side substitutability. The supply-side constraint in question will be considered when analysing potential entry into the market.

[4] A sunk investment or sunk cost is a cost incurred on entering a market that is not recoverable on exiting that market. This could include investments in product placement, distribution and production technology.

4 THE GEOGRAPHIC MARKET

4.1 The geographic market refers to the area over which substitution takes place. If buyers will travel further afield to buy products when their local prices are increased, then the geographical spread of the market is wide and vice versa. If sellers from afar will now supply to local markets because the local price has risen, then the geographic market is also wider than the situation where only local sellers are willing to supply.

4.2 The geographic scope of the market can be defined using the same framework used to analyse the product market, while putting emphasis on three particular categories of issues:

- Demand-side issues (usually for defining retail markets);
- Supply-side issues (usually for defining wholesaling and manufacturing markets); and
- Imports.

Demand-Side

4.3 The process for defining the geographic market is similar to the process for defining the product market. It begins by looking at a relatively narrow geographic area, which usually refers to the focal area, by asking if a 10% increase in the price of a product in one area would lead to buyers switching to sellers in neighbouring areas. If a significant number of buyers are likely to switch to other sellers, this would restrain the ability of a hypothetical monopolist to charge higher prices in its area. These neighbouring areas would be included in the market definition.

4.4 Use of the chains of substitution could potentially lead to a larger geographic market. Not all of the neighbouring areas may be included in the geographic market (as depending on the case). There could be areas where the chain of substitution is broken.

4.5 The evidence used to define geographic markets on the demand side would usually be similar to that used to define the product market. An additional consideration would be the value of the product. Generally, the higher the price of a product, the greater the willingness of buyers to travel further to buy cheaper supplies. The mobility of buyers (whether buyers have the ability to travel to buy cheaper supplies) is also relevant.

4.6 In the case of consumer products, geographic markets may often be quite narrow if a significant number of buyers are unlikely to switch to products sold in neighbouring areas, or countries. For wholesaling or manufacturing markets where transport costs are not too high, buyers may be in a better position to switch between sellers in different regions.

Supply-Side

4.7 Apart from the willingness of buyers to switch to sellers from neighbouring areas in response to a price increase, the potential for undertakings in neighbouring areas to supply to buyers should also be considered. As in the product market definition, these sellers should be considered if they can respond in the short run, (for example, within one year). Significant costs in terms of advertising or marketing, or non-access to distribution channels may constrain a potential seller.

4.8 The costs of transportation should also be considered. If buyers and sellers face high transportation costs, then the geographic market will be smaller than when transport costs are low. The higher the costs of transportation, the smaller the geographic market is likely to be.

Imports

4.9 Significant imports of a particular product may indicate that the market is wider than Singapore. Imports could come solely from the international operations of domestic sellers, in which case they may not act as an independent constraint on domestic undertakings. Also, in order to import on a larger scale, international sellers may require substantial investments in establishing distribution networks or branding their products in the destination country. These factors may mean that sellers of the relevant product located outside Singapore would not provide a sufficient constraint on domestic sellers to be included in the relevant geographic market.

4.10 On the other hand, a lack of imports does not necessarily imply that the market could not be a regional or a wider international market. The potential for imports may still be an important source of supply-side substitution should prices rise. This possibility could constrain the exercise of market power by existing sellers.

5 OTHER ISSUES

Temporal Markets

5.1 Another dimension that may be relevant in some markets is time. Examples of how the timing in the production and purchasing of products can affect markets include:

- Peak and off-peak services (for example, tour packages during peak season (school vacations) and off-peak season (school term)): In these cases, it may not be possible for buyers to substitute between time periods. Some buyers may not view peak and off-peak services as substitutable.
- Seasonal variations (for example, food specialities which have a significantly higher demand during local festive celebrations): A time dimension is appropriate as the market for these products may only exist to a limited extent during certain time periods.
- Innovation/ Inter-generational products (for example, handphones and computers): Consumers may choose to defer expenditure on present products because they believe innovation will soon produce better substitutes or they may own an earlier version of the product, which they consider to be a close substitute for the current generation.

5.2 To some extent, the time dimension is simply an extension of the product dimension, for example, the product can be defined as the supply of tour packages at a certain time of the year.

Identifying the Competitive Price

5.3 The hypothetical monopolist test uses the competitive price as the base price.

5.4 When assessing whether an agreement is anti-competitive under the section 34 prohibition, the current price may be used as a benchmark level in determining the relevant market, even though in practice, it may not be the competitive price. The agreement can be considered to have an appreciable adverse effect on competition if it would allow the undertakings to raise prices above the price level that would exist in that market in the absence of the agreement.

5.5 In an analysis relating to the section 47 prohibition, the issue of whether the current price is above competitive levels is considered. This is because the undertaking could have already used its dominant position to raise prices above competitive levels in order to maximise profits. In this situation, the hypothetical monopolist could be constrained from further raising prices by the possibility of substitution by buyers. If prices already exceed the competitive level, then the closest substitutes cannot be included in the relevant market as they did not prevent the hypothetical monopolist from exercising its market power. If a wide range of substitutes is included in the relevant market, it might lead to a misleading finding that the market power of the undertaking is lower than it actually is and hence the undertaking is found to be not dominant, when that might not have been the case.

5.6 This problem is known as the "cellophane fallacy" after a US case involving cellophane products. For example, a seller of product A with high market power could have raised the price of product A above competitive levels, as buyers regard other products as inferior substitutes. The current price of product A could be set so high that buyers would replace it with other products if the price was raised any further. In this case, although the inferior substitutes were able to constrain the seller from further raising the price of product A, these substitutes should not be included in the definition of the relevant market. This is because they did not constrain the seller of product A from exercising its high market power and raising the price of product A above competitive levels in the first place.

5.7 Evidence that prices are above competitive levels might include excess profits or past price movements. The possibility that market conditions are distorted by the presence of market power (or other factors) will be accounted for when all the evidence on market definition is considered. For example, where current prices are likely to differ substantially from their competitive levels, caution must be exercised when dealing with the evidence on switching patterns as such evidence may not be a reliable guide to what would occur in normal competitive conditions.

Previous Cases

5.8 Although there might be cases where a market would have been investigated and defined in an earlier investigation, the fact that competition conditions do change over time will be taken into account. This is especially so in the case where there is innovation, which could make substitution between products easier or harder. Therefore, changing circumstances may require a new market definition because competitive constraints have changed.

5.9 Behaviour by an undertaking with substantial market power could affect market definition as well. For example, suppose an earlier investigation had defined a market to be relatively wide because of the scope for both demand-side and supply-side substitution. A dominant undertaking in that market might raise buyer switching costs or act in such a way as to remove some possibilities for supply-side substitution. If so, this could affect the appropriate definition of the relevant market in the future. Hence, while earlier definitions could provide useful information as a short cut, it may not always be the right one to use in future cases.

Other Approaches to Market Definition

5.10 Many markets contain differentiated products, for example products that are differentiated by features such as brand, location or quality. Hence, there are no clear boundaries in defining the market, even within the same area at the same time. The market definition would vary depending on the facts of the case. This means that there may be no clear distinction between products that are "in" the market and those that lie outside it. Therefore, even if two products do not lie within the same market for the purposes of one case, this does not rule out the possibility that in another case, they will be in the same relevant market.

5.11 In some cases, sellers may bundle distinct products, A, B, C and D to be sold together. An example could be furniture sellers bundling distinct pieces of furniture to be sold as bedroom or dining room sets, or sellers bundling different stationery items to be sold together, such as pencils, erasers, rulers, staplers etc. Depending on the case, distinct products may be included in the relevant market due to "bundling". Buyers' views would be important in assessing the appropriate frame of reference.

5.12 In other cases, it may be necessary to consider substitution possibilities at the downstream level, for example, when considering substitutes for a wholesale product. Suppose a seller produces a wholesale product A which is a necessary input for the supply of a retail product B. Suppose also that a vertically integrated seller that does not supply a substitute wholesale product supplies a product C which is a substitute for product B at the retail level. The ability of buyers to substitute product C for product B at the retail level may constrain the ability to raise the price of wholesale product A.

6 MARKET DEFINITION FOR AFTER MARKETS

Complements and Secondary Markets

6.1 Apart from identifying groups of substitutes, markets can also be defined to include groups of complements. Complements are groups of products that are consumed or produced together. They are included in the same market when competition in the supply of one product constrains the price charged for the other. This is most common in secondary markets, also known as after markets.

6.2 Secondary products are products that are only purchased if the buyer has already purchased the primary product. This situation often arises in the case of durable products which need to be maintained. For example, car parts can only be used for a particular car brand. The question in determining the relevant market is, therefore, should cars and their parts be considered as separate markets, or a combined car and parts market? Sellers of durable products sometimes have a monopoly or high market share in the supply of secondary products or services and might be perceived as exploiting this dominant position in the secondary market. However, as any exploitation of a seller's market power in the secondary market could affect its position in the primary market, the secondary market alone may not be the relevant market. For example, an increase in the price of spare parts for a car might affect a buyer's decision whether to buy that particular brand of car. So the seller might be constrained in exercising its market power in the secondary market.

6.3 There are three possible market definitions for secondary products:

- A **system** market – including the primary and secondary products.
- **Multiple** markets – where there is one market for the primary product but separate markets for secondary products for each brand of primary product.
- **Dual** markets – one for the primary product and one for all brands of secondary product.

6.4 Determining the market for secondary products depends on the facts of the case. A system market may be appropriate when buyers take into account the whole-life cost of the product before buying. This means that the buyer will look at both the price of the primary product and the secondary product before deciding which product to buy. This definition also applies when reputation effects mean that setting a supra competitive price for the secondary product would significantly harm a seller's profits on future sales of its primary product.

6.5 A seller may not wish to increase prices of its secondary product for existing buyers if that would earn it a reputation for exploitation and significantly reduce its ability to attract new or repeat buyers to its primary product. Reputation is more likely to be important where sellers have the prospect of relatively large numbers of new or repeat buyers, and where undertakings cannot price discriminate between new or repeat buyers, and other buyers.

6.6 Where the conditions for a system market do not apply, a multiple markets or a dual markets definition may be appropriate. The former is likely where, having purchased a primary product, buyers are locked in to using only a restricted number of secondary products that are compatible with the primary product. For example, buyers might be restricted to purchasing certain types of inkjet cartridges that are compatible with their printers. A dual markets definition is appropriate where secondary products are compatible with all primary products (and are so perceived by buyers). For example, buyers are able to purchase any brand of paper to use with their printers.

6.7 The following are some of the factors that influence a buyer's decision to consider the whole-life cost of the product:

- **Price proportion:** Buyers are more likely to adopt a whole-life costing approach if the secondary product is a higher proportion of the primary product's price.
- **Size of purchase:** Large companies may be better able to do whole-life costing than smaller companies or final consumers.
- **Availability of information:** Whole-life costing will be more difficult if buyers lack specialised information on the costs of spare parts and servicing, and the reliability of products.
- **Uncertainty:** It would be difficult to adopt a whole-life costing approach if there is uncertainty about how often spare parts or servicing would be required.

6.8 Another factor to consider is how often the primary product is to be replaced and whether there are any costs involved from changing sellers. If replacement is infrequent or switching costs are high, there may be a significant number of secondary product buyers who are captive. Depending on the relative size of the primary market, the seller may find it profitable to exploit these captive buyers, even though new buyers may take a whole-life approach in evaluating the cost of the product. This would thus imply that secondary products would be in a separate market.

6.9 Sellers of the primary product may reduce prices below cost in order to increase the profits from future sales of secondary products. However, this behaviour might be considered undesirable by sellers as it may lead to an over-supply of the primary product and an under-supply of the secondary product. It may be appropriate to treat the two products as separate markets, instead of defining the market to include both products, and consider whether the undertaking's behaviour in either market might be an abuse of dominance under the section 47 prohibition.

7 GLOSSARY

Agreement	Includes decisions by associations of undertakings and concerted practices unless otherwise stated, or as the context so demands.
Buyer	Refers to the end-user consumer, and/or an undertaking that buys products as inputs for production or for resale, as the context demands.
Market Power	Refers to the ability to profitably sustain prices above competitive levels or to restrict output or quality below competitive levels. An undertaking with market power might also have the ability and incentive to harm the process of competition in other ways, for example by weakening existing competition, raising entry barriers or slowing innovation. Market power arises where an undertaking does not face sufficiently strong competitive pressure.
Product	Refers to goods and/or services
Seller	Refers to the primary producer, an undertaking that sells products as inputs for further production, and/or an undertaking that sells goods and services as a final product, as the context demands.
Undertaking	Refers to any person, being an individual, a body corporate, an unincorporated body of persons or any other entity, capable of carrying on commercial or economic activities relating to goods or services, as the context demands. Includes individuals operating as sole proprietorships, companies, firms, businesses, partnerships, co-operatives, societies, business chambers, trade associations and non-profit-making organisations.