

**CCS DRAFT GUIDELINE ON
THE SECTION 47 PROHIBITION**

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1 INTRODUCTION

- 1.1 Section 47 of the Competition Act 2004 ('Act') prohibits any conduct on the part of one or more undertakings, which is an abuse of a dominant position in any market in Singapore ('the section 47 prohibition').
- 1.2 This guideline sets out some of the factors and circumstances which the Competition Commission of Singapore ('CCS') will consider in determining whether an undertaking has engaged in conduct amounting to an abuse of a dominant position in a market. It indicates the manner in which the CCS will interpret and give effect to the provisions of the Act when assessing abuse of dominance.
- 1.3 The CCS will set its strategic priorities and consider each case on its merits to see if it warrants an investigation.
- 1.4 This guideline is not a substitute for the Act, the regulations and orders. The examples in this guideline are for illustration. They are not exhaustive, and do not set a limit on the investigation and enforcement activities of the CCS. In applying this guideline, the facts and circumstances of each case will be considered. Persons in doubt about how they and their undertakings may be affected by the Act should seek legal advice.
- 1.5 The term "undertaking" as used in the guideline on the section 34 prohibition will apply.
- 1.6 A glossary of terms used in this guideline is attached.

2 SECTION 47: THE PROVISIONS

Scope of the Provisions

- 2.1 Conduct, which is an abuse of a dominant position in a market, includes conduct that protects, enhances or perpetuates the dominant position of an undertaking in ways unrelated to competitive merit. The section 47 prohibition only prohibits **abuse** of a dominant position. It does not prohibit undertakings from having a dominant position or striving to achieve it. In considering whether there has been an abuse of dominance, the CCS will conduct a detailed examination of the relevant markets concerned and the effects of the undertaking's conduct.
- 2.2 The section 47 prohibition extends to conduct on the part of *two or more* undertakings, where there is an abuse of a collective dominant position. A dominant position may be held collectively when two or more undertakings act in a parallel manner, or are linked in such a way that they adopt a common policy in the relevant market.
- 2.3 The section 47 prohibition also applies to undertakings in a dominant position outside Singapore, and which abuse that dominant position in a market in Singapore.
- 2.4 Section 47(2) of the Act provides an illustrative list of such conduct:
 - (a) predatory behaviour towards competitors;
 - (b) limiting production, markets, or technical development to the prejudice of consumers;
 - (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
 - (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.'

3 CONCEPT OF DOMINANCE

3.1 There is a two-step test to assess whether the section 47 prohibition applies:

- Whether an undertaking is dominant in a relevant market, either in Singapore or elsewhere; and
- If it is, whether it is abusing that dominant position in a market in Singapore.

Market Definition

3.2 To assess whether an undertaking is dominant, the relevant market¹ must be determined. The relevant market will have two dimensions:

- The relevant product ('the product market'); and
- The geographic scope of the market ('the geographic market').

Assessing Dominance

3.3 An undertaking will not be dominant unless it has substantial market power. Market power can be thought of as 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. Both buyers and sellers can have market power.

3.4 In assessing whether an undertaking is dominant, the extent to which there are constraints on an undertaking's ability to profitably sustain prices above competitive levels will be considered. Such constraints include:

- Existing competitors: This refers to competition from undertakings already in the relevant market, to whom buyers might switch if the alleged dominant undertaking sustained prices above competitive levels. The market shares of competitors in the relevant market are one measure of the competitive constraints from existing competitors;
- Potential competitors: This refers to the possibility that undertakings will enter the relevant market and gain market share at the expense of

¹ Refer to the CCS guideline on *Market Definition*.

an alleged dominant undertaking seeking to sustain prices above competitive levels. The strength of potential competition is affected by barriers to entry;

- Other factors, such as the existence of powerful buyers and economic regulation.

Extent of Existing Competition: Market Shares

- 3.5 There are no market share thresholds for defining dominance under the section 47 prohibition. An undertaking's market share is an important factor in assessing dominance but does not, on its own, determine whether an undertaking is dominant. For example, it is also important to consider the positions of other undertakings operating in the same market and how market shares have changed over time. An undertaking is more likely to be deemed as dominant if its competitors have relatively weak positions and it has enjoyed a persistently high market share over time.
- 3.6 The history of the market shares of all the undertakings within the relevant market is often more informative than considering market shares at a single point in time, partly because such a snapshot might not reveal the dynamic nature of the market. For example, volatile market shares might indicate that undertakings constantly innovate to get ahead of each other. This is consistent with effective competition. Evidence that undertakings with low market shares have grown rapidly to attain relatively large market shares might suggest that barriers to expansion are low, particularly when such growth is observed for recent entrants.
- 3.7 Market shares alone might not be a reliable guide to market power, both as a result of potential shortcomings with the data and for reasons such as low entry barriers, successful innovation, product differentiation, responsiveness of buyers to price increases, and price responsiveness of competitors. High market shares are therefore not necessarily an indication that competition in the market is not effective. For example, a persistently high market share could be the result of persistently successful innovation in a market, where undertakings compete to improve the quality of their products.
- 3.8 In general, dominance may be presumed if an undertaking has a market share above 60%. This is only an indicative market share and other factors mentioned earlier will be considered in determining whether a firm is dominant. Similarly, dominance could potentially be established at a lower market share, if other relevant factors provided strong evidence of dominance.

- 3.9 An undertaking which is a small and medium enterprise (SME)² is rarely capable of conduct that has an appreciable adverse effect on competition in Singapore. However the CCS reserves the right to investigate alleged anti-competitive conduct of an SME if such is warranted.
- 3.10 Please refer to Annex A for details on measuring market shares.

Extent of Potential Competition: Entry Barriers

- 3.11 Entry barriers are important in the assessment of potential competition. The lower the entry barriers, the more likely it will be that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels. Even an undertaking with a large market share would be unlikely to have market power in a market where there are very low entry barriers. An undertaking with a large market share in a market protected by significant entry barriers is likely to have market power.
- 3.12 There are many ways in which the different types of entry barriers can be classified, but it is useful to distinguish between the following factors which, depending on the circumstances, can contribute to barriers to entry:
- Sunk costs;
 - Limited access to key inputs and distribution outlets;
 - Regulation;
 - Economies of scale;
 - Network effects; and
 - Exclusionary behaviour by incumbents.
- 3.13 Please refer to Annex B for details on entry barriers.

Other Constraints

- 3.14 The strength of buyers and the structure of the buyers' side of the market may constrain the market power of a seller. Size is not sufficient for buyer power. Buyer power requires the buyer to have choice. A buyer's bargaining strength might be enhanced if:
- the buyer is well informed about alternative sources of supply and could readily, at little cost to itself, switch substantial purchases from one seller to another while continuing to meet its needs

² SMEs in Singapore are defined as follows: For manufacturing SMEs, if they have Fixed Assets Investment (FAI) of less than S\$15 million; and for services SMEs, if they have less than 100 workers.

- the buyer could commence production of the item itself, or 'sponsor' new entry by another seller relatively quickly, for example, through a long-term contract, without incurring substantial sunk costs
- the buyer is an important outlet for the seller, that is, the seller would be willing to cede better terms to the buyer in order to retain the opportunity to sell to that buyer
- the buyer can intensify competition among sellers through establishing a procurement auction or purchasing through a competitive tender

3.15 In some sectors, the economic behaviour of undertakings (such as the prices they set or the level of services they provide) is regulated by the Government or an industry sector regulator, and an assessment of market power may need to take that into account. Although an undertaking might not face effective constraints from existing competitors, potential competitors or buyer power in the market, it may still be constrained from profitably sustaining prices above competitive levels by the government or an industry sector regulator. However that is not to say that market power cannot exist when there is economic regulation. It is feasible, for example, that regulation of the average price or profit level across several markets supplied by an undertaking may still allow for the undertaking to profitably sustain prices above competitive levels in (one or more of) these markets and/or to engage in exclusionary behaviour of various kinds.

4 ABUSE

- 4.1 Where it is established that an undertaking is dominant in the relevant market, the second part of the test is to assess whether the undertaking's behaviour might be regarded as an abuse of its dominant position. Where a dominant position is achieved or maintained through conduct arising from efficiencies, such as through successful innovation or economies of scale or scope, such conduct will not be regarded as an abuse of dominance.
- 4.2 Section 47 lists broad categories of business behaviour within which particular examples of abusive conduct are most likely found. A dominant undertaking is under a special responsibility not to distort competition.
- 4.3 The legitimate exercise of an intellectual property right, even by a dominant undertaking, will not be regarded as an abuse. It is however possible that the way in which an intellectual property right is exercised may give rise to concerns if it goes beyond the legitimate exploitation of the intellectual property right, for example, if it is used to leverage market power from one market to another or to prevent the development of a new market. More details can be found in the guideline on *Treatment of Intellectual Property Rights*, to be released at a later date.
- 4.4 Exclusionary behaviour may include excessively low prices and certain discount schemes, which remove or limit competition. The likely effect of a particular form of behaviour will depend on the facts of each case.
- 4.5 Exclusionary behaviour can also be in the form of vertical restraints either imposed unilaterally by the dominant firm or by agreement. Vertical agreements are made between undertakings that are at different stages of the production and distribution chain, and would therefore seem to fall within the scope of the section 34 prohibition. As most vertical agreements do not raise competition concerns, they have been excluded from the section 34 prohibition under the Third Schedule, though the Minister may remove the exclusion by order. However, vertical agreements are not excluded from the section 47 prohibition. Vertical restraints involving dominant undertakings may still be prohibited.
- 4.6 While there is no provision for exemptions under the section 47 prohibition, the CCS will adopt an approach known as **objective justification**. The CCS will take into account both the anti-competitive effects and any countervailing benefits when assessing the effects of a particular conduct. Where the dominant undertaking can show that the conduct leads to improvements in economic efficiency and that the benefits could not be achieved without producing such anti-competitive

effects, the CCS will not find abuse. However, any restriction of competition would need to be proportionate to the benefits produced.

- 4.7 Similarly, the CCS will consider if there may be legitimate justification for the conduct. For example, a refusal to supply might be justified by the poor creditworthiness of the buyer. However, it will still be necessary for a dominant undertaking to show that its conduct is proportionate.

Abuse in Related Markets

- 4.8 An abuse may not necessarily be committed in the market where the undertaking is dominant. In certain circumstances, the section 47 prohibition may apply where an undertaking that is dominant in one market commits an abuse in a different but closely associated market.

5 EXCLUSIONS

5.1 The Third Schedule of the Act specifically excludes from the section 47 prohibition:

- Conduct of an undertaking entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly, insofar as the prohibition would obstruct the performance of those tasks assigned to that undertaking;
- Conduct to the extent to which it is engaged in order to comply with a legal requirement;
- Conduct which is necessary to avoid conflict with an international obligation of Singapore; and which is also the subject of an order by the Minister;
- Conduct which is necessary for exceptional and compelling reasons of public policy and which is also the subject of an order by the Minister;
- Conduct which relates to any activity within the jurisdiction of another regulatory authority;
- Conduct which relates to any of the following specified activities:
 - The supply of ordinary letter and postcard services by a person licensed and regulated under the Postal Services Act (Cap. 237A);
 - The supply of piped potable water;
 - The supply of wastewater management services, including the collection, treatment and disposal of wastewater;
 - The supply of scheduled bus services by any person licensed and regulated under the Public Transport Council Act (Cap. 259B);
 - The supply of rail services by any person licensed and regulated under the Rapid Transit Systems Act (Cap. 263A); and
 - Cargo terminal operations carried out by a person licensed and regulated under the Maritime and Port Authority of Singapore Act (Cap. 170A);
- Conduct which relates to the clearing and exchanging of articles undertaken by the Automated Clearing House established under the Banking Act (Clearing House) Regulations (Cap. 19, Rg 1); or any related activities of the Singapore Clearing Houses Association.

5.2 The Minister may at any time, by order, amend the Third Schedule.

6 EXEMPTIONS

- 6.1 Unlike the section 34 prohibition, the provision for block exemptions does not apply to conduct which is an abuse of dominance.
- 6.2 Conduct which does not infringe the section 34 prohibition, or which infringes the section 34 prohibition but which is exempted under a block exemption order, may nonetheless be regarded as conduct amounting to an abuse of a dominant position under the section 47 prohibition.

7 NOTIFICATION FOR GUIDANCE/ DECISION

- 7.1 There is no requirement for undertakings to notify conduct to the CCS. It is for an undertaking to ensure that its conduct is lawful and decide whether it is appropriate to make a notification for guidance or decision.
- 7.2 Guidance may indicate whether or not an undertaking's conduct would be likely to infringe the section 47 prohibition. The CCS will generally take no further action once guidance has been given that the section 47 prohibition is unlikely to be infringed, unless there are reasonable grounds for believing that there has been a material change of circumstance since the guidance was given; or the CCS has a reasonable suspicion that the information on which it had based its guidance was materially incomplete, misleading or false; or a complaint is received from a third party.
- 7.3 A decision may indicate whether the conduct has infringed the section 47 prohibition. If the section 47 prohibition has not been infringed, the CCS will state whether that is because the conduct is excluded under the Third Schedule.
- 7.4 The CCS will generally take no further action once a decision has been given that the section 47 prohibition has not been infringed unless there are reasonable grounds for believing that there has been a material change of circumstance or there is a reasonable suspicion that the information on which it had based its decision was materially incomplete, misleading or false. Unlike guidance, a decision cannot be reopened because a complaint is made by a third party.
- 7.5 Notification of conduct to the CCS by an undertaking provides immunity from financial penalty from the date on which the notification was given to such date as may be specified by the CCS following a determination. This date shall not be earlier than the date on which the CCS gives notice. The CCS may remove this immunity if it takes further action under one of the circumstances described in paragraph 7.2 (in a case for guidance) or paragraph 7.4 (in a case for decision), and considers that the conduct will likely infringe the section 47 prohibition. The CCS will notify the undertaking of the removal of the immunity accordingly. If the CCS removes the immunity because the information supplied by the undertaking was materially incomplete, false or misleading, it may impose a penalty from a date that is earlier than the date of the CCS notice.

8 CONSEQUENCES OF INFRINGEMENT

Financial Penalty

- 8.1 A financial penalty not exceeding 10% of the turnover of the business of an undertaking in Singapore for each year of infringement may be imposed for a maximum period of 3 years, where there is an intentional or negligent infringement of the section 47 prohibition.

Rights of Private Action

- 8.2 A party who has suffered any loss or damage directly as a result of an infringement of the section 47 prohibition has a right of action in civil proceedings against the relevant undertaking.
- 8.3 This right of private action can only be exercised after the CCS has determined that an undertaking has infringed the section 47 prohibition and after the appeal process has been exhausted.

Annex A**9 MARKET SHARES**

- 9.1 This part considers the extent to which market shares indicate whether an undertaking possesses market power, how market shares may be measured, the sort of evidence likely to be relevant, and some potential problems. These issues are important when considering the intensity of existing competition.

Market Shares and Market Power

- 9.2 In general, market power is more likely to exist if an undertaking (or group of undertakings) has a persistently high market share. Likewise, market power is less likely to exist if an undertaking has a persistently low market share. Relative market shares can also be important. For example, a high market share might be more indicative of market power when all other competitors have very low market shares.
- 9.3 The history of the market shares of all undertakings within the relevant market is often more informative than considering market shares at a single point in time, partly because such a snapshot might not reveal the dynamic nature of a market. For example, volatile market shares might indicate that undertakings constantly innovate to get ahead of each other, which is consistent with effective competition. Evidence that undertakings with low market shares have grown rapidly to attain relatively large market shares might suggest that barriers to expansion are low, particularly when such growth is observed for recent entrants.
- 9.4 Nevertheless, market shares alone might not be a reliable guide to market power, both as a result of potential shortcomings with the data and for the following reasons:
- **Low entry barriers:** An undertaking with a persistently high market share may not necessarily have market power where there is a strong threat of potential competition. If entry into the market is easy, the incumbent undertaking might be constrained to act competitively so as to avoid attracting entry over time by potential competitors.
 - **Bidding markets:** Sometimes buyers choose their suppliers through procurement auctions or tenders. In these circumstances, even if there are only a few suppliers, competition might be intense. This is more likely to be the case where tenders are large and infrequent (so that suppliers are more likely to bid), where suppliers are not subject to capacity constraints (so that all suppliers are likely to place competitive bids), and where suppliers are not differentiated (so that for any

particular bid, all suppliers are equally placed to win the contract). In these types of markets, an undertaking might have a high market share at a single point in time. However, if competition at the bidding stage is effective, this currently high market share would not necessarily reflect market power.

- **Successful innovation:** In a market where undertakings compete to improve the quality of their products, a persistently high market share might indicate persistently successful innovation and so would not necessarily mean that competition is not effective.
- **Product differentiation:** Sometimes the relevant market will contain products that are differentiated. In this case undertakings with relatively low market shares might have a degree of market power because other products in the market are not very close substitutes.
- **Responsiveness of customers:** Where undertakings have similar market shares, this does not necessarily mean that they have similar degrees of market power. This may be because their customers differ in their ability or willingness to switch to alternative suppliers.
- **Price responsiveness of competitors:** Sometimes an undertaking's competitors will not be in a position to increase output in response to higher prices in the market. For example, suppose an undertaking operates in a market where all undertakings have limited capacity (e.g. are at, or close to, full capacity and so are unable to increase output substantially). In this case, the undertaking would be in a stronger position to increase prices above competitive levels than an otherwise identical undertaking with a similar market share operating in a market where its competitors are not close to full capacity.

9.5 Therefore, while consideration of market shares over time is important when assessing market power, an analysis of entry conditions and other factors is equally important. All relevant factors will be considered.

Measuring Market Shares

Evidence

- 9.6 Data on market shares may be collected from a number of sources including:
- information provided by undertakings themselves. Undertakings are usually asked for data on their own market shares, and to estimate the shares of their competitors;
 - trade associations, customers or suppliers who may be able to provide estimates of market shares; and
 - market research reports.
- 9.7 The appropriate method of calculating market shares depends on the case in hand. Usually sales data by value and by volume are both informative. Often value data will be more informative, for example, where goods are differentiated.
- 9.8 The following issues may arise when measuring market shares:
- **Production, sales and capacity:** Market share is usually determined by an undertaking's sales to customers in the relevant market. Market share is normally measured using sales to direct customers in the relevant market rather than an undertaking's total production (which can vary when stocks increase or decrease). Sometimes market shares will be measured by an undertaking's capacity to supply the relevant market: for example, where capacity is an important feature in an undertaking's ability to compete or in some instances where the market is defined taking into account supply side considerations.
 - **Sales values:** When considering market shares on a value basis, market share is valued at the price charged to an undertaking's direct customers. For example, when a manufacturer's direct customers are retailers, it is more informative to consider the value of its sales to retailers as opposed to the prices at which the retailers sell that manufacturer's product to final consumers.
 - **Choice of exchange rates:** Where the relevant geographic market is international, this may complicate the calculation of market shares by value, as exchange rates vary over time. It may then be appropriate to consider a range of exchange rates over time, including an assessment of the sensitivity of the analysis to the use of different exchange rates.

- **Imports:** If the relevant geographic market is international, market shares will be calculated with respect to the whole geographic market. If the relevant geographic market is not international, it is possible that imports will account for a share of that market. If so, and if information is available, the sales of each importing undertaking are usually considered and market shares calculated accordingly, rather than aggregating shares as if they were those of a single competitor. Where the relevant geographic market is domestic, the share of an undertaking that both supplies within and imports into that market³ would usually include both its domestic sales and its imports.
- **Internal production:** In some cases, a supplier may be using some of its capacity or production to meet its own internal needs. In the event of a rise in price on the open market, the supplier may decide to divert some or all of its 'captive' capacity or production to the open market if it is profitable to do so, taking into account effects on its downstream business that is now deprived of the captive supply. The extent to which 'captive' capacity or production is likely to be released onto the open market (or might otherwise affect competition on the open market) will be taken into account in assessing competitive constraints.

³ This includes situations where the undertaking in question is part of the same group as an importer into that market.

Annex B**10 ENTRY BARRIERS**

- 10.1 This Part considers barriers to entry and expansion and how they may be assessed in practice.
- 10.2 Entry barriers are important in the assessment of potential competition. The lower the entry barriers, the more likely it will be that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels.
- 10.3 Entry barriers are factors that allow an undertaking profitably to sustain supra-competitive prices in the long term, without being more efficient than its potential rivals. If there are no existing competitors, an undertaking could not sustain supra-competitive prices in the long term, in the absence of entry barriers.
- 10.4 An undertaking even with a large market share in a market with very low entry barriers would be unlikely to have market power. However, an undertaking with a large market share in a market protected by significant entry barriers is likely to have market power.
- 10.5 Entry barriers arise when an undertaking has an advantage (not solely based on superior efficiency) over potential entrants from having already entered the market and/or from special rights (e.g. to production or distribution) or privileged access to key inputs. Entry barriers may make new entry less likely or less rapid by affecting the expected sunk costs of entry and/or the expected profits for new entrants once they are in the market, or by establishing physical, geographic or legal obstacles to entry.
- 10.6 There are many ways in which different types of entry barriers can be classified, but it is useful to distinguish between the following factors which, depending on the circumstances, can contribute to barriers to entry:
- Sunk costs;
 - Limited access to key inputs and distribution outlets;
 - Regulation;
 - Economies of scale;
 - Network effects; and
 - Exclusionary behaviour by incumbents.
- 10.7 Most of the following examples refer for simplicity to a situation where there is one incumbent already in the market and one potential entrant or 'rival'. Although in reality the existence of several incumbents and several

potential entrants may complicate the analysis, the principles outlined remain valid.

Sunk Costs

- 10.8 Entry will occur only if the expected profit from being in the market exceeds any sunk costs of entry.
- 10.9 Sunk costs of entry are those costs which must be incurred to compete in a market, but which are not recoverable on exiting the market. When a new entrant incurs sunk costs when entering a market, it is as if that entrant has paid a non-refundable deposit to enable it to enter.
- 10.10 Sunk costs might give an incumbent a strategic advantage over potential entrants. Suppose an incumbent has already made sunk investments necessary to produce in a market while an otherwise identical new entrant has not. In this case, even if the incumbent charges a price at which entry would be profitable (if the price remained the same following entry), entry may not occur. This would be the case if the entrant does not expect the post-entry price to be high enough to justify incurring the sunk costs of entry.
- 10.11 It is useful to consider the extent to which sunk costs give an incumbent undertaking an advantage over potential new entrants and to what extent sunk costs might affect entry barriers. The mere existence of sunk costs in any particular industry, however, does not necessarily mean that entry barriers are high or that competition within the market is not effective.

Limited Access to Key Inputs and Distribution Outlets

- 10.12 Entry barriers may arise where inputs or distribution outlets are scarce, and where an incumbent obtains an advantage over a potential entrant due to privileged access (or special rights) to those inputs or outlets.

Essential Facilities

- 10.13 At one extreme, an incumbent might own or have privileged access to an essential facility, which its rival does not. Although the assessment of whether a particular facility is essential must be on a case-by-case basis, essential facilities are rare in practice. A facility will only be viewed as essential where it can be demonstrated that access to it is indispensable in order to compete in a related market and where duplication is impossible or extremely difficult owing to physical, geographic, economic or legal constraints (or is highly undesirable for reasons of public policy). Generally if a rival does not have access to an essential facility, it cannot enter the market.

- 10.14 There will be circumstances in which difficulties accessing inputs or resources constitute an entry barrier without those assets or resources meeting the strict criteria required to be defined as 'essential facilities'.

Intellectual Property Rights

- 10.15 Intellectual property rights (IPRs) can be entry barriers, although this is not always the case. In particular, when an IPR does not prevent others from competing with the IPR holder in the relevant market, it would not normally be a barrier to entry. In those cases where IPRs do constitute a barrier to entry, it does not always imply that competition is reduced. Although an IPR may constitute an entry barrier in the short term, in the long term a rival undertaking may be able to overcome it by its own innovation. The short term profit which an IPR can provide acts as an incentive to innovate and can thus stimulate competition in innovation.

Regulation

- 10.16 Regulation may affect barriers to entry. For example, regulation may limit the number of undertakings which can operate in a market through the granting of licences. Also, licences may be restricted so that there is an absolute limit to the number of undertakings that can operate in the market. In this case a licence can be thought of as a necessary input before production can take place and so regulation will act as an entry barrier.
- 10.17 Sometimes regulation sets objective standards. Where these apply equally to all undertakings, such as health and safety regulations, they might not affect the costs for new entrants any more than they affect the costs for incumbents. However, regulation can lead to entry barriers when it does not apply equally to all undertakings. For example, incumbents might lobby for standards that are relatively easy for them to meet, but harder for a new entrant to achieve.

Economies of Scale

- 10.18 Economies of scale exist where average costs fall as output rises. In the presence of large economies of scale, a potential entrant may need to enter the market on a large scale (in relation to the size of the market) in order to compete effectively. Large scale entry might require relatively large sunk costs and might be more likely to attract an aggressive response from incumbents. These factors may in some circumstances constitute barriers to entry.

- 10.19 Attaining a viable scale of production may take time and so require the new entrant to operate in the market for some time at a loss. For example, a new entrant at the manufacturing level might need to secure many distribution outlets to achieve a viable scale. If, perhaps due to long term contracts, many input suppliers or distributors are locked-in to dealing with the incumbent, the new entrant might not be able to achieve an efficient scale of production over the medium term. This could deter entry.
- 10.20 Even when entry is not completely deterred, entrants may take time to achieve efficient levels of production, obtain the relevant information, raise capital and building the necessary plant and machinery. In this case, even if entry occurs, the incumbent could nevertheless retain market power for a substantial period of time.

Network Effects

- 10.21 Network effects occur where users' valuations of the network increase as more users join the network. For example, as new customers enter a telephone network, this might add value to existing customers because they would be connected to more people on the same network. If customers benefit from being on the same network (e.g. due to incompatibility with other networks), an incumbent with a well established network might have an advantage over a potential entrant that is denied access to the established network and so has to establish its own rival network.
- 10.22 Network effects, just like economies of scale, may make new entry harder where the minimum viable scale (e.g. in terms of users of the network) is large in relation to the size of the market.

Exclusionary Behaviour

- 10.23 The term 'exclusionary behaviour' refers to anti-competitive behaviour which harms existing or potential competition: for example, by eliminating efficient competitors or raising barriers to entry and expansion. The following paragraphs set out some examples of how exclusionary behaviour can create barriers to entry.

Predatory Response to Entry

- 10.24 An undertaking contemplating entering a market weighs up its expected profit from being in the market with the expected sunk costs of entering. Expected profits from being in the market may depend on how the entrant expects the incumbent to react when it enters the market: the potential entrant might believe that the incumbent would, for example, reduce prices substantially if it entered and so reduce the prospective profits available.
- 10.25 While low prices are generally to be encouraged, if a new entrant expected an incumbent to respond to entry with predatory prices, this could deter entry. For example, if an incumbent has successfully preyed in the past, it may have secured a reputation for its willingness to set predatory prices. Any future potential entrants to this market (or to any other market where the incumbent operates) might then be deterred from entering due to the likelihood of facing an aggressive response.

Vertical Restraints

- 10.26 In general, vertical restraints are provisions made between undertakings operating at different levels of the supply chain which restrict the commercial freedom of one or more parties to the agreement. Many vertical restraints may be beneficial or benign, especially if there is effective competition at both the upstream and downstream levels. However, vertical restraints may also affect entry.
- 10.27 For example, a manufacturer might have a series of exclusive purchasing agreements with most retailers in a particular geographic market. This might limit the ability of a new manufacturer to operate on a viable scale in that market and therefore deter entry.

Other Exclusionary Practices

- 10.28 Discounts designed to foreclose markets, margin squeezes, and refusals to supply might also be used in a way that raises entry barriers.

Assessing Entry Barriers

- 10.29 Assessing the effects of entry barriers and the advantages they give to incumbents can be complex. A variety of steps may be involved. For example, incumbents and potential entrants might be asked for their views on: the sunk costs associated with a commitment to entry; the relative ease of obtaining the necessary inputs and distribution outlets; how regulation affects the prospect of entry; the cost of operating at a minimum

- viable scale; and any other factors that may impede entry or expansion in the market.
- 10.30 Claims that potential competition is waiting in the wings are more persuasive if there is fully documented evidence of plans to enter a market or where hard evidence of successful entry in the recent history of the market is provided. In the latter case, such evidence might include a historical record of entry into the market (or closely related markets), including evidence that new entrants had attained in a relatively short period of time a sufficient market share to become effective existing competitors.
- 10.31 It is important, but not necessarily straightforward, to assess the time that may elapse before successful entry would occur. Some producers, most likely those in neighbouring markets, may be able to enter speedily (e.g. in less than a year) and without substantial sunk costs by switching the use of existing facilities. Where this is possible, it will sometimes be taken into account in defining the market (as supply-side substitutability). New entry from scratch tends to be slower than entry from a neighbouring market, for a variety of reasons, which depend on the market concerned – obtaining planning permission, recruiting and training staff, ordering equipment, appointing distributors and so on. The nature of the market may also limit the times at which entry may occur. For example, where customers award long-term contracts, a potential entrant may have to wait until these contracts are renewed before it has an opportunity to enter the market. It may be also important to assess whether enough contracts would come up for renewal to allow the entrant to attain a viable scale.
- 10.32 Sometimes the relevant geographic market will be international. Where this is not the case, foreign suppliers may nevertheless exert a constraint on domestic undertakings, in the absence of entry barriers, as potential competitors. However, trade barriers – whether tariff or non-tariff – are an example of a barrier to entry that could impede international competition and shield market power.
- 10.33 Growth, or prospective growth, of a market will usually have a bearing on the likelihood of entry: entry will usually be more likely in a growing market than in a static or declining one because it will be easier for an entrant to achieve a viable scale, for example by selling to new customers.
- 10.34 In markets where products are differentiated, undertakings compete not only on price but also on features such as quality, service, convenience and innovation. Where there is a scope for differentiation, this may facilitate entry, for example where a new entrant targets untapped demand by differentiating itself from incumbents (provided that incumbents have not already pre-empted all possible niches in the market).

- 10.35 In markets where brand image is important, a new entrant may have to invest heavily in advertising before it can attain a viable scale. However, even where advertising expenditure is a sunk cost, this does not necessarily mean that entry barriers are high. For example, incumbents may have had to establish their brands and may also have to advertise heavily to maintain them, and so will not necessarily have a cost advantage over potential entrants.
- 10.36 The rate of innovation is also important: in markets where high rates of innovation occur, or are expected, innovation may overcome product market barriers to entry relatively quickly (provided that there are no barriers to entry into innovative activity). Indeed, any profits that result from an advantage created by successful innovation (e.g. from intellectual property rights) may be an important incentive to innovate.

Barriers to Expansion

- 10.37 New entry is not simply about introducing a new product to the market. To be an effective competitive constraint, a new entrant must be able to attain a large enough scale to have a competitive impact on undertakings already in the market. This may entail entry on a small scale, followed by growth. Barriers to entry are closely related to barriers to expansion and can be analysed in a similar way. Many of the factors discussed above that may make entry harder might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact.

11 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.
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.