

Advisory Guidelines on Market Definition & Assessment of Market Power

1. Introduction

1.1 These guidelines set out the analytical framework that the Media Development Authority of Singapore ("MDA") will use in defining markets in the media sector for the purpose of assessing competition cases, designating Dominant Person(s), assessing consolidations and assessing whether to grant exemption requests as provided for in the Code of Practice for Market Conduct in the Provision of Media Services ("MMCC").

1.2 Some of the relevant MMCC provisions include:

- i. **Part 4 of the MMCC**, which contains a general prohibition against a Regulated Person¹ engaging in unfair methods of competition to obtain a competitive advantage in any media market in Singapore for itself or any Affiliate² that provides media services in Singapore. Part 4 of the MMCC also contains a non-exhaustive list of practices that would constitute unfair methods of competition.
- ii. **Part 5 of the MMCC**, which provides a detailed explanation of the criteria for designating a Regulated Person who is able to act without significant competitive restraints from competitors as a "Dominant Person". Specifically, a Regulated Person is in a dominant position when, in the opinion of MDA, that Regulated Person has Significant Market Power ("SMP") in any relevant media market. Part 5 of the MMCC also contains a non-exhaustive list of factors which MDA will take into consideration when assessing whether a Regulated Person has SMP.
- iii. **Part 6 of the MMCC**, which sets out the special obligations imposed on a Dominant Person to prevent the use of its market position in a manner that will harm consumers or unreasonably restrict competition in any media market in Singapore. Part 6 of the MMCC also contains a non-exhaustive list of practices that would constitute an abuse of dominant position.
- iv. **Part 7 of the MMCC**, which contains a prohibition against any Regulated Person from entering into anti-competitive agreements with another Regulated Person or any other person. Part 7 of the MMCC also contains a non-exhaustive list of agreements that would have as its object or effect the prevention, restriction or distortion of competition.

¹ A "Regulated Person" means any person specified by the Minister under section 16(3) of the *Media Development Authority of Singapore Act* (Cap. 172).

² As defined in paragraph 5 of the MMCC.

v. **Part 8 of the MMCC**, which contains the analytical framework for assessing a proposed Consolidation³ between Regulated Persons or between a Regulated Person or an Ancillary Media Service Provider⁴. Specifically, MDA may withhold its approval to a proposed Consolidation or may impose appropriate conditions in granting its approval if it concludes that the proposed Consolidation is likely to result in a substantial lessening of competition.

1.3 The market definition exercise is primarily a tool to help MDA identify the competitive constraints faced by the relevant Regulated Person or (for the purposes of Part 8 of the MMCC) an Ancillary Media Service Provider ("relevant undertaking") in a systematic manner. The definition of a relevant market will allow MDA to recognise goods and/or services (hereafter collectively referred to as "products") that customers regard as reasonable substitutes for the product of the relevant undertaking that is the subject of the review (the "focal product"). Part I of these guidelines sets out a description of the general analytical framework that MDA will use in defining markets in the media sector.

1.4 Only when the market has been defined can MDA proceed to calculate the market share attributable to the relevant undertaking. The market share is typically the starting point for assessing the market power of the relevant undertaking in the relevant market. Part II of these guidelines provides guidance on some factors that MDA will take into account in this regard.

2. Application of Guidelines

2.1 The examples set out in these guidelines are used for illustrative purposes only and do not in any way constrain the ability of MDA to conduct investigations or take enforcement actions. To arrive at a precise market definition, MDA will endeavour to obtain the full facts and circumstances and adopt an evidence-based approach in applying these guidelines. In addition, MDA may, whenever feasible and appropriate, also consult other regulatory authorities in Singapore to ensure that the market definitions applied will accurately reflect the cross-sectoral nature of the media industry.

2.2 The definition of market and assessment of market power is an empirical exercise that needs to be undertaken on a case-by-case basis, based on the prevailing state of the relevant market. As such, previous determinations of MDA on market definition or assessment of market power (under these guidelines or otherwise) will not be binding, and may have limited value as a precedent. MDA will approach each case on the basis of its own facts.

³ As defined in paragraph 8.4.1 of the MMCC.

⁴ An "Ancillary Media Service Provider" means any person who provides infrastructure, systems, services, information or other resources that are used or intended to be used in connection with the provision or delivery of any media service (i.e. Ancillary Media Services).

2.3 In the event of a conflict between the MMCC and these guidelines, the provisions of the MMCC will prevail.

3. Evolution of Guidelines

3.1 MDA will review these guidelines every three years as part of the triennial review of the MMCC, or whenever there is sufficient evidence of market development to warrant an interim review.

Part I: Market Definition

4. General Approach

- 4.1 Market definition is very often the first step in a full blown competition analysis. It is not an end in itself, but a tool used to identify and define the boundaries in which competition takes place. A market definition should normally contain two dimensions: a product market and the geographical market. As a conceptual framework, MDA will use the hypothetical monopolist test in defining product markets. Generally speaking, MDA will use the Small but Significant, Non-transitory Increase in Price ("SSNIP") test (described below) to identify suppliers of substitute products who are able to exert competitive constraints on the supply of the focal product by the hypothetical monopolist in the relevant market. As discussed further below, MDA may also use the SSNIP test to define the relevant geographic market.
- 4.2 However, the market definition framework described in these guidelines is merely a conceptual approach, and is not intended to be applied mechanically. For example, MDA recognises that other implementations of the hypothetical monopolist test may be more appropriate in certain instances, for example where the focal product is provided to consumers free of charge⁵ in a market where advertising or quality differentiation is the dominant form of competition (e.g. an advertisement-supported online video-streaming service). MDA is also cognisant of the fact that media markets can frequently be characterised as a two-sided market, and that the econometric models employed in the application of the SSNIP test may have to be adapted as a result of the two-sided nature of the market.
- 4.3 As such, MDA will undertake a detailed qualitative analysis to evaluate the characteristics of the relevant market before determining the appropriate test principle and econometric models to be applied in each case. This step could include for example:
- i. definition of relevant variables;
 - ii. description of relevant market characteristics;
 - iii. description of the technology;
 - iv. description of the respective kind of media;
 - v. description of the supplier and customer structure; and
 - vi. description of the product categories, contents, frequencies.
- 4.4 In certain cases, it may be apparent from such qualitative analysis that an activity is unlikely to have an appreciable adverse effect on competition, or that the relevant undertaking does not possess SMP under any sensible market definition. MDA may deem it unnecessary to formally establish a definition of the relevant market in such a scenario.

⁵ MDA notes that consumers may consider the small price difference between supplying something for free *vis-à-vis* charging a very small sum to be highly significant. In such a scenario, qualitative evidence may yield more information about switching behaviour and possible substitutes.

4.5 Even if MDA proceeds to define the relevant market in accordance with the appropriate test principle, 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. Nevertheless, the conceptual framework of the test will provide a useful structure within which evidence on competitive constraints can be gathered and analysed.

5. Application of SSNIP Test

5.1 The intent of the SSNIP test is to arrive at the smallest product group and the smallest geographic area within which a hypothetical monopolist supplying the focal product would be able to profitably sustain prices above competitive levels. This test is done through an iterative process that seeks to identify all the relevant products that customers would reasonably regard as substitutes for the focal product.

5.2 The SSNIP test starts with a very narrow definition of the product and geographic market. This would usually be the focal product and the area in which the focal product is sold. Using this narrow market definition, MDA will then assess the extent to which customers will switch to a substitute product if the price⁶ of the focal product is raised to supra-competitive levels.⁷ If a sufficiently large number of customers would be likely to switch to the next best substitute after the price increase, so that the price increase would not be profitable, this substitute product would then be included in the definition of the relevant market because it would successfully constrain the exercise of market power by the hypothetical monopolist.

5.3 The assessment is then repeated and the market is widened to include more substitute products until the number of customers that respond to the small but significant non-transitory increase in price by switching to another product is not sufficient to render the price increase unprofitable. At this point, the profits gained from raising the price over the group of products previously included in the market will outweigh the profits lost from customers switching to a substitute product. The group of substitute products not constrained by any other products will be considered the relevant market.

5.4 For example, suppose that the SSNIP test is applied to determine whether a video-on-demand ("VOD") service where videos are streamed to the customers' PC or other devices over the Internet (the focal product) is in the same market as DVD

⁶ When MDA uses the SSNIP test to make a dominance assessment, MDA will use the "competitive price" (i.e., the price that would be present in a competitive market). In un-concentrated markets with large number of suppliers, the prevailing price level is often used as a proxy for the competition price level. However, in a market that is not competitive, the prevailing price cannot be assumed to be proxy for the competitive price. Where significant market power is already being exercised, using actual prices may result in the problem commonly referred to as the "cellophane fallacy" (after a US case involving cellophane products).

⁷ MDA will generally consider an increase of 5 to 10% above the competitive price to be "small but significant" for the purpose of a SSNIP test. The actual percentage increase used may vary depending on the particular facts of each case.

rentals. If the price of the VOD service were increased by 10 per cent, and too few customers switched from watching videos over the VOD service to renting DVDs to render the price increase unprofitable, then the market for VOD services would be considered the relevant market. In this scenario, the profit gained from the 10 per cent price increase would outweigh the profit lost through customers switching to DVD rentals. By contrast, if a price increase of 10 per cent resulted in a significant number of customers switching away from watching videos over the VOD service to renting DVDs, making the price increase unprofitable, then it is likely that consumers perceive watching a DVD on their television sets and a video streamed to their PCs or other devices over the Internet as reasonable substitutes. In this scenario the relevant market would need to be widened to include DVD rental services.

6. Defining the Product Market

6.1 In looking at the product market, MDA may take into account (i) the products customers regard as reasonable substitutes for the focal product (demand-side substitution); and (ii) the suppliers who currently supply such substitute products, or who will be able to supply such products at short notice (supply-side substitution). However, MDA will generally only factor in supply-side substitution into market definition where it is reasonably likely to take place, and already has an impact by constraining the supplier of the focal product. MDA recognises that analysing supply-side substitution raises similar issues to the analysis of barriers to entry in assessing market power. As long as all competitive constraints from the supply side are taken into account in the overall competitive assessment, it should not matter whether such competitive constraints are labelled supply-side substitution (and relevant to market definition) or potential entry (and relevant to assessment of market power).⁸ Where there is doubt as to whether supply-side substitution should be taken into account in defining the market and calculating market shares, the market will be defined only on the basis of demand-side substitutability, and competitive constraints from the supply side will be considered assessing market power.

A. Demand-side Substitution

6.2 In considering demand-side substitution, the key issue is whether substitutes for the focal product can impose a constraint on the way the hypothetical monopolist prices the focal product. Demand substitution constitutes one of the most important and effective disciplinary forces on the hypothetical monopolist, in relation to the pricing and other factors affecting the terms on which the focal product is made available to consumers.

6.3 MDA also recognises that products may be seen as substitutes even though they may not have very similar physical characteristics, and vice versa. Price similarity is also not a conclusive factor for determining substitutability.

⁸ Although MDA notes this distinction may potentially affect whether market share thresholds have been met.

- 6.4 For example, from the advertisers' point of view, the relevant market for the supply of advertisement spaces through traditional newspapers may potentially include the supply of advertisement spaces online via a website, even though the mode of transmission is markedly different. The key question is whether a price increase in one product could in turn lead to a sufficient number of users switching to another substitute product such that the hypothetical price increase can be constrained.
- 6.5 In terms of the relevant timeframe within which MDA will consider the switching behaviour of customers for the purpose of defining the relevant market, as a rule of thumb, if substitution by customers takes more than a year, MDA will generally presume that these substitutes are not in the same market as the focal product under assessment.⁹ Nevertheless, MDA recognises that the relevant timeframe to be used for assessing switching behaviour will depend on the facts of the specific case.
- 6.6 In assessing the scope for demand substitution, MDA will, among other considerations, take the following factors into account:
- i. evidence on customer preferences that helps in assessing substitutability;
 - ii. evidence of how customers reacted to previous price changes;
 - iii. the extent to which switching costs would be incurred and the time frame customers will consider when switching;
 - iv. evidence from businesses on the prospects of demand substitution by customers in response to relative price changes;
 - v. the own or cross price elasticity of the focal product; and
 - vi. the degree to which the supplier of the focal product is able to price discriminate.
- 6.7 This list is not intended to be exhaustive, but is reflective of the kind of evidence that MDA will consider when assessing the relevance of substitutes to the focal product. MDA may also consider any other relevant evidence if they are readily available and feasible for MDA's analysis.

B. Supply Side Substitution

- 6.8 Supply-side substitution considers the extent to which the hypothetical monopolist is constrained in its ability to charge a higher price by potential entrants, i.e. suppliers who are currently not supplying the focal product but can easily enter the market and offer the relevant product in question within a reasonable period of time. Supply-side substitution thus addresses the question of whether potential competitors are able to start supplying a market in response to the hypothetical monopolist's attempt to sustain supra-competitive prices.
- 6.9 For example, readers of a Mandarin language newspaper may only consider other existing Mandarin newspapers to be reasonable substitutes. A consideration of what readers perceive to be substitutes that are currently available to them (*i.e.* demand-

⁹ This is because contracts involving media services offered to end-consumers in Singapore typically have a one- or two-year duration.

side substitution), may lead to a market definition that only consists of the existing set of Mandarin newspapers in circulation. However, if suppliers of newspapers in other languages could also launch rival Mandarin newspapers within a short period of time and of a sufficient scale in response to an increase in the price, then the relevant market could include these potential suppliers.

6.10 Competitors who can potentially supply a substitute product in less than 12 months would typically be considered by MDA as part of the relevant market.

6.11 In order to determine whether there are supply-side substitutes and whether such substitutes can exert competitive constraints on the hypothetical monopolist, MDA may consider the following evidence:

- i. the existence of close substitutes (which is more likely in a market in which there is little product differentiation);
- ii. technological constraints and other requisites (including regulatory requirements) potential entrants have to meet to offer comparable products or services ;
- iii. the history of actual market entry (including prior examples of suppliers repositioning products or shifting product);
- iv. the presence of spare capacity in the industry;
- v. the willingness of customers to switch (including how loyal customers are to the focal product and whether they are likely to switch to substitute products from new suppliers); and
- vi. the costs (including sunk costs) and minimum viable scale for successful entry
- vii. the relevant time period for entry to occur.

6.12 This list is not intended to be exhaustive. MDA may also consider any other relevant evidence if it is readily available and feasible to do so.

6.13 Notwithstanding the foregoing, as mentioned in paragraph 6.1 above, MDA will generally only take supply-side substitution into account in defining the market where it is reasonably likely to take place, and already has an impact by constraining the supplier of the focal product.

C. Price Discrimination

6.14 Price discrimination occurs when a relevant undertaking is able to charge some customers a higher price than others for the same product or service, where the difference in price is not a result of higher costs involved in serving those customers. For price discrimination to occur, there must be no arbitrage between customers.

6.15 Separate relevant markets could be created where a hypothetical monopolist is able to price discriminate. For example, a pay-TV broadcaster could price discriminate between residential and commercial customers, thus creating separate markets for residential pay-TV and commercial pay-TV services. A pay-TV broadcaster may also be able to price discriminate between different types of commercial customers

based on their audience reach (e.g. hotels and pubs). In this case, the different customer groups could be considered as separate relevant markets.

- 6.16 Where a relevant undertaking is unable to price discriminate, this may lead to the relevant market being wider than the focal product or focal area. For example, the relevant undertaking may face price constraints such that it 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.

7. Defining the Geographic Market

- 7.1 The geographic market refers to the area over which substitution of products takes place. The geographic market is also defined using the SSNIP test as described above. The SSNIP test usually begins with a relatively narrow geographical area and asks if a small but significant non-transitory increase in prices will lead to consumers switching to suppliers based in another location. If a sufficiently large number of customers switch to products in another location, such that the price increase is not profitable, this will constrain the ability of the hypothetical monopolist to raise prices and the alternative location will be included in the relevant geographic market.
- 7.2 Apart from the willingness of buyers to switch to sellers from neighbouring areas in response to a price increase, the potential of suppliers in neighbouring areas to supply the focal product in the local market is also important. If these suppliers are able to supply the local market in response to a small but significant non-transitory increase in price to exert constraints on the hypothetical monopolist, then the geographic market should be widened to include them.
- 7.3 Given the size of Singapore and the reach of the relevant undertakings, it is likely that, in most cases, the geographical market will be for the whole of Singapore.¹⁰ However, depending on the specific facts and circumstances, MDA may consider alternative geographic market definitions such as a part of Singapore (e.g. if certain service providers only supply to the Central Business District) or the regional or even global market (e.g. especially relevant with services delivered over the Internet which are accessible anywhere in the world).

¹⁰ Given Singapore's small geographical size, media services provided by a relevant undertaking are typically supplied to customer on a Singapore-wide basis.

8. Other Factors to be Considered in Defining Markets

A. Substitutability between bundled and unbundled offerings

- 8.1 It is a common practice for companies in the media industry to offer bundled services to their customers. For example, companies can package services such as sports programmes and variety shows into a single product offering and offer it at a lower price to customers than if they purchase the various programmes separately. In some cases, customers may be required to subscribe to a lower-tier product before they are allowed to subscribe to another higher-tier product.
- 8.2 In assessing market definition where the focal product is a bundled product, MDA will consider whether a hypothetical monopolist supplying the bundled product will be constrained from introducing a small but significant non-transitory price increase by the threat that customers will switch to buying the individual components separately and/or alternative bundles.
- 8.3 For example, in the case of a bundled product offering both sports programmes and the variety shows, MDA will ascertain if either sports programmes or variety shows on a stand-alone basis is a good substitute for the bundle product. If customers perceive sports programmes sold on a stand-alone basis to be substitutable with the bundled product, the market should then be widened to include both the bundled product and the sports programmes on a stand-alone basis. In light of the foregoing, there are various possible permutations for the definition of the market:
- i. the market for the supply of the bundled product;
 - ii. the market for the supply of (a) the bundled product AND (b) sports programmes on a stand-alone basis; or
 - iii. the market for the supply of (a) the bundled product AND (b) variety shows on a stand-alone basis.

B. Convergence in the media industry

- 8.4 Convergence in the media industry refers to the ability of suppliers to provide similar kinds of services to customers over different network platforms. Examples include the provision of VOD services via managed networks including wired networks (e.g. fibre-optics or hybrid fibre-coaxial) or wireless networks (e.g. over the mobile network using DVB-H technology), or via the Internet (e.g. "over the top" delivery). Convergence may lead to more bundling of content by suppliers as they are able to provide a wider variety of services via existing infrastructure.¹¹
- 8.5 Further, convergence complicates the analysis of supply-side substitution as it increases the number of ways content can be distributed using existing resources. For example, in the absence of obvious entry barriers such as regulation, a traditional pay-TV operator providing VOD services may choose to supply some of its

¹¹ Market definition issues related to bundling are discussed in section 5A of these guidelines.

content online as it may not incur substantial incremental costs in respect of such delivery method. This may exert competitive constraints on both traditional as well as existing VOD service providers. MDA will consider these supply side issues carefully in order to determine whether to widen traditional market definitions to include potential competitive constraints exerted by firms that can use existing resources to supply a new service within a short period of time.

- 8.6 Conversely, firms may not switch to supplying a new service even if it is possible in the light of convergence. While a firm may choose to enter a new market in response to a small price increase by a hypothetical monopolist of the service, the fact that the firm does not currently supply to the new market may also indicate that entry requires more than just technological assets. For example, there may be significant regulatory barriers preventing entry.
- 8.7 While MDA recognises the potential challenges in defining markets as a result of convergence, MDA notes that the current principles adopted for defining markets are sufficient, because the principles are based on economic characteristics of the product such as demand-side and supply-side substitutability, rather than physical characteristics that define the medium of transmission. This is especially important in media markets where similar content can be distributed via different channels, but may still be considered to be within the same market.

C. Temporal Markets

- 8.8 The timing in production, consumption and purchasing of products and services can affect market definition. Where appropriate, MDA may also define a market based on a "temporal" dimension. For example, MDA may distinguish between the screening of a recent Hollywood blockbuster movie on pay-TV just several months after its release in the cinema, and the same movie shown on pay-TV one to two years after its release. Some consumers may not view a delayed screening as a substitute for a far more recent screening of the same movie.
- 8.9 To some extent, the time dimension is simply an extension of the product dimension. For example, the product above may be defined as the screening of movies on a pay-TV service within a specified period after its cinematic release.

Part II: Assessment of Market Power

9. Assessment of Market Power

9.1 After defining the market, the next step in competition analysis seeks to determine whether the relevant undertaking possesses SMP in that market. MDA will typically use market shares as the starting point in its assessment of SMP.

A. Market Shares

9.2 MDA recognises that market shares can be calculated with reference to a number of different measures. For example, market shares can be determined using sales in terms of volume or price, revenues, subscriber numbers, production capacity or other relevant units of measurement. Depending on the facts of the case and the availability of reliable evidence, MDA will employ the measure that is most appropriate, based on the underlying characteristics of the relevant market. For example, where capacity is an important feature in an undertaking's ability to compete, market share may be measured in terms of the relevant undertaking's capacity to supply to the relevant market.

9.3 Pursuant to paragraph 5.3(b) of the MMCC, there is a rebuttable presumption that a relevant undertaking with a market share exceeding 60 per cent has SMP in the relevant market. However, MDA also recognises that a relevant undertaking with a market share of less than 60 per cent may also possess SMP. MDA reserves the right to determine whether a relevant undertaking possesses SMP based on a holistic assessment of factors in the relevant market. However, as a rule-of-thumb, if a relevant undertaking has a market share of less than 40 per cent in the relevant market, MDA will generally not consider that the relevant undertaking possesses SMP. If a relevant undertaking has a market share of between 40 and 60 per cent, MDA may initiate a closer review to determine whether SMP exists.

9.4 In general, where data about the historical trend in market shares is readily available and reliable, MDA will also consider such information to be more informative about whether a relevant undertaking possesses SMP than market shares at a single point in time. Amongst other things, such historical evidence may reveal the dynamic nature of the market, with volatile market shares indicating the possibility of effective competition where market participants constantly innovate to get ahead of each other.

9.5 Finally, MDA recognises that high market shares do not necessarily mean that competition in the relevant market is not effective. In some cases, a high market share can be the result of persistently successful and innovative business strategies, rather than the exercise of market power. In such cases, the relevant undertaking's ability to exercise market power may be constrained if other entities could rapidly enter the market in response to an increase in price or a decrease in quality.

B. Other Factors

- 9.6 In addition to market shares, MDA will take into consideration the factors listed in paragraph 5.3(a) of the MMCC when determining whether a relevant undertaking possesses SMP in a relevant market. Some of these factors are discussed in the following paragraphs.
- 9.7 Ability to act unilaterally – Such unilateral conduct includes raising or reducing prices, reducing the quality of products or services, without constraint from other products. The evidence of such behaviour is likely to indicate that the relevant undertaking possesses SMP, since it is already able to engage in conduct that allows it to act independently of competitive market forces.
- 9.8 Barriers to entry – As mentioned in paragraph 6.1 above, MDA will take into consideration competitive constraints from the supply side in the form of entry barriers in assessing market power. This is particularly pertinent in certain segments of the media industry characterised by the need for economies of scale and high fixed costs. In particular, the presence of the following factors (which are not meant to be exhaustive) can constitute barriers to entry:
- i. Sunk costs: Sunk costs are costs that must be incurred in order to compete in a particular market, which are typically unrecoverable upon exiting the market. For example, the cost of advertising a brand for the provision of media services generally cannot be recovered and therefore is a sunk cost. By contrast, the cost of frequency spectrum is not a sunk cost if it can be sold when a player exits the market. An industry characterised by high sunk costs typically means the incumbents have an advantage. If potential entrants do not believe that future profits are high enough to cover the sunk costs of entry, they are not likely to enter the market as they may not be able to recover these costs when they exit the market.
 - ii. Access to key inputs: Incumbents who may own resources / inputs that are important for the production of product hold a strategic advantage over potential entrants that may have difficulties in gaining access to these key resources (e.g. access to distribution network). The extent to which access to such resources/ inputs constitutes a barrier to entry will be assessed by MDA on a case-by-case basis. At the same time, MDA will also consider the impact of industry-wide developments, such as media convergence and the deployment of the open access Next Generation Nationwide Broadband Network, which are likely to reduce access barriers for new entrants.
 - iii. Economies of Scale: The cost structure of the media industry usually involves substantial economies of scale, in which the average cost of producing an additional unit of a product falls significantly as output rises. This is because media content, such as a radio broadcast, can always be provided to an additional person at zero or a very low marginal cost of production. As such, given the need for large economies of scale in order to compete effectively,

new entrants may only enter the market if they expect to be able to achieve sufficient scale. This may prove to be a substantial barrier to entry should the costs required to enter on a large scale be high.

- iv. Network Effects: The media industry is characterised by network effects, which occur when the value of the network to customers increase as more customers use the network. For example, the more viewers a local channel has, the more likely it is able to attract advertisers and in turn have the resources to produce or acquire more valuable content. This, in turn, will lead to an increase of each customer's valuation of the channel and, ultimately, may lead to more subscriptions. The ability to gain entry into the network may be seen as a barrier to entry because attaining a viable scale of production in face of the incumbent's economies of scale may take time and may also require the entrant to operate at a loss in the initial period.
- v. Regulation: MDA also recognises that regulation may curtail the economic behaviour of the potential entrant to the market. For example, regulations may constitute barriers to entry by limiting the number of operators who can operate in the media industry. As such, any assessment of market power (or market definition) should also take these regulations into account.

9.9 Buyer power – In some circumstances, buyers individually or collectively are able to constrain the market power of a relevant undertaking. This is known as countervailing buyer power, and such buyer power could arise from the relative negotiating strength of buyers, or the structure on the buyers side of the market. For example, a TV network is likely to have buyer power when procuring from content producers, if there are more content producers offering similar content (such as documentary programmes) competing to sell to the TV network. However, a TV network may have less buyer power when negotiating with the licensor of premium sports programme, if the premium sports programme is seen as a 'must-have' by consumers. MDA will assess the extent to which a relevant undertaking faces countervailing buyer power in its assessment of SMP.

9.10 Competitors – MDA will consider the number of market participants, level of market concentration and level of product diversification, as well as the ability and incentive of competitors to compete effectively and/or constrain the ability of the relevant undertaking to engage in unilateral conduct. For example, MDA will consider whether competitors are able to increase the output of their programmes or expand advertising space, such that it would constrain the ability of the relevant undertaking to profitably carry out any unilateral conduct. In considering market concentration, MDA will also take into consideration the extent to which the relevant undertaking acts in concert with or has control of another Regulated Person or any other person.

9.11 Switching costs – Switching costs could deter substitution, particularly if the switching costs are high relative to the value of the focal product. Factors such as the length of contracts and the availability of alternatives will contribute to the costs of switching. In considering switching costs, the existence of historical evidence of

switching will also be useful for MDA's assessment of SMP. MDA will also consider other market developments, such as the introduction of the cross-carriage measure, which may potentially facilitate switching.

- 9.12 Ultimately, in conducting an assessment of whether a relevant undertaking possesses SMP, MDA is of the belief that no one single factor can provide a reliable indicator of the degree of competition in the market. MDA recognises that market share, by itself, may not necessary be a reliable guide for establishing the existence of SMP. The relevant undertaking should be assessed in totality, taking into account the other factors mentioned in paragraph 5.3(a) of the MMCC.