



**Malaysian Communications and Multimedia Commission**

**PUBLIC INQUIRY REPORT**

**Assessment of Dominance in Communications Market**

**24 September 2014**

**This Public Inquiry Report was prepared in fulfilment of Sections 61 and 65 of the Communications and Multimedia Act 1998.**

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## **ABBREVIATIONS AND GLOSSARY**

ACCC	Australian Competition and Consumer Commission
ADSL	Asymmetric Digital Subscriber Line
ASP	Applications Service Provider
ATM	Asynchronous Transfer Mode
BEREC	Body of European Regulators for Electronic Communications
c-i-c	Commercial in Confidence
CIIP	Common Integrated Infrastructure Provider
CMA	Communications and Multimedia Act 1998
COS	Class of Service
CSMG	Cambridge Strategic Management Group
DCIS	Domestic Connectivity to International Services
DEL	Direct Exchanged Line
DR	Domestic Roaming
DSL	Digital Subscriber Line
DTT	Digital Terrestrial Television
DTTB	Digital Terrestrial Television Broadcast
EC	European Commission
EPL	European Premiere League
FCC	Federal Communications Commission of the United States
FTA	Free to Air
FTTH	Fibre to the Home
GSM	Global System for Mobile Communications
GSMA	GSM Association
HHI	Herfindahl-Hirschman Index
HSBB	High Speed Broadband Network
IDA	Info-Communications Development Authority of Singapore
ILS	Inter-connect link service
IPLC	International Private Leased Circuit
IPTV	Internet Protocol Television
ITU	International Telecommunications Union
LLC	Local Leased Circuit
LTE	Long Term Evolution
Mbps	Mega Bit Per Second
MCMC	Malaysian Communications and Multimedia Commission
MDF	Main Distribution Frame

METRO-E	Metro Ethernet
MMS	Multimedia Messaging Service
MNO	Mobile Network Operator
MSAP	Mandatory Standard on Access Pricing
MVNO	Mobile Virtual Network Operator
MyCC	Malaysia Competition Commission
MyIX	Malaysian Internet Exchange
NRA	National Regulatory Authority
NFP(I)	Network Facilities Provider Individual Licence
NSP(I)	Network Service Provider Individual Licence
OFCOM	The Office of Communications of UK
OFT	Office of Fair Trade of UK
OTT	Over-the-Top
PI	Public Inquiry
POA	Point of Access
POP	Point of Presence
PSSB	Puncak Semangat Sendirian Berhad
PSTN	Public Switched Telephone Network
RAN	Radio Access Network
SBC	State-Backed Company
SDSL	Symmetric Digital Subscriber Line
SLC	Substantial Lessening of Competition
SMS	Short Messaging Services
SSNIP	Small but significant non-transitory increase in price
STD	Subscribers Trunk Dial
ULL	Unbundling of Local Loop
VDSL	Very High Bit Rate Digital Subscriber Line
VNO	Voice Network Operator
VOD	Video on Demand
VoIP	Voice Over Internet Protocol
VPN	Virtual Private Network
VSAT	Very Small Aperture Terminal
WBB	Wireless Broadband
WiMAX	Worldwide Interoperability for Microwave Access
WLLC	Wholesale Local Leased Circuit
WLR	Wholesale Line Rental

2G	Second Generation
3G	Third Generation
4G	Fourth Generation

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# 1 Introduction

## 1.1 Public Inquiry Process

In its Public Inquiry Paper on Assessment of Dominance in Communications Markets (**PI Paper**) released on 11 July 2014, the Malaysian Communications and Multimedia Commission (**MCMC**) detailed the approach and methodology it proposed to adopt in this Public Inquiry (**PI**).

The purpose of this PI is to identify those licensees that are in a dominant position for the purposes of a determination under section 137 of the Communications and Multimedia Act 1998 (**CMA**) and to put in place a framework which permits the dynamic assessment and findings of dominance in the future.

The PI Paper sets out the MCMC's preliminary views on market definition and the licensees it considered to be dominant in each defined market. The PI Paper invited comments on its preliminary views and specifically sought comment on 29 issues or questions.

The PI Paper explained:

- (a) the legislative context and purpose of conducting the PI;
- (b) the scope of the PI;
- (c) the proposed outputs of the PI;
- (d) the MCMC's initial views on market definition and dominance; and
- (e) the process of the PI.

## 1.2 Consultation process

The MCMC has consulted widely and openly with all interested stakeholders during this PI, including:

- (a) consultations with a broad range of licensees prior to the release of the PI Paper, as explained in Part A to the PI Paper, including the circulation of the draft market definition analysis dated 7 April 2014 (**Market Definition Analysis**) to selected licensees for comments;
- (b) publication of the PI Paper on 11 July 2014 and a request for comment, including publicity in relation to the same on the MCMC website and major newspapers in Malaysia; and
- (c) conducting a public clarification session on the PI Paper. The public clarification session was held in the MCMC auditorium in Cyberjaya at 9.30 am on Thursday, 7 August 2014.

### 1.3 Submissions received

At the close of the PI period at 12.00 noon on 25 August 2014, the MCMC had received written submissions from the following parties.

**Table 1: Summary of submissions received**

No.	Submitting party	Documents received
1.	Altel Communications Sdn Bhd ("Altel")	One submission (28 pages) Appendix 1 (1 page) Appendix 2 (1 page)
2.	Asiaspace Sdn Bhd ("Asiaspace")	One submission (5 pages)
3.	Astro Malaysia Holdings Bhd ("Astro")	One submission (68 pages)
4.	Celcom Axiata Berhad ("Celcom")	One submission (36 pages)
5.	DiGi Telecommunications Sdn Bhd ("DiGi")	One submission (35 pages)
6.	Fibrecomm Network (M) Sdn Bhd ("Fibrecomm")	One submission (5 pages)
7.	Fiberail Sdn Bhd ("Fiberail")	One submission (14 pages) Appendix I (1 page) Appendix II (1 page) Appendix III (1 page) Appendix IV (1 page)
8.	Maxis Berhad ("Maxis")	One submission (96 pages) Appendix 1 (20 pages)
9.	Packet One Networks (Malaysia) Sdn Bhd ("P1")	One submission (30 pages)

No.	Submitting party	Documents received
10.	Persatuan Penyedia Infrastruktur Telekomunikasi Malaysia ("PPIT")	One submission (15 pages)
11.	Puncak Semangat Sdn Bhd ("PSSB")	One submission (1 page)
12.	Sacofa Sdn Bhd ("Sacofa")	One submission (11 pages)
13.	Telekom Malaysia Berhad ("Telekom Malaysia")	One submission (52 pages)
14.	TT dotcom Sdn Bhd ("TIME")	One submission (20 pages)
15.	U Mobile Sdn Bhd ("U Mobile")	One submission (11 pages)
16.	YTL Communications Sdn Bhd ("YTL")	One submission (17 pages)

Having thoroughly reviewed and assessed the submissions received on the PI Paper against its own preliminary views, the MCMC now presents this Public Inquiry Report on Assessment of Dominance in Communications Market (**PI Report**) within the 30-day requirement of the closing date of submissions, as stipulated under section 65 of the CMA.

Any information that was provided to the MCMC during the Public Inquiry on a confidential basis and which the MCMC is satisfied is not otherwise available from public sources has been redacted and marked with the reference "c-i-c" (i.e. commercial-in-confidence). This information has been used by the MCMC in formulating its views and is referred to in this PI Report, but not disclosed due to confidentiality restrictions.

#### **1.4 Structure of this PI Report**

The remainder of this PI Report largely follows the structure of the PI Paper. The 29 numbered questions in the PI Paper are duplicated in each section with a summary of the comments received. The MCMC then sets out the rationale of its final views on each issue. Below, the MCMC has provided a summary of the general nature of the comments received.

#### **1.5 Dominance determination**

Based on the findings of this PI report, the MCMC will issue a Determination on dominant position under section 55(5) of the CMA. Under that section, the MCMC is required to determine a matter which has undergone an inquiry within 45 days



from the conclusion of the inquiry. Section 137 of the CMA empowers the MCMC to determine that a licensee is in a dominant position in a communications market.

The MCMC has considered the duration of previous determinations on dominance including the last series of dominance determinations made in 2004 which lasted for a period of 2 years and which have since lapsed. In view of the dynamic approach that the MCMC proposes to adopt on market definition and to ensure consistency with section 122 of the CMA, the duration of the determination of dominance issued in relation to this PI Report will accordingly last for a period of 3 years.

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## **2 Dominance Guideline**

### **2.1 Overview**

In section 8 of Part A of the PI Paper, the MCMC described the Dominance Guideline which has been used to assess dominant position in the PI.

### **2.2 Summary of Submissions Received**

#### **(a) General comments on the PI Paper and the Market Definition Analysis**

There were three submissions containing general comments on the PI Paper and Market Definition Analysis, and the MCMC's general approach to market definition and dominance.

Astro submitted that the PI Paper sets out contradictory statements on the purpose of market definition and dominance assessment. Astro referred to paragraphs 7.11 and 5.5 of the PI Paper and pointed out that on the one hand it is stated that it is intended to facilitate better oversight and supervision of the communications markets, while, on the other hand it suggests that findings here will form the basis for ex-post enforcement action. Astro does not think that pre-defining markets and pre determining dominance is a legitimate exercise within the scheme of regulation under the CMA. Astro also expressed grave reservations about the level of economic rigour that the MCMC has applied in presenting its evidence and analysis. If the MCMC's intention is to use the present analysis to issue a Determination on a dominant position pursuant to section 137 of the CMA, they believe that the MCMC should undertake and demonstrate more rigour in market definition analysis.

Astro agrees with the MCMC intention to take a dynamic approach to defining markets. However, the MCMC's approach of using the present analysis to make a determination on dominance under section 137 is incorrect.

Firstly, they submitted that the evidential burden for defining markets in the context of actual determination as part of future, possible, enforcement will be considerably higher than the exercise of predefining markets for current regulatory purposes. Astro is of the view that the evidence relied on by the MCMC to arrive at

these preliminary findings, appears at times to be selective and the analysis set out in the PI Paper, unconvincing.

Secondly, they noted that the MCMC has not acknowledged the limitations of pre-defining market. Astro quoted economist Steven Salop who had stated in his paper "*The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium*", that market power and market definition should not be analysed in vacuum or in a threshold test divorced from conduct and allegations about its effects. Astro highlighted that similar view was held by other economists such as Bishop and Walker.

Thirdly, Astro highlighted that in many instances in the PI Paper, the MCMC has failed to take a dynamic approach to market definition by taking a prospective look at the market within 3-5 year time horizon.

Astro submitted that the MCMC has not adduced any evidence of particular local circumstances in the Malaysian context that warrants a unique approach to pre-defining markets for ex-post regulation and so significantly increasing the number of pre-defined markets. Therefore, Astro requested the MCMC to:

- make a clear statement that it is defining these markets, for the sole purpose of oversight and governance and not for the purpose of a Determination on dominance under section 137 CMA and/or in the context of specific enforcement action.
- undertake a comprehensive, robust market definition exercise in the specific context of a set of factual circumstances and/or a specific complaint when defining markets for the purposes of enforcement of sections 133 and 139 of the CMA.
- embark on a more rigorous market definition exercise if the MCMC is investigating a complaint or in the context of any enforcement action that will culminate in a Determination of Dominance.

TIME provided the following comments on the Market Definition Analysis:

- Clarification from the MCMC on Part B, paragraph 2.36 of the PI Paper, where the MCMC has quoted Ecorys report in footnote 36. TIME submitted that they did not come across European Commission's (**EC**) formal recommendation and wanted to know if it was a drafting error. If so, they requested the MCMC to cite the reference that attests to the formality of EC's conclusion on the relevant fixed lines market.
- The MCMC to consider establishing a formal committee with Malaysian Competition Commission (**MyCC**) to evaluate anti-competitive complaints or environments that addresses regulatory gaps. TIME cited a collaborative regulatory approach between Office of Communications of UK-Office of Fair Trading (OFCOM-OFT) in UK that has worked well. The collaborative model in UK involves

informal discussions/consultations between OFCOM and OFT as well as formal interactions and consultations according to the Concurrency Regulations and Guidelines developed under the Memorandum of Understanding (MoU) between OFCOM and OFT. TIME believes that a similar approach will be beneficial in Malaysia.

- When the MCMC publishes the Determination on Dominance as an outcome of this PI, the effective date of the determination should be 1 January 2014.

In addition, TIME noted that EC's legal and regulatory framework is entirely different from the Malaysian approach. EC market definition exercise focuses on wholesale markets and retail markets which ought to be subjected to ex-ante regulation by the national regulatory authorities if significant retail market power persists despite the presence of regulations at the wholesale level. The role of the MCMC under the CMA is primarily that of an ex-post competition regulator. The MCMC has the power under section 137 to determine a licensee's dominance on an ex-ante basis or on an ex-post basis when the MCMC decides to investigate the conduct of a non-dominant licensee under section 139. TIME commended the MCMC for drawing lessons on ex-ante market definition from the EC but expressed disappointment that very little is said about the approach that will or should be taken to re-define the ex-post market as and when necessary.

Telekom Malaysia expressed concerns on the approach taken by the MCMC in defining the markets. Telekom Malaysia was concerned about the MCMC's approach in pre-determining the markets and submitted that this is not a common global practice. Telekom Malaysia pointed out that no comparable regional exemplar market undertakes a process of pre-determination of telecommunications markets. Instead, a market is only determined when it becomes necessary to do so, and even then, it is only determined by reference to the purpose for which it is being defined. Telekom Malaysia cited Australia, New Zealand and Singapore as examples of countries that assess relevant market where it is believed that anti-competitive conduct has taken place, while European Union (**EU**) is the only major example of pre-determination approach. Telekom Malaysia also noted that the number of markets identified by the MCMC is larger than EC. Telekom Malaysia is of the view that market definition need to be reasonably dimensioned to ensure it is enforceable. They are concerned that the granular approach adopted by the MCMC may complicate the investigation process.

Telekom Malaysia submitted that regulatory focus should take into account the continuing declining trend in fixed services and the dominance of mobile connectivity. Telekom Malaysia provided statistics to indicate that mobile subscriptions represent more than 92% of the telephony market, with fixed subscribers accounting for just fewer than 8%. Therefore, Telekom Malaysia strongly urged the MCMC to review the current balance of regulation across fixed and mobile services, including dominance regulation.

Telekom Malaysia strongly feels that wholesale services that are already regulated via the access regime should be excluded from dominance assessment. Telekom Malaysia pointed out that the current access regime not only deals with pricing but also sets standard on service provisioning which constraint service providers from acting independently. If the MCMC does foresee any loop holes in the existing access regime, it should review and reassess the effectiveness of such instruments separately.

(b) **General comments on the Dominance Guideline**

Altel proposed that the Dominance Guideline should be more constructive and include elements which could be manipulated and actions that can lead to the substantial lessening of competition. In addition, Altel also suggested that based on the information available to the MCMC, market averages of wholesale and retail offerings should be published or made readily available to industry to minimise the potential anti-competitive conduct. Altel acknowledged the MCMC's position not to adopt entity based approach as Infocomm Development Authority (**IDA**) but proposed the MCMC to consider IDA's approach of imposing regulations on dominant operators to share essential facilities and service such as Domestic Roaming (**DR**), Radio Access Network (**RAN**) sharing, infrastructure and dark fibre.

Astro is of opinion that a "pre-determined" determination of dominance would prejudice the rights of a licensee under section 51 of the CMA. They are of the view that section 51 of the CMA gives the licensee the right to make representations on all of the elements set out in section 139, (including dominance) and pre-determination of dominance by the MCMC is likely to have the effect of compromising a licensee's subsequent ability to address the issue of dominance where the underlying factual basis has changed due to technological or economic or even regulatory changes.

This conflicts with the due process requirements in section 51 of the CMA, which sets out important safeguards for licensees, particularly in light of the fact that a failure to comply with a direction by the MCMC carries criminal consequences.

Therefore, Astro urged the MCMC to make a separate and specific determination of dominance where it intends to pursue enforcement action against a licensee for conduct in contravention of section 139 CMA. Not doing so would mean the MCMC is prejudging the issue without considering all the contemporaneous facts - which would necessarily lead to wrong decisions.

Celcom was supportive of the Dominance Guideline released by the MCMC as it is far more comprehensive. However, Celcom suggested a periodic review of the markets and findings of dominance, in view of the technological and product innovation in the communications sector.

Maxis thought that the review of the guidelines are timely as the competition practice has progressed significantly since the last review and also with the

introduction of the Malaysian Competition Act 2010, there is need to ensure a consistent approach.

In general, Maxis was of the view that the analytical framework proposed has the key elements and appropriate methodology has been adopted.

In relation to the approach to the assessment of dominance, Maxis noted the MCMC's reference to section 3 of the CMA. Maxis is of the view that the National Policy Objectives might be too high level for this purpose. The MCMC should refer to narrower objectives, such as the promotion of effective competition for the long term benefit of the end user. Maxis noted that Australia refers to the competition rule specifically in its legislation.

In general YTL agreed with the guidelines but would prefer the establishment of quantitative tests. They noted that the guidelines are currently couched in qualitative language. YTL also observed that whilst it is good to refer to international practices, the MCMC should analyse the industry in the context of the Malaysian legal and regulatory framework.

YTL observed that the objective of the guidelines is to establish licensees that are in a dominant position. However, in some circumstances, even licensees that are not in a dominant position can act in an anti-competitive manner if that licensee is a sole provider of a product or service in a given locality. Although potential competition acts as constrain on the ability of a firm to act independently, the prospect of competition must be real rather than merely a possibility.

YTL pointed out that many licensees have interlinked/common share holding and boardroom representations and such companies should be considered as a single entity as they have the ability to act independently.

YTL noted mergers and acquisitions have been dealt with in the Guidelines on Substantial Lessening of Competition. However, they believe that similar provision should also be included in the Dominance Guidelines.

Lastly, YTL requested the MCMC to set a time-frame for the assessment of dominance so that effective remedy can be instituted in a timely manner.

(c) **Market definition**

Maxis noted that it was generally in concurrence with the key concepts outlined in the guidelines relating to market definition but with regards to paragraph 3.9, Maxis proposed that specialised surveys and data collection will help to aid the process of market definition. Maxis believes that data collection should also be done to compute relevant ratios like the Herfindahl-Hirschman Index (**HHI**) to ensure accuracy of assessments and Maxis has presented a HHI for cellular.

In relation to paragraph 3.14 of the guideline, Maxis highlighted that there is a third source of competition constraint that should be considered by the MCMC in defining markets, i.e. potential competition. A case in point is Telekom Malaysia's

re-entry into the mobile communications market. Maxis noted that potential competition is considered by EC.

Maxis considered that the concept of “close substitutes” for two products to be considered part of the same market is too strict. Close substitutes may mean that products that are seen as interchangeable end up declared belonging to separate markets. European Union (**EU**) considers substitution from the angle of “sufficiently interchangeable” which is less stringent. Maxis is of the view that some measurement of cross elasticity would be useful.

In relation to paragraph 3.20, Maxis noted that while data collection may be challenging, it is critical for proper assessment of market and regulatory policy in general. Maxis requested the MCMC to consider conducting specialised surveys and cited an example where OFCOM had commissioned CSMG for a report on Very High Bandwidth Connectivity in February 2013. In addition, Maxis also requested the MCMC to carry out a cross elasticity test as part of small but significant non-transitory increase in price (**SSNIP**).

Maxis believes that the list of criteria for determining the product dimension of a market at paragraph 3.39 of the guideline should be considered in totality. For example, licensing itself is not a full determinant of market. Similarly, prices and pricing trends should be assessed in totality with other aspects and not in isolation. Maxis also requested the MCMC to add international best practice as one of the factors and consider market segmentation in investigation of demand and supply side substitution.

In most cases, Maxis does not believe that there is a separate market for bundles. The common occurrence in bundling is the extension or leveraging of market power from one market to another.

In relation to the geographic dimension of a market, Maxis suggested that the MCMC refer to EC guidelines which defined relevant geographic market as an area in which the conditions of competition are similar or sufficiently homogeneous and can be distinguished from neighbouring areas in which prevailing competition is appreciably different.

Maxis pointed out that at the functional dimension, market assessment should not be seen in isolation of retail market. Competition in upstream levels is to ensure retail competition for the benefit of end users. If retail markets are effectively competitive, there may not be a need to scrutinise functional wholesale competition.

Telekom Malaysia noted that the MCMC will adopt a dynamic approach to market definition and therefore believe the current market definition by the MCMC is to be taken as a guide only. They are of the view that the MCMC ought to conduct further market definition analysis to support any imposition of ex-ante regulation. Telekom Malaysia requested the MCMC to provide clarification on how the MCMC proposes to review the defined markets, the process for appealing any decision on market definition and the circumstances under which the MCMC may decide to

define a market that is different to those contained in the list of defined markets. Telekom Malaysia observed that the MCMC's Commission Determination on Dominant Position in a Communications Market (Determination No. 2 of 2004) was valid for two years and if this is what the MCMC is proposing when it refers to a dynamic approach, then Telekom Malaysia is supportive of the MCMC's position. They believe an objective process for reviewing dominance and market definitions is essential to ensure certainty for operators and promote confidence in sector regulation.

TIME makes reference to clause 3.39 (j) of the Dominance Guidelines and requested the MCMC to elaborate how and why "[a] distinct group of customers for the relevant product may comprise a separate market if it is possible for a licensee to engage in price discrimination." TIME cited an article by Posner in 2001 and stated that different prices for the same service do not necessarily amount to price discrimination if the price differences are justified by variations in the costs of supply. TIME also quoted descriptions of price discrimination by OFT and MyCC.

TIME also requested the MCMC to bear in mind the prevalence of asymmetric substitution in the communications services where customers switch from less capable networks and services to more capable ones, but not the other way around. It is therefore important that the focal product (i.e. starting point) for the definition of relevant market should be the one for which there are observable signs of competition problems.

TIME requested the MCMC to clarify the different forms of bundling at paragraph 3.41 of the Guideline. TIME pointed out there are three forms of bundling for which different conditions are placed, namely pure bundling, tying and mixed bundling.

TIME observed that the MCMC has, in Clause 4.6 of the Guideline on Substantially Lessening of Competition, given itself the option of subjecting cases to either the specific or general prohibitions of the CMA. TIME expressed concern with the regulatory uncertainty of such an approach, especially for a licensee's business plan to engage in mixed bundling practices.

TIME noted that the way in which the relevant market for a mixed bundle is defined will depend on firstly, the degree of substitutability between the bundle, secondly the degree of complementarity of the services within the bundle and thirdly the focal product of the market definition analysis.

Depending on whether the focal product is a standalone component or the bundle itself, the market definition could include separate markets for each of the standalone component, a single market for the bundle only or a market in which consumers can substitute a bundle for individual services but not the other way around.

TIME stated that sound and proper definition of the relevant market is important, especially in cases involving allegations of market foreclosure or leveraging. TIME

requested the MCMC to consider issuing a bundling specific guideline, similar to that published by ACCC in Australia.

In relation to paragraph 3.47(c) of the guideline, TIME noted that the term “price discrimination” is confusing and misinformed.

TIME opined that the example the MCMC used at paragraph 3.61(e) of the Guideline is not meaningful. They believe that even though the wholesale price of a vertically integrated licensee has been constrained by retail price competition, it cannot be inferred that the licensee’s wholesale and retail services are both supplied in the same market. TIME urged the MCMC to construct a more meaningful example, if possible with reference to specific case law.

In relation to paragraph 4.3 of the guideline, TIME noted that its understanding of the “cellophane fallacy” is somewhat different from that expressed in footnote 10 of the Guideline. The fallacy stems from applying SSNIP test to the firms prevailing monopolistic price for its products which will result in the definition of an overly broad market.

TIME is of the view that the SSNIP test should be applied to a “competitive”, and not the prevailing, price of a product. Where competitive prices are not available, this price is usually imputed or inferred through consultations with consumers and suppliers. Doing so will minimise the risks of overly broad market definitions.

(d) **Dominant position**

Maxis sought clarification on whether the MCMC proposes to apply the European Court of Justice’s definition of a dominant position and if not, to provide the definition of the same.

P1 urged the MCMC to really consider a dominant position of a licensee which resulted from failure of other competitors to invest in a similar market. They believe that the operator who took the risk to invest should be given space to build their business to re-coup the investment.

Maxis proposed that the MCMC considers additional factors when assessing competitive dynamics in a market (see paragraph 4.18 of the guideline) such as “a highly developed distribution and sales network” and “easy or privileged access to capital market or financial resources”. An example in Malaysia is the Public Private Partnership between the Government and Telekom Malaysia on High Speed Broadband (**HSBB**). Therefore, Maxis opines that the Government funding in HSBB has contributed to the lack of investment in fixed markets by other operators.

In addition, Maxis observed that product differentiation should also be taken into account as market share can be legitimately gained in this manner.

In relation to paragraph 4.23(f) of the guideline, Maxis submitted that while incumbent’s conduct is critical, the key is to differentiate between conventional legitimate competitive behaviour from anti-competitive conduct.



In terms of the assessment of "Corporate Groups" at paragraph 4.31 of the guideline, Maxis believes that this may not be necessary as the matter could be addressed by joint or collective dominance. Corporate groups could pose challenges in view of Khazanah's common share ownership across several licensees. Maxis requested MCMC to reconsider this or at least not interpret this too widely.

DiGi supports the MCMC's position and views the inclusion of corporate groups in the assessment of dominance as a positive step, made necessary by recent corporate announcements such as the recent merger of Telekom Malaysia and P1. DiGi noted that Telekom Malaysia could potentially use its extensive fibre-broadband, fixed-voice, internet protocol television (**IP TV**) and LT850 services together with P1's WiMAX and TD-LTE to drive down data prices sharply to gain market share within a short period of time and this could affect the viability of mobile operators.

In determining dominance in the communications market, Telekom Malaysia stated that the MCMC has listed four factors in the PI Paper that it considers important, namely:

- the structure of the market and the nature of competition in that market, including market shares;
- barriers to entry and expansion;
- countervailing power of buyers; and
- the nature and effectiveness of economic regulation (if any).

Telekom Malaysia is of the view that the MCMC should consider other factors such as pricing behaviour, supply behaviour, independence, market share, vertical integration, barriers to entry, global technology and commercial trends as well as product and service differentiation. Telekom Malaysia believes that technology and commercial trends are an especially important consideration for the communications market.

TIME acknowledged the factors that the MCMC will take into account when identifying the presence (or otherwise) of countervailing buyer power. However TIME is disappointed that, unlike its concern with abuse of dominance on the supply-side, the MCMC did not acknowledge the presence of, nor did it express any concerns with, the misuse of monopsony power on the demand-side. TIME proposed that the MCMC include more detailed description (with examples) in the Guideline of how and when monopsonistic power may be considered to have been misused.

(e) **Market share**

Astro requested the MCMC to make a distinction between high market share and a market share number that serves as a threshold for dominance. Astro also believes that other factors such as barriers to entry may be more important than

market share in understanding the economics of competition and cautioned that primarily focusing on market share may limit the proper examination of competition constraints imposed by competitors. Astro suggested that the MCMC refrain from using market share thresholds in assessment of dominance and cited the Spanish Competition Tribunal and French Competition Authority as regulators who have adopted this approach. Astro submitted that the communications market is supported by multiple delivery platforms and suppliers. By using market share which is predominantly based on licensee's past revenue as an indicator for dominance, the MCMC would be unable to take such dynamism into account. Astro also noted that in other jurisdictions, market share is not used as an indicator of dominance per se, rather changes in market shares are often used to understand the nature of competition.

DiGi agreed with the MCMC's use of market share thresholds as one of the various indicators however DiGi opined that it is necessary to align the threshold with the 60% threshold adopted by MyCC. DiGi also believes that a market share of 40% should not be considered sufficient evidence to raise a concern of dominance or significant market power. Instead, the presumption of dominance and the threshold for presumption of dominance should be set to 50% in line with international best practice. In addition, it is also necessary to include an analysis of other factors to assist in determination of dominance as indicated in the guideline. Market share alone is insufficient to make a determination of dominance.

Maxis noted that, while market share is a useful indicator, it is not a complete indicator. Therefore, Maxis propose that the MCMC take into account the influence of customers, suppliers, customer in relation to industries and government regulation.

In relation to paragraph 4.17 of the guidelines, Maxis considered that revenue should not be used primarily for calculation of market share. Instead, the criteria for market share should be dependent on the characteristics of the relevant market. Maxis cited European Guidelines which recommends that the measure should be decided based on relevant market characteristics.

Maxis also urged the MCMC to use measurements such as HHI as indicator of market power, where possible.

Telekom Malaysia emphasized that market share should not be the sole indicator of dominance. They believe that market share measurement does not address the key criteria of dominance, i.e. the ability to ignore competitive restraints to increase profits. Therefore, they believe that market share threshold should be one of many criteria that indicate a potential for dominance but should not be indicative of dominance if considered in isolation.

Telekom Malaysia explained that the incumbent operators in many foreign markets globally enjoy a large share of total sector revenue. However, in Malaysia, their revenue is on par with major mobile operators in Malaysia, and in some service segments it is in fact much lower. Telekom Malaysia provided analysis of key

financial data of major operators in Malaysia which shows that Telekom Malaysia's voice revenue lags behind the three major mobile operators and data service revenue trails Celcom Axiata. In addition, Telekom Malaysia also provided comparison of their share of total revenue in Malaysia, which is 31% while other incumbent operators such as Telstra, Deutsche Telekom and Orange have 60%, 58% and 52% respectively. Telekom Malaysia also provided a chart that clearly shows that fixed voice revenue and ARPU declined between 2008 and 2013. Therefore, Telekom Malaysia strongly urged the MCMC to review the current balance of regulation across fixed and mobile services, including dominance regulation.

TIME agreed that a market share of more than 40% provides a useful (albeit imperfect) indicator of dominance. However, there should be no presumption that a licensee with less than 40% market share cannot be dominant, especially if that licensee is "one among a few" in a highly concentrated sector. TIME encouraged the MCMC to assess the level of competition using HHI.

### **2.3 The MCMC's Final Views**

The MCMC thanks all respondents for their comments on the Dominance Guideline. The MCMC has carefully considered all of the comments provided and has provided its responses to the key issues raised by respondents by topic below.

#### **(a) PI Paper and the Market Definition Analysis, and the MCMC's general approach to market definition and dominance**

The MCMC notes that several respondents submitted that the MCMC should not pre-define markets or pre-determine dominance, and that one respondent considered that doing so was not a legitimate exercise under the CMA. Under section 137 of the CMA, the MCMC may determine that a licensee is in a dominant position. As explained in the PI Paper, the purpose of this PI is to identify those licensees that are in a dominant position for the purposes of a determination under section 137. In order to determine whether a licensee is in a dominant position for the purposes of section 137 of the CMA, the MCMC must first define the relevant markets. Once a determination under section 137 has been made, the MCMC will use that determination to assist it with the exercise of its powers under section 139 of the CMA.

The MCMC accepts that markets and competitive dynamics within those markets are continually changing and evolving. It is for this reason that the MCMC expressly stated in the PI Paper that it would take a dynamic approach to market definition and dominance. This means that, while the MCMC will utilise the analysis undertaken during this PI and its findings on market definition and dominance when examining conduct in the future, the MCMC will not be bound by its findings and will re-assess market definition and dominance if necessary in the particular circumstances or context in question. The MCMC notes TIME's comments regarding the lack of guidance on the approach that will or should be taken to re-define markets as and when necessary. When undertaking an investigation into specific conduct for the purposes of section 139 of the CMA, the MCMC will

reassess its market definition and dominance findings if it receives sufficient evidence from a third party complainant or the licensee being investigated, or evidence of its own, that suggests that the market definition or dominance finding is no longer appropriate.

The MCMC notes Astro's reservations regarding the level of economic rigour that has been applied in the Market Definition Analysis and PI Paper. In undertaking its analysis of the relevant markets in the Market Definition Analysis and PI Paper, the MCMC applied accepted economic and legal principles. The MCMC's findings on market definition and dominance are based on information obtained from interviews with licensees, questionnaire responses and submissions from key industry participants and extensive research on each of the proposed communications markets. The investigation and analysis process is consistent with the practises of other regulators both in the region and globally, and is extensive in many respects to the previous PI Report issued by the MCMC in 2004 and reports issued by other regulators on market definition and dominance.

The MCMC has taken into account the effect of existing regulation on the ability of licensees to act independently of their competitors for the purposes of determining whether they are in a dominant position. However, the MCMC disagrees with Telekom Malaysia that services that are on the Access List should be excluded from the dominance assessment. The MCMC will review and assess the effectiveness of the Access List at the appropriate time.

The MCMC notes TIME's suggestion that it consider establishing a formal committee with the MyCC. The MCMC wishes to explain that there is an existing committee that has been established by MyCC comprising of various regulatory bodies. In relation to TIME's request for clarification of Part B, paragraph 2.36 of the Market Definition Analysis, the MCMC wishes to clarify that the conclusion was reached by Ecorys, consultants for DG Connect.

A number of licensees provided comments on the state of competition and the potential for dominance in specific communications markets. These comments have been considered in reaching the MCMC's final views on market definition and dominance in these markets. These final views are set out further below.

**(b) General comments on the dominance guideline**

The MCMC notes that licensees were generally supportive of the Dominance Guideline and methodology adopted.

Altel suggested that the Dominance Guideline be more constructive and include actions which could lead to a substantial lessening of competition. YTL also made the observation that licensees that are not in a dominant position can act in an anti-competitive manner and suggested that the Dominance Guideline also deal with mergers and acquisitions, similar to the SLC Guideline. The MCMC has prepared two guidelines as part of this PI: the Dominance Guideline and the SLC Guideline. The SLC Guideline provides guidance on the meaning of a substantial lessening of competition for the purposes of sections 133 and 139 of the CMA.

Accordingly, the MCMC does not consider it necessary to include guidance on the meaning of a substantial lessening of competition, or in relation to mergers and acquisitions, in the Dominance Guideline.

Astro commented that pre-determining dominance prejudices the rights of licensees under section 51 because it is likely to have the effect of compromising a licensee's subsequent ability to address the issue of dominance where the underlying factual basis has changed due to technological or economic or even regulatory changes. The MCMC disagrees that pre-determining dominance is likely to prejudice licensee's rights in any investigation of specific conduct for the purposes of enforcement action under section 139 of the CMA. As previously explained in the PI Paper, the MCMC will take a dynamic approach to market definition and dominance and will reconsider its findings if the underlying factual basis upon which the original determination was made has changed in a manner that is likely to impact on those findings. Licensees will be given the opportunity to provide evidence and information to the MCMC on all of the elements of section 139, including dominance. In the event that the MCMC issues a direction to licensees to cease a conduct which has or may have the effect of substantially lessening of competition, the MCMC will adhere to the process stipulated under section 51 of the CMA where the affected licensee shall be granted an opportunity to be heard or submit a written submission within a reasonable time period. The MCMC also notes Celcom's comments that the MCMC should undertake a periodic review of the markets and dominance findings. The MCMC will undertake a review of the markets and dominance findings on a case-by-case basis when required for the purposes of undertaking enforcement action under section 139 of the CMA.

The MCMC notes Maxis' view that the National Policy Objectives might be too high level for this purpose and that it should refer to narrower objectives such as the promotion of effective competition for the long term benefit of the end user. The MCMC can only issue a direction under section 139 of the CMA if doing so would be consistent with the objects of the CMA, which includes the National Policy Objectives. The National Policy Objectives include a range of objects, including regulating for the long-term benefit of the end user.

The MCMC has noted Altel's suggestion regarding the publishing of certain information to assist with minimising potential anti-competitive conduct and the proposal to follow the IDA's approach to regulating dominant operators. The MCMC will consider whether publishing this information may be possible in the future but notes that this is beyond the scope of the current PI. The regulation of essential facilities and services such as dark fibre will be considered in the upcoming Access List enquiry.

Finally, YTL commented that it would prefer the establishment of quantitative tests in the Dominance Guideline, that the MCMC should analyse the industry in the context of the Malaysian legal and regulatory framework and that the MCMC should set a timeframe for the assessment of dominance. The MCMC will use quantitative tests in defining relevant markets and assessing dominance, such as the SSNIP test and the HHI, where data is available. As explained in the PI Paper,

the MCMC will continually re-assess the state of competition in communications markets and will take action if and as necessary. The MCMC will also evaluate any competition complaints it receives from licensees to assess whether further action is required.

(c) **Market definition**

Respondents were generally supportive of the key concepts outlined in the Dominance Guideline in relation to market definition.

The MCMC notes Maxis' suggestion that specialised surveys and data collection will help to aid the process of market definition. The MCMC agrees that such information and data would assist in the market definition process and encourages licensees to provide such information to the MCMC when the MCMC is investigating specific conduct for the purposes of enforcing the provisions of the CMA.

Maxis submitted that there is a third source of competitive constraint that is relevant to market definition: potential competition. The MCMC considers that potential competition is more appropriately considered as part of the assessment of dominance and notes that the key concept in market definition is the concept of substitutability. The MCMC also disagrees with Maxis that the concept of "close substitutes" is too strict. The MCMC has considered the approach taken to market definition by regulators in other jurisdictions and considers its approach to market definition to be consistent with international best practice.

In relation to the criteria for determining the product dimension of a market, the MCMC disagrees with Maxis' comment that the list of criteria at paragraph 3.39 of the Dominance Guideline should be considered in totality. While the MCMC agrees that a single criterion is unlikely to be determinative of market definition, not all of the factors may be relevant to a particular market. The MCMC will consider those factors that are relevant and where information or evidence is available.

TIME requested additional clarification on how and why a distinct group of customers for a relevant product may comprise a separate market if it is possible for a licensee to engage in price discrimination. The MCMC agrees that difference in pricing to two distinct customer groups does not necessarily amount to price discrimination if the price differences are justified by variations in the costs of supply. The MCMC considers that a distinct group of customers may comprise a separate market if a supplier is able to supply products or services at different prices to different customers because the customer is readily identifiable and does not have substitution possibilities.

The MCMC notes TIME's comments that the focal product (i.e. starting point) for the definition of relevant market should be the one for which there are observable signs of competition problems.

A number of respondents commented on the issue of defining markets characterised by bundled products. The MCMC notes TIME's comments regarding the different forms of bundling. The different forms of bundling have been

explained in the SLC Guideline and the MCMC does not consider it necessary to discuss the different forms of bundling in the Dominance Guideline. Further, the MCMC does not consider it necessary to issue a separate bundling guideline as requested by TIME. The MCMC considers there to be sufficient guidance on bundling provided in the SLC Guideline.

The MCMC notes that respondents generally agreed with the criteria for considering whether a bundle may constitute a separate product market. The MCMC agrees that market definition could include separate markets for each of the standalone components of a bundle, a single market for the bundle only or a market in which consumers can substitute a bundle for individual services but not the other way around. However, the MCMC notes Maxis' view that there is not a separate market for bundles.

In relation to the temporal dimension, the MCMC notes TIME's comments regarding the use of the term price discrimination at paragraph 3.47(c) of the Dominance Guideline. The MCMC disagrees that the term is confusing and notes that the term price discrimination in the context of the temporal dimension of a market simply refers to the practice of supplying the same product at different prices in different time periods. An often quoted example of this type of price discrimination is peak and off peak pricing.

The MCMC notes Maxis' suggestion that the Dominance Guideline refer to the EC guidelines which define the relevant geographic market as an area in which the conditions of competition are similar or sufficiently homogeneous and can be distinguished from neighbouring areas in which prevailing competition is appreciably different. The MCMC had regard to the EC's definition of the geographic dimension of the market, in addition to the approach to defining geographic markets taken by other regulators.

In relation to the functional dimension of the market, the MCMC notes Maxis' comments that the market definition should not occur in isolation of the retail market. The MCMC agrees that competition at one level of the market may affect another level of the market to the point that the two levels of the market can only sensibly be assessed as a single market. The MCMC has noted at paragraph 3.61(e) of the Dominance Guideline that it will take into account whether demand from one level of a market may affect demand at another level of the market for the purposes of determining the relevant functional market. However, the MCMC notes TIME's submission that even though the wholesale price of a vertically integrated licensee is constrained by retail price competition, it cannot be inferred that the licensee's wholesale and retail services are both supplied in the same market. While the MCMC will take into account the extent to which demand at one level of the market affects another level of the market for the purposes of market definition, it does not follow that where this occurs the MCMC will define the functional market as comprising a single functional level. The MCMC will take into account a range of factors when determining the relevant functional level.

The MCMC notes that Telekom Malaysia has requested clarification on how the MCMC proposes to review the defined markets, the process for appealing any decision on market definition and the circumstances under which the MCMC may decide to define a market that is different to those contained in the list of defined markets. The MCMC will undertake a review of the markets and dominance findings on a case-by-case basis when required for the purposes of undertaking enforcement action under section 139 of the CMA. In undertaking any review of the defined markets, the MCMC will follow the approach to market definition set out in section 3 of the Dominance Guideline.

Finally, the MCMC notes TIME's comments regarding the "cellophane fallacy". The MCMC wishes to clarify its position on the cellophane fallacy. The cellophane fallacy is usually relevant in the context of a SSNIP being used as a tool for market definition. The cellophane fallacy occurs when monopolists are currently supplying goods or services at the profit maximising level. When a court or a regulator undertakes a SSNIP, they do so at the prevailing prices of the market, and see whether the firm can raise and maintain its prices by, say, 5%. The cellophane fallacy is that the monopolist cannot maintain a SSNIP over the already profit-maximising price, however the application of the SSNIP test fails to take into account the fact that the prevailing price was not a competitive price, but was a monopolistic price. Put another way, the assessment of the market takes place after an anti-competitive SSNIP has successfully occurred and therefore there is the risk of defining an overly inclusive market.

(d) **Dominant position**

The MCMC confirms that the definition of a dominant position that it proposes to apply is the European Court of Justice's definition quoted at paragraph 4.1 of the Dominance Guideline.

The MCMC notes that most licensees agreed with the factors that the MCMC will consider when assessing whether a licensee is in a dominant position. However, both Telekom Malaysia and Maxis commented that the MCMC should take other factors into account. These factors include pricing behaviour, supply behaviour, independence, market share, vertical integration, barriers to entry, global technology and commercial trends, product and service differentiation, a highly developed distribution and sales network and easy or privileged access to capital market or financial resources. The MCMC agrees that many of these factors may be relevant to the assessment of dominance and considers that each of these factors are adequately covered by the four key factors summarised at paragraph 4.6 of the Dominance Guideline.

P1 urged the MCMC to consider the dominant position of a licensee that has resulted from failure of other competitors to invest in a similar market and argued that a licensee which has undertaken investment should be allowed to re-coup its investment. The failure of other competitors to invest in infrastructure or other key assets in a particular market may occur for many reasons, including the existence of barriers to entry. Accordingly, where there has been a lack of investment by



competitors, the MCMC will consider the reasons for the lack of investment when assessing whether a licensee is in a dominant position. This will be particularly relevant when assessing whether entry or expansion is likely to constrain a licensee.

The MCMC notes Maxis' comments that, while the conduct of an incumbent is a critical factor in the assessment of potential barriers to entry or expansion, the key is to differentiate between conventional legitimate competitive behaviour and anti-competitive conduct. The MCMC agrees that this is an important distinction, but considers that differentiating between legitimate and anti-competitive conduct is a relevant consideration when assessing whether particular conduct has the purpose or effect of substantially lessening competition.

The majority of respondents agreed with the MCMC's approach to corporate groups at paragraph 4.33 of the Dominance Guideline. However, the MCMC notes Maxis' view that the MCMC's approach to corporate groups may not be required as the issue could be addressed by joint or collective dominance. The MCMC disagrees that joint or collective dominance adequately addresses the issue of corporate groups and notes that the CMA does not directly contemplate the existence of joint or collective dominance.

The MCMC notes TIME's comments regarding abuse of dominance on the demand-side. The MCMC considers that the Dominance Guideline is adequate for the purposes of determining dominance in acquisition markets. The factors that the MCMC will take into account when analysing dominance are not intended to be exhaustive and where other factors exist in a particular market that are relevant to the assessment of dominance, such as countervailing power of suppliers, the MCMC will take this into account when assessing dominance. The MCMC has amended the Dominance Guideline to clarify this.

(e) **Market share**

The MCMC has considered the comments from respondents in relation to the use of market share in assessing dominance.

The MCMC notes that several respondents commented that market share should not be the sole or primary indicator of dominance and that other factors should be considered in assessing dominance. As explained in the PI Paper, the MCMC views market share as one (of many) possible indicators of dominance. The MCMC will take into account a range of factors when assessing dominance, including market share.

The MCMC notes Astro's suggestion that the MCMC refrain from using market share thresholds when assessing dominance. The MCMC would like to clarify that it has not specified any market share thresholds in the guideline and will not apply market share thresholds when assessing dominance. As explained in the PI Paper, the example of a 'high' market share in the Dominance Guideline is not a threshold for determining dominance and does not give rise to a presumption of dominance.

The MCMC agrees with Astro's comments that changes in market share over time are often used by regulators in other jurisdictions to understand the nature of competition in a market.

A number of licensees suggested that the MCMC use measurements such as the HHI as an indicator of market power. The MCMC agrees that such measures are a useful tool in assessing dominance and has amended the Dominance Guideline to clarify that such tools will also be used by the MCMC where sufficient data is available.

Maxis submitted that revenue should not be used primarily for calculation of market share. Instead, the criteria for market share should be dependent on the characteristics of the relevant market. As explained in the PI Paper under paragraph 4.17, the Dominance Guideline expressly states that other factors such as share of subscribers or number of towers may also be used to calculate market share.

The MCMC notes Telekom Malaysia strongly urged it to review the current balance of regulation across fixed and mobile services, including dominance regulation. As explained in the PI Paper, the MCMC will take a neutral approach to the application of the Dominance Guideline and the SLC Guideline.

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## **3 SLC Guideline**

### **3.1 Overview**

In section 9 of Part A of the PI Paper, the MCMC described the SLC Guideline.

After a brief discussion of the process by which the MCMC obtained feedback on the draft SLC Guideline from selected licensees, the MCMC described the analytical framework for assessing a 'substantial lessening of competition' set out in the SLC Guideline, including:

- (a) The difference between the purpose test under section 133 and the effect test under section 139 of the CMA;
- (b) The meaning of the phrase 'substantial lessening of competition';
- (c) The with and without test and competitive factors; and
- (d) Examples of conduct that may substantially lessen competition.

### **3.2 Summary of submissions Received**

Astro highlighted that the SLC Guideline does not make any express exception of conduct that may substantially lessen competition, to be justified on the basis that it represents a reasonable commercial response or brings about net benefits. Astro had noted that the MCMC will consider potential positive benefits of otherwise anti-competitive conduct when assessing an authorisation application under section 140 but they believe that there should be other ways to recognise positive

benefits. Otherwise, every commercial decision may require authorisations and this will cause unnecessary delays to conclusion of commercial transactions. Astro requested the MCMC to pursue amendments to the law to clear agreements that may otherwise be prohibited. Astro cited European Union as example where an agreement prohibited by Article 101(1) may be justified and thus capable of being cleared if Article 101(3) applies.

Astro also submitted that the SLC Guideline does not provide any clarity on how merger parties may approach the MCMC or what the MCMC expects licensees to do in the event of an anticipated merger. There is no information in the SLC Guideline on whether the MCMC can formally or informally grant merger clearance after its assessment and this will only lead to uncertainty in the media market, and deter media players from considering mergers as a means to grow their business. Astro urged the MCMC to seriously think through the inclusion mergers and acquisitions. They also noted the lack of parity between the competition regime of the general competition regulator and that of the MCMC. As such, they believe that it is clearly inappropriate of the MCMC to seek to regulate mergers as part of this market exercise. Seeking to regulate mergers through the authorisation process pursuant to section 140 CMA also runs the risk of being ultra vires and would cause uncertainty in the communications market if not properly conceived and implemented. Due to such ambiguity, Astro proposed that the merger provisions in the SLC Guideline are deleted and the MCMC should instead rely on the other provisions in the SLC Guideline to assess if there is an SLC and thereby regulate any post-merger SLC.

In relation to the MCMC's intention to issue a separate guideline for section 140, DiGi cautioned that the MCMC needs to be satisfied that such authorized conduct is in line with national interests (which also need to be explicitly described). DiGi recommended that, for purposes of clarity, the MCMC should consider developing a list of parameters or criteria that would guide the process, including what is meant by 'national interest'.

Whilst DiGi supported the idea of the MCMC examining mergers and acquisitions in the communications and multimedia sector, DiGi opines that there should be first, clear provisions in the CMA or other relevant Malaysian competition legislation that would specifically and directly provide for merger controls. DiGi is of the view that not all mergers and acquisitions are aimed at or result in increasing market power or a reduction in competition. In particular, where partnerships between licensees seek to enhance cost efficiency and operational synergies; such ventures should be encouraged as a means to improve on the services provided in the industry which could benefit the end users.

DiGi noted that the Competition Act 2010 has no merger controls, nor does the Malaysian Code of Take-overs and Mergers consider market competition effects. As such, they believe that there should also be an equitable application of mergers and acquisitions provisions applied equally for the communications and multimedia sector and that of other sectors in Malaysia. This would also be in line with international best practice.

DiGi submitted that the MCMC should assess whether to design an ex-ante system of merger control, in which the following, amongst other issues, should be considered:

- Which transactions should be characterized as a merger;
- The jurisdictional test that should be used for determining those mergers that can be investigated by the authorities. The threshold could for instance be based on turnover, the value of assets required or market share;
- Whether the merger control system also apply to transactions consummated outside Malaysia but which have effects within it;
- Whether mergers should be subject to a system of mandatory pre-notification or should it be voluntary;
- Whether there should be a requirement to suspend mergers that the Authority has the power to investigate before notification and until declared compatible with the merger control rules;
- The procedural timeframe for which a merger investigation must be completed;
- The substantive test for reviewing mergers, solely a competition criteria, i.e. whether the merger has the effect, or be likely to have the effect, of substantially lessening competition in the relevant market in Malaysia; whether the merger significantly impedes effective competition or similar) and/or others;
- The mechanisms to put in place for the negotiation of remedies that would overcome the problem identified by the Authority;
- Who should make the decisions in a merger case; and
- The system of judicial review or appeal should be put in place to test the findings of the decision-maker in merger cases and the deadlines that should apply for a judicial review or appeal to be completed.

As for the substantive test and in line with European merger control rules, DiGi submitted that market shares of the merged entity and the increase of market share will only be one of several relevant factors to take into consideration when assessing a horizontal merger. Other circumstances to be taken into account are such as:

- Whether one or more of the merging parties had a pre-merging market share of 50 % or more;
- The other market players market shares and the level of concentration in the market;

- Whether the merging parties are close competitors;
- Whether the customers of the merging parties will have limited possibilities of switching to other suppliers;
- Whether the customers have countervailing buyer power;
- Whether barriers entry into the market is sufficiently easy and/or whether the merger will increase barriers to entry;
- Whether the merger would remove an important competitive force;
- Whether the merging parties will be able to hinder expansion by competitors;
- Whether competitors are unlikely to increase supply if prices increase;
- Whether the merger involves a potential entrant or recent entrant with a small market share;
- Whether one or more of the parties are important innovators in ways not reflected in market shares;
- Whether there are significant cross-shareholdings among the market participants;
- Whether one of the merging firm is a maverick firm with a high likelihood of disrupting coordinated conduct;
- Whether there are indications of past or ongoing coordination or facilitating practices that are present; and
- Whether the merger will result in efficiencies outweighing the negative effects on competition.

DiGi proposed that the MCMC develop a procedural framework on mergers and acquisition that will apply to licensees. The framework should include two phases, namely notification and investigation by the MCMC. DiGi also believes that ex-ante merger controls should address issues such as ancillary restraints, penalties and remedies and an avenue for review.

DiGi also proposed that the MCMC develop a separate Guideline or Information Paper to articulate what it deems as tying or linking conduct and provide examples as guidance to the industry. DiGi is of the view that such Guideline or Information Paper is necessary given that there are some service providers who are cross-selling multiple and distinctly different products within their group of companies e.g. Telekom Malaysia while others are collaborating to cross-sell each other's products and services e.g. Astro's IPTV service offered with either Maxis' or TIME's High Speed Home Fibre Internet.

Maxis noted that the Competition Commission allows certain exemptions of conduct and suggested that the MCMC consider situations where such can arise. There can be instances of conduct having beneficial impact on the market in the long run even though it can appear to be anti-competitive. Maxis noted the MCMC's position on Authorisation of Conduct and wanted to know if the MCMC would consider the "national interest" in CMA S140 to encompass the items of section 5 (a)-(d) of the Competition Act. Maxis also proposed that the divergence between the CMA and the Competition Act, if any, should be remedied to ensure that all industries are treated equally or consistently.

Similar to what Maxis had highlighted in the Dominance Guideline, Maxis proposed narrower objectives, such as the promotion of effective competition for the long term benefit of the end user.

When assessing conduct which has the purpose and effect of substantial lessening of competition, Maxis commented that the seriousness of the effect of the conduct to competition should be given utmost priority. It must be meaningful or relevant to the competitive processes, and not merely "motive". Similarly, the "actual or likely effect of the conduct" must be real and meaningful, not something that cannot be achieved or trivial.

Further, Maxis commented that the mere fact that an operator being in dominant position should not be the only criteria to determine that the operator's conduct has or may have the effect of substantially lessening competition. Maxis cited the criteria that ACCC of Australia has laid down to consider whether a corporation is in a position to take advantage of its market dominance. In addition, Maxis also cited the case of *Melway Publishing Pty Ltd v Roberts Hicks Pty Ltd* (2001) where the Federal Court and High Court had found that Melway had not taken advantage of its market power.

In relation to existing competition, Maxis requested the MCMC to consider the state of development of the market. Some sunset markets such as paging have declining subscribers and exit the market but it is not due to anti-competition factors.

In relation to the examples of conduct that may 'substantially lessen competition', Maxis:

- requested that the MCMC provide some examples of conduct under S135 that would constitute an offense to guide licensees on conduct;
- proposed that the MCMC use a combination of cost methods to arrive at conclusion of predation when considering predatory pricing conduct. In addition, the MCMC was also requested to consider whether there is likelihood that a competitor who has exited the market may re-enter the market or if other new entrant has entered into the market to re-balance market competitiveness. Finally, Maxis sought clarification on whether the MCMC will inform

the respondent(s) and complainant(s) of what particular cost method is used to assess predatory pricing and whether opportunity will be given for submission.

- noted that, in relation to refusals to supply, it believes that a more appropriate regulatory approach would be inclusion of that facility or service in the Access List, as opposed to using dominance route. They believe that refusal to supply is likely to substantially lessen competition only if the licensee has substantial degree of market power. Maxis cited an information paper published by ACCC where some exceptions were given for contestable markets such as mobile virtual network operator (**MVNO**). In making decision to impose duty to supply and taking enforcement action, the MCMC should have regard for investment incentives.
- urged the MCMC to give a balanced recognition to the importance of protecting ex-ante incentives for the licensees to invest and compete dynamically, when assessing access. Maxis proposed that the MCMC adopts criteria established in the landmark EU case of Oscar Bronner GmbH & Co. Kg v. Mediaprint Zeitungs-und Zeitschriftenverlag GmbH & Co.
- provided a recommendation for improving the margin squeeze description: "Margin squeeze refers to a situation where a vertically integrated firm that controls an essential input to a downstream market sets the price for that input at a level which results in an insufficient margin between the price at which it supplies the input to wholesale customers and the price at which it supplies the finished product in a downstream market, for an efficient operator."
- requested the MCMC to consider avoidable cost test (the incumbent's cost) and avoided cost test (efficient competitor's cost) when determining margin squeeze.
- sought clarification on whether the MCMC will inform the respondent(s) and complainant(s) of what particular cost method is used to assess margin squeeze and whether opportunity will be given for submission.
- requested the MCMC to consider technical tying or bundling as this is often a lasting strategy used by dominant operator to foreclose competition.
- noted that exclusive dealing should be assessed on a case-by-case basis. For instance, exclusive supply should be considered anti-competitive only if such exclusive arrangement makes most of the efficient input suppliers and customers competing with dominant operator unable to find alternative source of input supply. Maxis suggested the MCMC to consider the length of the agreed term, the

establishment costs of the service incurred by the parties, the relationship of these costs to the establishment charges of such arrangement and the extent to which these costs could be expected to be amortised over the particular period of arrangement. These criteria were adopted by ACCC.

Maxis also sought clarification on when actual investigation will be occurring as the guideline seems to suggest 2 stage investigation. Under section 70(1) of the CMA, Maxis requested that the notification includes the type of anti-competitive conduct alleged, the facts of the allegation, the costing methods applicable for assessment and the relevance of the information sought, in relation to the investigation.

P1 disagreed with the MCMC's approach to categorise mergers and acquisitions under possible conduct of substantial lessening of competition. P1 pointed out that Mergers and Acquisition can generate benefits as follows:

- Greater Value Generation - The shareholder value of a firm after mergers or acquisitions would be greater than the sum of the shareholder values of the parent companies. Mergers and acquisitions generally generate cost efficiency through the implementation of economies of scale, contributing to efficient use of investment. These benefits will eventually be transferred to consumers in the form of lower cost of services.
- Tax Gain - Mergers & Acquisitions also leads to tax gains and can even lead to a revenue enhancement through market share gain. Companies go for Mergers and Acquisitions with the anticipation that the newly generated shareholder value will be higher than the value of the sum of the shares of the two separate companies. Mergers and Acquisitions are particularly beneficial when companies are weathering through tough times.
- Gaining Cost Efficiency - A merger or acquisition is able to create economies of scale which in turn generates cost efficiency. P1 is of the view that mergers and acquisitions can be useful when a business firm wishes to make its presence felt in a new market, when an organization wants some administrative benefits and when a firm is in the process of introducing new products.

Telekom Malaysia welcomed the provision of the SLC Guidelines and the clarity they provide. Telekom Malaysia believes that section 58 of the CMA provides appropriate mechanisms to allow for PI and consultation where action against licensees is proposed under sections 133 or 139. Telekom Malaysia considers that the ordinary, natural meaning of "substantial", "considerable" and "big" are appropriate for the regulation of anti-competitive behaviour in Malaysian telecommunications markets.

Telekom Malaysia noted that the MCMC has included mergers or acquisitions within the list of "examples of conduct that the MCMC considers likely to have an



adverse impact on competition". While Telekom Malaysia recognises the need for effective regulation and oversight of significant mergers and acquisitions, the inclusion of mergers and acquisitions as an example of potentially anti-competitive conduct is not consistent with global practice. Telekom Malaysia noted that regulators generally rely on separate mergers and acquisitions guidelines and cited the ACCC's Merger Guidelines 2008 as an example.

Telekom Malaysia considers that an exception to sections 133 and 139 for authorised conduct that is in the national interest is both appropriate and necessary. A transparent mechanism for assessing and determining requests for authorisation is necessary for this exception to be effective, but should such a mechanism be in place, Telekom Malaysia considers that section 140 provides an appropriate avenue for ensuring that sections 133 and 139 do not inadvertently prevent nationally advantageous conduct. Telekom Malaysia applauded the MCMC's commitment to develop a guideline for seeking authorisation of conduct but they urged the MCMC to prepare the guideline as soon as possible in order to provide certainty. Telekom Malaysia supported the removal of "tying" as an example of SLC conduct since it is already prohibited under another section of the CMA.

TIME expressed concern that the MCMC is reading the term "conduct" under sections 133 and 139 to include mergers and acquisitions. TIME pointed out that there are no specific provisions in the CMA on mergers and acquisitions. Although it is possible to assess the SLC "purpose" of a completed mergers and acquisitions, a finding that it has anti-competitive effects will inevitably lead to the problem of "unscrambling a scrambled egg". If the MCMC were to deem mergers and acquisitions as "conduct" and subject it to authorisation under section 140, the MCMC should be mindful that the economic grounds for authorising a uni-dimensional and short-run form of conduct with potential anti-competitive effects will be completely different from multi-dimensional effects needed to authorise mergers and acquisitions. If the MCMC insists on deeming mergers and acquisitions as conduct, TIME proposed that the MCMC adopt a cautious approach. TIME also proposed that a guideline be developed to explain the subtle difference between a forward looking and retrospective assessment of mergers and acquisitions.

TIME urged the MCMC to be cautious in relying on the prospective (i.e. pre-defined) markets for the purpose of applying the "with and without" test in assessing cases under section 133 or section 139. The "with and without" test has to compare the effects that have already materialised in the relevant market with those that would have reasonably come about if not for the alleged anti-competitive conduct. An anti-competitive conduct that has transpired amounts to "a change in circumstances" and the starting point of market definition could be different from the one that the MCMC has used in its ex-ante definition of the market for the purpose of declaring dominance.

TIME noted that paragraph 4.4 of the SLC Guideline states that the MCMC "is still finalising its views on market definition and will take account [sic] these

conclusions on market definition when assessing the purpose or effect of particular conduct.” This appears to contradict the approach posited in clause 2.2 of the SLC Guideline.

TIME does not agree with the MCMC that there may be overlaps between sections 135 and/or 136 with sections 133 and 139. TIME is of the view that the per se restrictions (in sections 135 and 136) complements rather than overlap the SLC restrictions (in sections 133 and 139). TIME is of the view that the decision as to whether section 135 and/or 136 have been breached will be based on facts and evidence, without any need to define the relevant market and to assess whether the collusive agreement or tying has the purpose or effect of substantially lessening competition in that market. TIME expressed concern that if the MCMC has an ‘open ended’ choice of taking action under specific or general prohibitions, then a case on bundling can be ruled to be illegal under section 136 regardless of the actual or potential pro-competitive effect.

YTL believes that the effectiveness of the implementation of the SLC Guidelines will hinge on how the MCMC approaches the definition of relevant markets. The flexible approach as outlined in the market definition analysis will be required. They opined that the MCMC should not be hesitant in invoking the flexibility of market definition to ensure that the competition objectives of the CMA are achieved.

YTL observed that SLC Guideline take the view that if a small player exits the market, SLC may not arise. They pointed out that small player may be exiting the market due to barriers arising from the control over supply of products and services. They urged the MCMC to prevent such conduct to nurture competition in the long term.

YTL pointed out that collusion has not been addressed in the guidelines where more than one party, being members of an industry grouping, restrict or attempt to restrict entry of other players into the market. Another form of restrictive activity is where a licensee who is given the responsibility to "project manage" provisioning of infrastructure designs the infrastructure in such a way that only a restricted number of licensees can share the facility. YTL highlighted that such type of arrangements are prevalent in the market, where access is only provided to licensees who are part of a grouping, while other licensees are denied access despite the access regime. They believe that such form of sharing arrangements should be addressed in the SLC framework rather than treating them as access issues.

YTL welcomed the inclusion of mergers and acquisitions in the SLC Guidelines. However, they requested the MCMC to prescribe suitable remedies in a timely manner in the event of SLC. In many other jurisdictions, mergers and acquisitions is assessed by relevant regulatory authorities before being allowed to proceed and YTL suggested that a similar approach is used by the MCMC. YTL requested for a timeframe to be established for investigations into SLC.

### **3.3 The MCMC's Final Views**

The MCMC thanks licensees for their thoughtful comments on the SLC Guideline. The MCMC has considered all of the comments provided by respondents on the SLC Guideline and notes that the majority of the comments received related to the application of the SLC Guideline, rather than the SLC Guideline itself.

The MCMC notes Maxis' comments that the seriousness of the conduct in question should be a priority when assessing conduct which has the purpose and effect of substantial lessening of competition, and that the "actual or likely effect of the conduct" must be real and meaningful, not something that cannot be achieved or trivial. The MCMC notes that, in order to breach sections 133 or 139 of the CMA, the lessening of competition must be 'substantial'. The MCMC believes, therefore, that conduct that has a trivial effect on competition will not breach sections 133 and 139. The MCMC has also noted Maxis' comments regarding sunset markets.

Maxis also made reference to the prohibition in Australia on misusing market power and the requirement that the courts consider whether or not a corporation has taken advantage of its market power. The MCMC notes that the taking advantage requirement under Australian law is not required under section 139. The test under section 139 is whether a licensee in a dominant position has engaged in conduct which has or may have the effect of substantially lessening competition.

Several licensees commented on the MCMC's intention to issue a separate guideline to clarify the process for licensees to seek authorisation of conduct under section 140 of the CMA. The MCMC notes that licensees were supportive of the development of specific guidelines for the authorisation of conduct under section 140. The MCMC will consider the comments from respondents on the application of section 140 when developing the guidelines.

The MCMC notes Astro's comments regarding the exclusion from the SLC Guideline of an express exception for conduct that may substantially lessen competition to be justified on the basis that it represents a reasonable commercial response or brings about net benefits, and the need for other ways to recognise positive benefits outside of section 140. As explained in the PI Paper, the MCMC does not consider the positive benefits of otherwise anti-competitive conduct to be a valid consideration under sections 133 and 139. Any positive or legitimate purpose or effect of conduct that is likely to substantially lessen competition will be considered when assessing an authorisation application under section 140.

In relation to application of the "with and without" test, the MCMC notes TIME's comments that the starting point of market definition could be different from the one that the MCMC has used in its ex-ante definition of the market for the purpose of declaring dominance. As explained in the previous section, the MCMC will undertake a review of the markets on a case-by-case basis when required for the purposes of undertaking enforcement action under sections 133 or 139 of the CMA. The MCMC thanks TIME for its comments on paragraphs 2.2 and 4.4 of the

SLC Guideline and notes that it will amend paragraph 4.4 to refer to the Market Definition Analysis.

Most respondents commented on the inclusion of mergers and acquisitions in the SLC Guideline as an example of conduct that may have the purpose or effect of substantially lessening competition in a communications market. The MCMC notes that the views of respondents as to whether mergers and acquisitions should be regulated by sections 133 and 139 of the CMA were mixed, with one respondent welcoming the inclusion while others raised concerns with interpreting 'conduct' as encompassing mergers and acquisitions. The MCMC believes that the term 'conduct' could encompass any commercial or other activities that are undertaken by a licensee in the relevant market. Accordingly, the term 'conduct' under sections 133 and 139 of the CMA can be read as encompassing mergers and acquisitions undertaken by a licensee.

The MCMC notes P1's disagreement with the MCMC's approach to including mergers and acquisitions as a type of conduct that is subject to sections 133 and 139 of the CMA on the basis that mergers and acquisitions can generate certain benefits. The MCMC does not consider the potential positive benefits of a merger or acquisition to be a valid reason to exclude mergers and acquisitions from the application of sections 133 and 139. Any positive benefit of a merger or acquisition will be considered when assessing an authorisation application under section 140.

A number of respondents called for further clarity on how merger parties may approach the MCMC regarding a proposed merger and for the MCMC to develop a procedural framework for the assessment of mergers and acquisitions. The MCMC intends to issue a separate guideline on mergers and acquisitions and will consider all of the comments from respondents in the development of those guidelines.

The MCMC notes TIME's disagreement with the MCMC's view that sections 135 and/or 136 overlap with sections 133 and 139 of the CMA. DiGi requested that the MCMC develop a separate Guideline or Information Paper to articulate what it deems as tying or linking conduct and provide examples as guidance to the industry. Similarly, Maxis requested that the MCMC provide some examples of conduct that would breach section 135 and YTL noted that collusion has not been addressed in the SLC guideline. The MCMC would like to point out that there is no requirement for conduct under sections 135 and 136 to have the purpose or effect of substantially lessening competition to be a breach of the CMA. Accordingly, the SLC Guidelines do not apply to conduct under sections 135 and 136. The MCMC will consider the requests for further guidance.

The MCMC has considered Maxis' specific comments on the examples of conduct that may substantially lessen competition and makes the following points:

- when assessing whether conduct is likely to amount to predatory pricing, the MCMC will consider the measure of cost that is appropriate in the circumstances. Respondents and complainants will be given the opportunity to make submissions on the

appropriate cost measure when the MCMC undertakes an investigation into specific conduct;

- the MCMC agrees that a refusal to supply is more likely to constitute a substantial lessening of competition in circumstances where the supplier is in a dominant position. However, the MCMC disagrees that all services where a refusal to supply is likely to have the effect of substantial lessening of competition should necessarily be included on the Access List. The Access List is a list of facilities and services to which an access regime applies and has been determined by the MCMC under Chapter 3 of Part VI of the CMA. The Access list is based on the principle of regulation in the long-term benefit of the end user. The MCMC is currently undertaking a review of the Access List in 2014.
- the MCMC agrees with the suggested addition to the definition of a margin squeeze proposed by Maxis. The MCMC will amend the definition to include the words “for an efficient operator” in paragraph 4.16 of the SLC Guideline. When undertaking an investigation into allegations of margin squeeze conduct, both the complainant and the respondent will be given the opportunity to comment on the MCMC’s approach to assessing margin squeeze, including the measure used to assess costs.
- the MCMC disagrees that exclusive dealing should only be considered anti-competitive if the exclusive dealing conduct will result in most of the customers or suppliers that compete with the supplier are unable to find an alternative source of supply. The MCMC agrees that the extent of market foreclosure test arising from exclusive dealing is relevant to the assessment under sections 133 and 139, but notes that the test is whether the exclusive dealing has the purpose or effect (or likely effect) of substantially lessening competition in a communications market.

In relation to Maxis’ request for clarification of the investigation process the MCMC confirms that investigation phase is a single phase but is comprised of multiple steps to ensure that a rigorous investigation is undertaken. The MCMC also notes Maxis’ request that the notification of investigation contain certain information such as the type of anti-competitive conduct alleged and the relevance of the information sought. The MCMC notes that the relevant provision of the CMA does not specify the types of information to be provided in a notice of investigation. The MCMC considers this allows for adequate flexibility in the MCMC’s approach to communicating with parties under investigation and accordingly the MCMC does not see the need to bind itself to a particular style of notice as it has a collaborative approach in dealing with all involved parties.

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## 4 Fixed telephony services (including VoIP)

### 4.1 Overview

Fixed telephony services (including voice over internet protocol, **VoIP**) were addressed in section 1 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. In the PI Paper, the MCMC set out its preliminary view that the fixed telephony services market in Malaysia included services delivered via the public switched telephone network (**PSTN**), VoIP, and over-the-top (**OTT**) but excluded mobile telephony, which forms part of a separate market. The MCMC came to the preliminary view that Telekom Malaysia is dominant in the national retail and wholesale markets for access to fixed telephony services, which is separated into business and residential markets and includes the following separate product markets:

- (a) access to the fixed line connection and local calling services; and
- (b) separate calling markets (including PSTN and VoIP) for:
  - (i) national long distances calls;
  - (ii) international calls; and
  - (iii) fixed-to-mobile calls.

### 4.2 Summary of submissions received

#### (a) Do you have any further comments on market definition?

Celcom, DiGi, Maxis and YTL are of the view that fixed and mobile communication services continue to belong to separate market segments, while TIME and Telekom Malaysia believe that they belong to the same market.

On the demand side, Celcom provided statistics by the MCMC and International Telecommunications Union (**ITU**) indicators that clearly show that mobile penetration rates are higher than fixed penetration rates. In addition, Celcom cited a paper published by Body of European Regulators for Electronic Communications (**BEREC**) in 2011, in which most national regulatory authorities had considered whether fixed and mobile services belong to the same market and the study found that majority of National Regulatory Authorities (**NRA**) in Europe do not consider these two services to belong in the same retail market due to different characteristics and different preferences of customers' and usage between these services.

From the supply side, mobile communications and Direct Exchange Lines (**DEL**) are also not supply-side substitutes because the network that is required to provide these services is different. In addition, they pointed out the costing study carried out by the MCMC in 2012 shows that the costs of delivering the services are also different.

DiGi agrees with the MCMC's conclusion that there are separate markets for fixed residential telephony and fixed business telephony. DiGi also agrees with the MCMC's conclusion that there are separate and distinct markets for fixed and mobile telephony.

Maxis supports the MCMC's findings that there are separate national retail and wholesale markets for access to fixed telephony services which is separated into business and residential markets. They believe that the usage, call patterns and composition of calls are different.

On the substitutability of fixed and mobile telephony services, Maxis agreed with the MCMC that mobile services do not constitute an effective substitute for the fixed-line telephony services as there are key differences between the two technologies in terms of functionality (e.g. fixed against mobility) and pricing adopted [e.g. local, subscribers trunk dial (**STD**) against on-net, off-net].

Maxis is of the view that "access to the fixed line connection and local calling services" can be defined as one market, while calling markets defined as another market. However, they believe that it may be too granular and resemble individual products if the national long distance, international calls and fixed-to-mobile calls are considered as separate markets individually. As such, they believe that it might be better to simplify the market definition into fixed calls (excluding local) provided that there is sufficient data to scrutinise it as a separate market.

P1 sought clarification from the MCMC on the meaning of the term VoIP as it appear to mean VoIP over fixed line service, i.e. managed IP network using 7 and/or 8 digit geographic numbers.

P1 disagreed with MCMC's approach to separate retail and business. They believe that the high switching cost between retail and business should not be used as a tool to measure dominance. P1 noted that the declining trend of DEL penetration and revenue for fixed services is largely attributed to mobile substitution and it is anticipated to become more prevalent with the advancement of technology. Therefore, P1 recommended that fixed-mobile convergence is fully considered in the market definition to ensure that the regulation is in line with future trends.

With regards to pricing strategies, P1 pointed out that there are no main differences between fixed and mobile as the fixed operator is also offering packages similar to what the mobile operators are offering, whereby a customer is charged a fixed amount on monthly basis using a 'bucket' of free calls. They also believe that pricing should not be a factor that should be accounted for in determining whether a service is a substitution to another.

TIME recommended that the retail market of fixed and mobile telephony should be treated as a single market, whilst the wholesale market should be separated. TIME noted that end users behaviour has changed over the last decade and they prefer using mobile services due to its mobility function and price is no longer a major consideration. TIME recommended that the MCMC conduct actual studies to

ascertain that there is no causal relationship for the decline of fixed telephony to the adoption of mobile telephony.

Telekom Malaysia believes that fixed-to-mobile substitution is present in the Malaysian market. Telekom Malaysia noted that in Malaysia, unlike other countries around the world, the introduction of mobile services meant that a significant segment of the market has bypassed the acquisition of a fixed line service altogether. The declining fixed line penetration along with rising mobile penetration indicates that many are relinquishing their fixed lines in favour of a mobile service.

Telekom Malaysia pointed out that while the MCMC has mentioned the issue of potential price differences between fixed and mobile services, it has failed to provide any analysis to show that the pricing of fixed products provides a clear differentiation in the face of the many advantages that mobile is offering consumers.

Telekom Malaysia noted that the MCMC has highlighted in the PI Paper that there are significant differences in pricing strategies that are adopted by fixed and mobile operators. However, Telekom Malaysia is of the view that the MCMC should have carried out an analysis of pricing structures for fixed and mobile telephone services before reaching that conclusion.

Telekom Malaysia also highlighted that the discussion of differences between two technologies by the MCMC in the PI Paper misses the point. The relevant issue is substitutability and not different technology and features. Telekom Malaysia believes that in response to a SSNIP for fixed telephony, consumers will change their preference to mobile telephony services. Telekom Malaysia supported its views by citing a study by BEREK which states that substitution effects need not be perfect nor symmetrical. The study also states that differences in product characteristics are not in themselves sufficient to exclude demand-side substitutability, since this will depend on how customers value different characteristics.

Telekom Malaysia stated that mobile technology has experienced extraordinary growth in the past decade, and continues to grow steadily. In Malaysia, mobile cellular subscriptions grew from around 5.1 million in 2000 to around 33.8 million in 2010 (an internal growth rate of approximately 21% per annum). This growth in mobile subscribers has been accompanied by a decrease in fixed subscriptions and an increase in the number of mobile-only households.

Telekom Malaysia provided statistics that show that a similar shift to mobile is evident in the United States, Australia and the United Kingdom, and has been very strong in countries like Finland and the Czech Republic.

Telekom Malaysia believes that the growth in mobile market has contributed to fixed-mobile convergence where there is gradual dissolution of differences between fixed and mobile networks, including in terms of network quality, speed and usage. In view of that, Telekom Malaysia believes that regulators should take



a platform and technology neutral approach to competition issues, including in the content market. Regulators must take account of vertical integration and the ability of firms, including telecommunications operators, to leverage their dominance in one market to influence their position in another. Telekom Malaysia cited Hong Kong regulators who had implemented converged licensing system in 2008 as an example. Telekom Malaysia expressed concern that while principles of convergence have been recognised by the MCMC and enshrined in policy and legislation, they are not reflected at the regulatory level. They urged the MCMC to develop policies based on service convergence.

Telekom Malaysia also highlighted the growing effect of VoIP services and the need for regulators to monitor the growth in these services and changes in characteristics. Telekom Malaysia cited French regulator for Electronic Communications and Postal (**ARCEP**), who had revised its definition of the fixed telephony market to include voice over broadband since this service was substitutable for traditional telephony services in terms of quality. Telekom Malaysia also highlighted a merger decision by the Federal Communications Commission (**FCC**) in 2006 involving two major fixed operators AT&T and BellSouth where FCC acknowledged the impact of mobile and VoIP services. Telekom Malaysia opines that customers do not have to rely solely on wireless services for there to be sufficient evidence that substitution between wireless and fixed services exists.

Telekom Malaysia noted that an important aspect of regulatory practice is purposive approach to market definition. In this case, markets are being defined to carry out an assessment of dominance. Telekom Malaysia highlighted that the ACCC defines the product dimension of a market as the range of products that will satisfy customer requirements. Based on that, Telekom Malaysia said that it is difficult to conceive any situation in which mobile telephony would not satisfy the requirements of fixed telephony customers, other than outright unavailability.

Based on Telekom Malaysia's assessment, they submit that a form of asymmetric, one-way substitution is taking place where mobile services have begun to converge with fixed services in terms of price, usage patterns, quality of service and reliability. Telekom Malaysia noted that they have not been identified as a competitor by mobile operators as there is no way in which Telekom Malaysia could infringe into their market. However, Telekom Malaysia and other fixed operators view mobile operators as strong competitors. Telekom Malaysia believes that they would not be able to act without regard to the competitive pressures imposed by those mobile operators and this clearly indicates that there exists a single market for voice which consists of both fixed and mobile. Telekom Malaysia suggested that the MCMC conduct further analysis of the price and other characteristics of fixed and mobile telephone services to prove its view that there is no significant fixed-to-mobile substitution. In addition, Telekom Malaysia sought clarification on the relevance of EC's decisions that mobile VoIP is not a viable substitute for fixed VoIP services in determining that there is a single retail telephony market in Malaysia and the bearing it has on the possibility of substitution between fixed and mobile telephony in Malaysia.

YTL agrees with the MCMC's view that there are separate business and residential fixed telephony market due to the differences in scale, pricing and product dimension. However, YTL noted that the future is moving toward IP based networks and suggested that the MCMC assess market definition from the technological neutrality point of view.

(b) **Do you agree with the preliminary market share findings?**

Celcom, Maxis, TIME, U Mobile and YTL concurred with the MCMC's preliminary findings on market share while Telekom Malaysia did not agree.

Maxis presented data on total PSTN market share, residential PSTN market share and business PSTN market share which shows that Telekom Malaysia has between 96% and 98% market share in each market. As such, Maxis agrees with the MCMC's findings that Telekom Malaysia has 98% market share in the fixed voice telephony market and the remaining 2% of market is shared by the other fixed line service providers including TIME, Maxis etc. Maxis believes that Telekom Malaysia's market share is a strong indicator of its dominant position in both the residential and non-residential (business) fixed telephony market.

On the alleged lack of investment by the other fixed line service providers, Maxis is doubtful that it can be the key reason of Telekom Malaysia being significantly dominant in the fixed telephony market. According to Maxis, the key reason for Telekom Malaysia's significant market share in the fixed telephony market is due to barriers to entry or expansion. One such barrier is access to the fixed network facilities such as fibre, copper, poles, ducts and manholes which is currently not being regulated by the MCMC. In addition, other operators also lack economies of scale and scope as compared to Telekom Malaysia, making it difficult to compete with the incumbent. Maxis supports the MCMC views that long term supply contracts in the market also constitute a barrier to entry that prevents or restricts potential entrants from accessing certain area or customers. Maxis cited Telekom Malaysia's collaboration with Putrajaya Corporation and Penang Development Corporation as examples.

P1 is of the view that it is inevitable that Telekom Malaysia has the highest market share for fixed telephony as it was the first service provider in the industry, coupled with the fact that there was lack of interest from others to invest. They believe that the inclusion of wholesale Line Rental service in the Access List gives other service providers opportunity to offer alternatives to end users.

Telekom Malaysia does not agree that fixed telephony should be considered a separate market, and therefore do not concur with the MCMC's finding of market share. Furthermore, Telekom Malaysia considers that market shares alone are inadequate in determining the existence of dominance in the fixed telephony market.

(c) **Have the Rate Rules been effective in promoting competition at the retail level for fixed telephony services?**

Celcom believes that Rate Rules have not been effective in promoting competition at the retail level.

Maxis pointed out that the Rate Rules have not been revised regularly and in some cases, the MCMC's costing indicates that the retail rates are no longer sufficient for cost recovery. Maxis made comparison for Exchange Line Rental rates under Rates Rules and prices for the Wholesale Line Rental under the MCMC Costing Study which clearly shows that residential Exchange Line Rental rates under Rates Rules are lower than Wholesale Line Rental.

Maxis benchmarked the regulation of retail services in a few selected countries and pointed out that in these countries, the regulations are on PSTN fixed services and applicable to the dominant service providers only. As such, they think it is appropriate for retail PSTN to be regulated. However, Maxis cautioned that the Rate Rules should be reviewed regularly to reflect cost dynamics.

P1 believes that the Rate Rules has served its purpose in managing the retail rate charged to consumers. They believe that the Rate Rules works hand in hand with the Mandatory Standard of Access Pricing (MSAP) to ensure competition is healthy.

TIME is of the opinion that the Rate Rules needs to be revised in a manner that could provide for fixed telephony to be competitive to mobile telephony.

Telekom Malaysia maintains that rate regulations are very effective in ensuring that providers cannot charge unreasonable or uncompetitive prices to its wholesale or retail customers. Telekom Malaysia believes that the Rate Rules, as well as other regulations designed to promote competition (including access regulation), have been effective in setting retail and wholesale rates.

U Mobile is of the view that the Rate Rules are acceptable as it is preventing excessive pricing.

YTL opined that Rate Rules have been effective in regulating the retail rates for fixed telephony but has not been successful in stimulating competition. Therefore, they believe that dominance in the fixed line business will continue due to legacy reasons and policy initiatives and stipulation. The Rate Rules are still based on geographical charging areas whereas the industry is moving to IP telephony where distances do not have impact on the cost of services. There is therefore a need to implement changes to take IP telephony into account.

(d) **Are there any additional competition issues that the MCMC should consider before making its final determination on dominance?**

Maxis also believe that there are additional competition issues related to the fixed telephony services. Firstly, Maxis highlighted that the access seekers in Malaysia are not allowed to provide normal voice/PSTN service. Instead, they are required

to subscribe to both wholesale line rental (**WLR**) and bitstream services together. Maxis pointed out that in other countries, wholesale line rental is provided with equal access and carrier pre-selection. Secondly, fixed number portability is also not implemented in Malaysia and Maxis is of the view that fixed number portability should be implemented in line other countries such UK, France, Australia and Singapore. Hence, Maxis strongly urged the MCMC to consider regulation of fixed number portability. Thirdly, Maxis explained that interconnection charges for Directory Assistance Service are not regulated and Telekom Malaysia imposes RM0.95 sen per call, while the retail rates are regulated at RM0.30 sen per minute.

TIME pointed out that there are no significant benefits to subscribe to the incumbent's unbundling offerings based upon the terms as well as the price offering. Therefore, to introduce further competition into the fixed telephony market, TIME would like to recommend for the introduction of fixed number portability of non-geographical numbers, followed by geographical numbers later on.

Telekom Malaysia was concerned that the extent of regulation in the fixed sector is excessive and is not conducive to growth and investment. The access regulation combined with retail price regulation has resulted in under-investment in the fixed network sector. They believe this has led to current and potential competitors focusing on the mobile and wireless segments of the market, especially since profitability and revenue are considerably higher.

On the issue of exclusivity arrangement, Telekom Malaysia clarified that prior to the enactment and enforcement of the CMA, most operators had entered into exclusive arrangements with property developers. Telekom Malaysia had stopped such practices since 2009 and amended all its Agreements with the developers. With regard to the allegation of Telekom Malaysia being the sole service provider for Putrajaya, Telekom Malaysia explained that under the Telecommunications Infrastructure Agreement entered between Telekom Malaysia and Perbadanan Putrajaya (**PJC**), it clearly provides that Telekom Malaysia is given the non-exclusive right to provide the telecommunication services within the agreed development area of Putrajaya. Therefore, other operators are free to provide services utilizing Telekom Malaysia's HSBB access and HSBB transmission services in Putrajaya.

U Mobile requested the MCMC to consider other infrastructure providers in their final determination as these parties are dominant in their area. Examples are state backed companies, Fibrecomm, Fiberail and edotco.

YTL requested the MCMC to consider extending the flexible approach to market definition to include geographic and local area.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

DiGi, Maxis, TIME, U Mobile and YTL agreed with the MCMC's preliminary findings.

DiGi pointed out that the absence of fixed number portability in Malaysia makes switching costs very high. DiGi also refuted Telekom Malaysia's claim that the fixed telephony industry has more onerous regulatory and reporting obligations as being the key reason that has deterred other operators from investing in the fixed telephony business. On the contrary, DiGi argued that the mobile operators are subjected to a few more mobile-specific regulatory obligations such as the implementation of Mobile Number Portability, implementation of Public Cellular Blocking Service and implementation of enhancement of Automatic Location Identification features for MERS999 services.

Maxis strongly agrees with the MCMC's preliminary view that Telekom Malaysia is dominant in the national retail and wholesale markets for access to fixed telephony services.

P1 opines that in an industry that is highly CAPEX intensive, dominance is unavoidable. The service providers should be applauded for taking the risk to invest to build a comprehensive network and should not be penalized for appearing to be big. They also pointed out telecommunication industry is already highly regulated and cautioned that heavy regulation may hinder creativity and curb innovation.

Telekom Malaysia's wholesale regulated voice inter-connect minutes and commercial PSTN minutes have been declining due to various factors (e.g. growing use of mobile telephony, growth in over-the-top (**OTT**) services, and non-price issues such as delivery and installation timeframes offered to competitors and their customers). Telekom Malaysia broadly agrees with the MCMC's analysis of barriers to entry for fixed services such as higher infrastructure cost, contractual restrictions as well as regulatory and legal requirement but believes that a significant barrier is the favourable commercial and regulatory environment for mobile services relative to fixed services. Such an environment has resulted in dramatic shift to mobile, not just for voice, but also for data, broadband and a range of other services that complement basic mobile applications.

Telekom Malaysia is of the view that by identifying them as dominant in the fixed market, the MCMC is penalizing the fixed operator for investing in the infrastructure that are expensive, complex and with high-barrier to deploy. Instead, they believe that the MCMC should incentivize the licensees who invest in the fixed network to encourage further investment. Telekom Malaysia also proposed that the MCMC carry out a study to understand the reasons for lack of investment in the fixed network. Telekom Malaysia also disagree that market share for fixed telephony services should be the sole input in determining dominance.

### 4.3 The MCMC's Final Views

The MCMC thanks all respondents for their views and has carefully considered all of the material and comments provided in relation to these markets.

The MCMC notes Telekom Malaysia's and TIME's suggestion that fixed and mobile communications services belong to the same product market, but also notes that this view was not supported by the majority of respondents. The MCMC has considered Telekom Malaysia's comments concerning fixed-to mobile substitution. However, Telekom Malaysia did not provide any data to support its assertion that a significant segment of the market has bypassed the acquisition of fixed line connections altogether. Furthermore, a recent study in the EU found that with the growth in internet usage, there is an increased trend of households utilising both fixed and mobile connections which suggests that fixed connections are not being abandoned by significant segments of the population.<sup>1</sup> This study also suggested that the trend of operators bundling fixed line connections with mobile services may also slow fixed-to-mobile substitution. While this study was based in the EU, the MCMC considers that it is reasonable to expect that a similar trend is likely to be occurring in Malaysia.

The MCMC has considered and finds persuasive the evidence provided by Celcom on both demand and supply side substitutability of fixed and mobile services. The MCMC also notes that Maxis considered that the pricing structures of fixed and mobile products vary in addition to the differing functionality between the two products.

The MCMC has considered the criticisms made by Telekom Malaysia of the MCMC's failure to provide a complete study or pricing analysis for fixed and mobile products. The hypothetical SSNIP for fixed telephony products posited by Telekom Malaysia does not provide any analysis as to why consumers would switch to mobile services if a SSNIP occurred in a fixed telephony market. While the MCMC acknowledges Telekom Malaysia's concerns as to the exponential growth of mobile subscriptions, this does not necessarily mean that they are viewed by consumers as substitutes for one another. The rise of mobile subscriptions is also influenced by the rise of M2M technologies and smart devices and is not necessarily conclusive of the finding that mobile services are substitutable for fixed services.

The MCMC does not consider that calls from a fixed location are substitutable with the ability to make calls anywhere on the go. Accordingly the MCMC is still of the view that fixed and mobile telephony services are separate markets. The MCMC does however note Telekom Malaysia's comments that the growth of VoIP services must be monitored in order to track changes in the market; the MCMC will accordingly monitor the growth of VoIP services.

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<sup>11</sup> Lukasz Grzybowski, Fixed-to-mobile substitution in the European Union, 2014, *The International Journal of ICT Economy, Governance and Society* 38 (2014) 601.

There was support from respondents on the segmentation of business and residential markets, although the MCMC notes the disagreement of P1 in this regard.

The MCMC has noted the market share data provided by Maxis of the size of Telekom Malaysia's network and the broad support for the market share findings, with the exception of Telekom Malaysia who considered the market to be incorrectly defined.

The MCMC notes the widespread calls for a revision of the Rate Rules, particularly the comments made by YTL and Celcom that although the Rate Rules have prevented excessive pricing, they have not stimulated competition. Maxis also provided benchmarking data for the regulation of retail services which the MCMC has carefully reviewed. The MCMC notes Telekom Malaysia's comments that the Rate Rules have been effective in ensuring that providers cannot charge unreasonable prices.

There were a number of additional issues raised by respondents in relation to the MCMC's assessment of dominance. Telekom Malaysia noted that it no longer enters into exclusive arrangements with property developers and amended all its existing agreements with developers in line with the principle of non-exclusivity. The MCMC notes this is a positive development. Maxis noted that access seekers must subscribe to bitstream and WLR services and that in other countries WLR is provided with equal access and carrier pre-selection. Maxis also noted that there is no fixed number portability and complained of directory service access fees. TIME also noted that fixed-number portability would potentially stimulate competition. The MCMC has taken these considerations into account in its assessment of dominance, particularly the high switching costs related to changing fixed service providers.

Telekom Malaysia noted that the extent of regulation in the fixed sector is not conducive to investment or growth and considers that access regulation and retail price regulation have led to a significant under investment in the fixed sector. The MCMC has carefully considered this but wishes to point out that a finding of dominance does not lead to additional regulation per se, rather, it gives the MCMC the ability to take action against a dominant player once the MCMC has investigated complaints of anti-competitive behaviour in relation to that operator.

There was broad support for the MCMC's preliminary findings on dominance. The MCMC reminds Telekom Malaysia that the purpose of access and competition regulation is not punishment, but rather to promote competition and access to bottleneck facilities and natural monopolies to ensure a better outcome for consumers. The MCMC notes that a finding of dominance does not necessarily increase the level of regulation on an operator per se.

The MCMC's final view is that Telekom Malaysia is the dominant operator in the national retail and wholesale markets for access to fixed telephony services. These markets are separated into business and residential markets and include the following separate product markets:

- (a) access to the fixed line connection and local calling services; and
- (b) separate calling markets (including PSTN and VoIP) for:
  - (i) national long distances calls;
  - (ii) international calls; and
  - (iii) fixed-to-mobile calls.

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## **5 Fixed broadband and data**

### **5.1 Overview**

Fixed broadband and data services were addressed in section 2 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Fixed broadband services can be provided over a range of technologies including dial-up, ADSL, SDSL, VDSL, fibre, satellite and fixed wireless including the HSBB but the market does not include broadband and data provided over mobile services. In the PI Paper, the MCMC found that there are both wholesale and retail segments to this market, which is further divided into business and residential segments. The MCMC formed the preliminary view that Telekom Malaysia is the dominant provider for fixed broadband and data services in the national retail and wholesale markets for:

- (a) residential-grade broadband services; and
- (b) business-grade broadband services.

### **5.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Celcom supported the MCMC's findings that there are separate markets for wholesale broadband and local access infrastructure. They also agreed with the MCMC's findings that Telekom Malaysia remains the largest fixed broadband provider and cited Frost & Sullivan news release dated 25 June 2014 which supports the MCMC's findings.

Celcom believes that Telekom Malaysia, being the provider of HSBB Access Service, has imposed certain conditions which result in the delay of Celcom's service installation compared to Telekom Malaysia and they believe such conditions could have the effect of substantial lessening of competition.

DiGi agrees with the MCMC's conclusion that there are separate markets for fixed and mobile broadband services. It is very clear from supply-side and demand-side substitution analysis that both services are very distinct.

Maxis supports the MCMC's findings that there are separate national retail fixed broadband markets and Maxis also supports the MCMC's findings that there are



separate wholesale fixed broadband markets, which apply uniformly to both residential and business-grade services.

P1 is not agreeable with the proposal to split between residential and business market for the same reason provided in Fixed Telephony service above.

Telekom Malaysia does not agree with the MCMC's proposal to define residential and business markets separately. Telekom Malaysia submitted that apart from the examples provided by the MCMC, namely the Netherlands and Austria, they are not aware of any precedent where residential and business markets for broadband are separately defined. However, even in those two countries, the distinction was made to cater for the unique circumstances in those markets and it was limited to the wholesale market only.

Therefore, Telekom Malaysia believes that the rationale for separating the residential and business markets is in fact the result of substitutability between fixed and mobile broadband. However, this has not been acknowledged by the MCMC. Telekom Malaysia requested the MCMC to provide more details on why the Malaysian broadband market requires separate residential and business markets for the purpose of ex-ante regulation.

Telekom Malaysia acknowledged that optical fibre broadband services remain faster than equivalent wireless services but they believe that wireless network speed and coverage have reached a level that provides users with a high level of satisfaction, and are meeting the needs of users to be continually connected. Therefore, Telekom Malaysia believes that fixed and mobile services are no longer complementary products, but are viewed by most consumers as effective substitutes.

This trend is clearly evident in the continuing increase in wireless broadband subscribers and growth in smartphone penetration. Telekom Malaysia submitted a chart on the growth of fixed and wireless subscribers as well as growth of smartphones from 2008 to 2013. The chart indicates that the number of wireless subscribers has overtaken the fixed segment in 2010 and smartphone devices are by far the dominant medium. Telekom Malaysia also provided statistics released by the MCMC that indicates mobile broadband subscriptions in Malaysia represent around 62% of total internet subscriptions. Telekom Malaysia submitted that similar phenomenon has been happening in other countries and cited Australia as an example where there has been a large increase in the proportion of mobile and fixed wireless subscriptions, while dial-up access has declined. Meanwhile Digital Subscriber Line (**DSL**), as well as cable, fibre and satellite access, have barely changed.

Telekom Malaysia submitted that the rise of wireless broadband has affected the ability of Telekom Malaysia and other fixed service providers to compete in terms of price, product capability and user experience. Telekom Malaysia observed that the MCMC and the Government have acknowledged this change at a policy level but it is yet to be reflected in the regulatory framework. Telekom Malaysia requested the MCMC to place a greater focus on this change and the competitive

pressure wireless services are placing on fixed providers. Telekom Malaysia quoted a report by the Malaysian Internet Exchange (**MyIX**) that shows that internet traffic in Malaysia grew by 51% in 2013 and most of this increase is attributable to the large increase in the proportion of users accessing the internet from their smart devices. MyIX also found a correlation with the increase in internet usage and the significant spike in smartphone use.

U Mobile believes that there should be separate markets for residential and business due to the way in which the products are marketed and segmented.

YTL agrees with the MCMC's consideration of separate retail fixed and wholesale fixed broadband market due to the disparate preferences that inculcates within the respective markets.

**(b) Do you agree with the preliminary market share findings?**

Celcom agreed with MCMC's preliminary findings that Telekom Malaysia is dominant in both retail and wholesale markets for residential and business grade broadband services. However, Celcom expressed concern on the MCMC's statement that the issue in vertically integrated operator (such as Telekom Malaysia) is mitigated by the Access List and pointed out that HSBB Access Service, HSBB Transmission Service and HSBB Connection Services are currently not regulated. Celcom is of the view that these services should be regulated via the Access List and also urged the MCMC to consider additional regulatory interventions to deal with dominant operators.

DiGi agrees with the MCMC's conclusion that Telekom Malaysia is the dominant provider of fixed line broadband and data services at the national retail and wholesale levels. The fact that Telekom Malaysia did not change its price offerings for Unifi services despite the subsequent market entry of Maxis Home Fibre Internet offering almost twice the bandwidth speeds, signals that Telekom Malaysia's pricing strategy is truly unaffected by competitive pressures.

Maxis noted the MCMC's findings that Telekom Malaysia has a market share of approximately 88% (based on revenue) of the fixed broadband services. Maxis submitted its own findings of market shares of total fixed broadband, residential fixed broadband and business fixed broadband which range from 93% to 95%. Hence, Maxis considers the MCMC's findings that Telekom Malaysia has market share of approximately 88% in the fixed broadband market to be broadly close to their estimates.

Telekom Malaysia does not believe that fixed and wireless broadband should be considered as separate markets, and therefore they do not agree with the MCMC's finding of market share. Telekom Malaysia does not believe that market share for fixed broadband services should be the sole input in determining dominance. They urged the MCMC to take into consideration the increasing pressure placed on fixed broadband services by the wireless broadband technology.

U Mobile and YTL agree with the MCMC's findings on preliminary market shares.

(c) **Are there any additional competition issues that the MCMC should consider before making its final determination on dominance?**

Astro believe that there is a compelling case for HSBB Services offering Layer 3 connectivity to be included in the Access List. Astro also requested the MCMC to take enforcement action against access providers to spur the development of this platform and therefore bringing quality TV content and innovative TV services to more and more households in Malaysia.

Maxis submitted that there are significant on-going competition issues on fixed broadband services. They highlighted that the regulated HSBB Network Services are not offered by Telekom Malaysia due to its different interpretation of the HSBB Network Services definition. Instead, Telekom Malaysia is only offering its HSBB Network Services under the commercial arrangement. The implications are:

- Cost becomes higher as services are bundled together;
- At layer 3, there is no differentiation as Telekom Malaysia manages the COS. It becomes comparable to a Unifi retail service;
- The various contention ratios for transmission require over-dimensioning of capacity and results in high cost. For example, the average cost of transmission of HSBB access is twice the amount Maxis pays for overseas internet interconnection to foreign internet exchanges;
- Voice contention ratio provided by Telekom Malaysia is 1:4. Maxis' actual utilization is below 10% of the subscription based on the predefined contention ratio. Higher contention ratio is desirable as it should contribute to better efficiency of bandwidth utilization; and
- Unicast COS is prohibitively expensive and results in video on demand (**VOD**) becoming commercially unfeasible.

Due to no/limited other options available, they have to use Telekom Malaysia's HSBB access for market entry but the structure of the product essentially means they cannot compete as effectively and competitively as they wish. For example, a Layer 2 service will allow greater price and COS differentiation. A more flexible contention ratio approach allows greater price competition which would eventually benefit the end users.

P1 noted that even though the MCMC emphasized on applying a technology neutral approach in its assessment of dominance in the fixed broadband markets, the capability of different technologies must not be sacrificed. A totally wired technology and partially wired will definitely not provide the same services due to the limitation in the way the service is delivered.

TIME referred to some of the issues the MCMC had highlighted in the PI Paper with regards to the claims made by some access seeker about the problems they have

encountered when acquiring HSBB services from Telekom Malaysia and recommended for the MCMC to further investigate these claims.

Telekom Malaysia believes the competitive impact of all regulation, including rate and access regulation, should be considered in greater detail by the MCMC.

(d) **Do you have any statistics or information on access to wholesale DSL?**

None of the operators were able to provide any additional statistics on access to wholesale DSL.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Astro agrees with the MCMC's preliminary findings.

Maxis strongly agrees with MCMC's view that Telekom Malaysia is the dominant provider of fixed line broadband and data services in the national retail and wholesale markets for residential and business. The assessment meets all the criteria of dominant position in the fixed broadband and data market in terms of market share, network coverage, and lack of wholesale access and existence of barriers to entry.

Maxis submitted price trends of Telekom Malaysia, Maxis and TIME, demonstrating the ability of Telekom Malaysia to act independently of competition. In addition, Maxis submitted chart that shows consistent increase of Telekom Malaysia fixed broadband subscribers which demonstrate that the company is not impacted by competition despite price reductions by rivals. Hence, Maxis concurs with the MCMC's findings that Telekom Malaysia is the dominant provider for fixed broadband services markets (residential and business, retail and wholesale).

TIME agrees with the MCMC's preliminary view that Telekom Malaysia is the dominant provider of fixed line broadband and data services in the national retail and wholesale markets.

Telekom Malaysia is not agreeable to the MCMC's preliminary finding on dominance as they believe that fixed and wireless broadband should be considered in a single market. Telekom Malaysia's total broadband subscribers in Q1 2014 were 1,228,000 compared to a total of 6,411,600 broadband subscribers which gives Telekom Malaysia a market share of 34%. This is below the threshold of 40% market share proposed by the MCMC to indicate potential dominance. Telekom Malaysia noted that the allocation of 2.6 GHz spectrum is likely to place additional pressure on the broadband market.

### **5.3 The MCMC's Final Views**

The MCMC has carefully reviewed the responses it received in relation to the fixed broadband and data markets and has considered all the responses in forming its final views.

The MCMC notes the broad support from Celcom, DiGi and Maxis for its market definition although the MCMC notes that P1 does not support the segmentation into residential and business markets.

The MCMC recognises Telekom Malaysia's concerns with the segmentation of retail and business markets but notes that apart from P1, no other operator considered this segmentation to be inappropriate in the Malaysian market.

The MCMC has made it clear in its Market Definition Analysis paper at paragraph 3.16 of Part B that although the EC does not explicitly define markets in terms of residential or business grade broadband there are functional and pricing differences in terms of the speeds and quality of broadband and data products associated with household or residential use. The MCMC has provided evidence of the manner in which Malaysian operators differentiate their product offerings for business and retail customers in paragraph 3.24 of Part B of the Market Definition Analysis paper. Accordingly, the MCMC does not consider that that P1 and Telekom Malaysia's comments in relation to the business and residential segments of the market definition are justified.

The MCMC disagrees with Telekom Malaysia's views that the speed and coverage of wireless services have now reached such a level that they are effective substitutes for fixed products. The MCMC does not consider that a residential end-user would consider a wireless broadband product as a viable substitute for a fixed connection if, for example several Gigabytes of files or documents or a high definition movie had to be downloaded.

The MCMC considers that Telekom Malaysia's information regarding the growth of wireless broadband products does not necessarily lead to a conclusion that wireless is a substitute for fixed broadband; it is a more likely conclusion that mobile or wireless broadband is growing as a separate market in its own right.

The MCMC has noted Telekom Malaysia's comment that the uptake of wireless broadband has affected the ability of Telekom Malaysia and other fixed service providers to compete in terms of price, product capability or user experience. The MCMC notes that it would be interested in being sent details of any practical examples of the competitive constraints that wireless is having on fixed broadband providers.

The MCMC has considered Celcom's and Astro's comments that the HSBB services should be regulated through the Access List and invites these operators to make a submission to the Access List review where their comments can be fully considered in a specialised forum. The MCMC also notes Maxis' comments on the additional competition issues in relation to the HSBB and the potential over-dimensioning of capacity and difficulties with voice contention ratios.

The MCMC has reviewed the figures on market share provided by Maxis and agrees that Maxis' estimates broadly support the MCMC's own findings on market share.

In relation to Telekom Malaysia's comments that market share should not be the sole input in determining dominance, the MCMC agrees and notes that its assessment of dominance was based on a range of factors in addition to dominance, including the high barriers to entry in the fixed broadband and data market, the high switching costs in this market, the pricing structures and the pricing changes in the market. The MCMC refers Telekom Malaysia to paragraphs 2.20-2.45 in Part B of the PI Paper for the full range of factors that were considered in assessing dominance in this market.

The MCMC's final view is that Telekom Malaysia is the dominant provider for fixed broadband and data services in the national retail and wholesale markets for residential-grade broadband services and business-grade broadband services.

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## **6 Mobile telephony**

### **6.1 Overview**

Mobile telephony services were addressed in section 3 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. At the wholesale level, the MCMC determined that there is a single wholesale market for mobile telephony, while at the retail level postpaid and prepaid mobile telephony services form a single market (excluding OTT services, short messaging service (**SMS**) and data which form part of separate markets). The MCMC expressed the preliminary view that the markets for wholesale and retail telephony services are relatively competitive and no single operator is in a dominant position in either market.

### **6.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Celcom agrees to the MCMC's views that there is a national wholesale and retail market for mobile telephony services. Fixed line telephony services are not effective substitutes for mobile telephony due to different characteristics which include price, bandwidth, mobility, usage limitations and cost.

Whilst DiGi agrees with the MCMC's conclusion that mobile telephony, SMS and data services are in separate retail markets, mobile operators are increasingly introducing plans comprising of mobile telephony, SMS and data as a package of services with a subscription price. Such packages are common in the mobile retail market and hence, separate retail market for mobile telephony, SMS and data would eventually converge into a single retail market.

Maxis supports the MCMC removal of a separate wholesale SMS; however, Maxis is of the view that there should be a single cellular communication market each for wholesale and retail levels respectively as the products are highly substitutable to each other. Several key regulators in Bahrain, Australia, EU and Norway have adopted this position. From the demand side, Maxis provided the prepaid usage pattern in June 2014 whereby less than 10% subscribers used a single product,

whilst majority of 53% used all three services (prepaid and postpaid services are substitutable). From the supply side, the network and radio engineering perspective, all carriers are fully able to carry voice and data and technology upgrades are based on generation of technology and not based on SMS, voice and data. Based on accounting separation accounts, very low margins were noted for data and relatively higher for voice and SMS. It is difficult to just offer data packages without some bolt on SMS and data for long term sustainability. Maxis One Plan is for a fixed fee, and allows postpaid customers freedom to use the services, subject to Fair Usage Policy. Maxis also supports the MCMC's position that Fixed Line Telephony is not a substitute for mobile voice telephony, in line with many other regulators. Maxis also requests the MCMC to place OTT voice into the mobile communication market as subscribers have been using fewer voice calls in tandem with smartphone penetration increase.

P1 recommends that fixed-mobile convergence be fully considered in the market definition to ensure regulation is robust to future trends. P1 also does not see the need to split mobile telephony, SMS and data services as they are carried over the same carriers. The gradual diminishing differences between services are becoming more obvious and hence should be treated as a single market. SMS cannot function on its own without subscribing to voice services, hence to customers, both services are interdependent and are bundled together. Mobile data is an add-on service for Smartphone users. The use of OTT services would also require consumers to have a phone number. Therefore separating these services is not justified. P1 supports that the categorisation of prepaid and postpaid services as substitutable.

TIME is of the opinion that the retail voice market for fixed and mobile telephony should be treated as a single market whilst the wholesale market should be separated. TIME highlighted that the number of mobile subscribers has surpassed DELs. DEL subscriptions have been relatively stagnant although capacities are abundant. TIME recommends that the MCMC prove that there is no causal relationship for the decline of fixed telephony to the adoption of mobile telephony by end users.

Telekom Malaysia believes fixed and mobile services should be considered as a single market. In a separate mobile market as proposed by the MCMC, these operators together represent 80% of the market, which may as one entity, have the effect of driving out potential competitors from the market which is detrimental to end users. Possibility of abuse of collective dominance warrants investigation. Telekom Malaysia considers that even if a finding of collective dominance is not established now, Maxis, Celcom and DiGi have an adverse impact on competition in the Malaysian market.

U Mobile opines that the market definition clearly separates fixed, mobile and VoIP telephony market and this is appropriate as the delivery of each service vary from one to another.

YTL agrees to have a separate fixed and mobile telephony market which is backed by both demand and supply side differences.

(b) **Do you agree with the preliminary market share findings?**

Celcom and YTL agree to the MCMC's preliminary market share findings. According to Celcom this is consistent with their submission.

Maxis' views are that the trend over time is a decrease in overall concentration with smaller operators rising in strength. The HHI measure by GSM Association for cellular communication market has been consistently decreasing, indicating that the Malaysian mobile market is more competitive over time. Maxis thinks it is critical to see the trend in market share and not only at a particular point in time. Smaller operators, particularly U Mobile and new entrants have considerably increased market share over the years, with one incumbent showing significant reduction since 2010. Based on GSMA mobile market share, U Mobile commands a respectable 9% market share, a marked increase over three years. As at end 2013, U Mobile's inbound traffic is approximately c-i-c of DiGi's traffic to Maxis. The traffic indicators are good additional measure of competitive dynamics.

P1 proposes to adopt a single pricing for voice and market share to be re-evaluated.

Telekom Malaysia believes fixed and mobile services should be considered as single market.

U Mobile agrees with the MCMC's view that access to spectrum is a main barrier to entry and having spectrum within specific band has greater advantage and would lead to dominance as compared to U Mobile who only have access to high frequency.

(c) **Are there any additional competition issues that the MCMC should consider before making its final determination on dominance?**

Celcom is not aware of any competition issues in the mobile market as there is growing MVNO presence that is able to increase network utilisation and reach new niche market segments by leveraging on existing business relationships and platforms. redONE, Celcom's MVNO was awarded with Frost and Sullivan's MVNO of the Year accolade. redONE attributed this success to its network provider. This recognition, according to Celcom is compelling evidence that the mobile market is competitive at both the wholesale and retail level. Celcom also notes the low barrier to entry which has increased the number of mobile operators on long term evolution (**LTE**) technology to 8 operators, which further amplifies the competitive dynamics of the mobile sector.

According to Maxis, the highly competitive mobile market has impacted the mobile retail charges that benefits end users. Hotlink call tariffs have reduced significantly over the years. Competition is expected to intensify with the imminent entry of Telekom Malaysia into the cellular sector. When Telekom Malaysia completes its



investment into P1, this fresh infusion of funds and expertise will revitalise this operator to further grab market share. Telekom Malaysia is already dominant in its key fixed markets, and can leverage its significant market power into the cellular market, particularly with regards to large companies and Government Linked Corporation accounts. Its expansion into the cellular market will be aided by the fact that it has intensive fixed network transmission (upgraded with government incentives), in comparison to other operators.

P1 suggest that the MCMC continue to promote the emerging MVNOs as they have contributed to healthy competition. The current arrangements between mobile network operator (**MNO**) and MVNOs are on a commercial basis. It would be helpful if measures are taken to ensure MVNOs are competitive and not pressured with frivolous price and commitment. P1 also requested the MCMC to measure wholesale prices offered to MVNO against retail prices offered by MNO to their end users. With the emergence of Fixed Mobile Convergence, the voice network operator (**VNO**) services should be expanded. As the CMA promotes technology neutrality, mobile services, where doable can ride on fixed infrastructure to provide innovative services to consumers, which can spur the creativity of services offered and lead to more exciting competition. Technology allows such innovation but is limited by regulation.

Telekom Malaysia submits that the MCMC must give greater consideration to the mobile market structure when assessing appropriate regulatory responses. The largest three mobile operators currently have substantial impact on competition thus posing significant barrier to entry for potential new entrants. This situation is compounded by the inability of the MVNO to access desired wholesale services required to compete, for example access to 4G/LTE networks. Instead only 2G/3G services are offered to MVNOs. Typically, even if LTE access is not provided at launch, it should be provided relatively quickly when the network has matured and the technical issues resolved to achieve a certain level of coverage. Telekom Malaysia notes that major Malaysian operators 4G network has been commercially available for more than 18 months and rollout is widespread including parts of East Malaysia. This is not expected behaviour in a competitive market, given the global experience. Telekom Malaysia believes the market for mobile services can be strengthened through the introduction of domestic and international roaming regulations, and a framework to promote the entry of MVNOs.

**(d) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Celcom, DiGi, Maxis and YTL agree with the MCMC's preliminary findings that the mobile telephony markets at wholesale and retail levels are competitive and there is no single operator in a dominant position. According to Celcom, there should be reduction or removal of regulatory intervention where there isn't any finding of dominance in the mobile market, including the need to review accounting separation requirements in the absence of dominance in the mobile market. DiGi believes with the entry of Altel and Telekom Malaysia/P1 into the mobile sector, competition pressure which is already high will further intensify. Maxis views that

there is an active wholesale market which is effectively competitive and this in turn facilitates greater retail competition.

Although U Mobile agrees with the MCMC's preliminary findings that the mobile telephony market is competitive with no clear dominant player that controls the market at this point of time, U Mobile views Maxis, Celcom and DiGi as dominant in the mobile market as they are able to control the market price and presence. According to U Mobile, they are forced to accept the market conditions and interconnection termination rates that are very high for a new player in the mobile market. U Mobile views they should be exempted from paying termination rates until they are at par with the current mobile market.

TIME recommends the MCMC to consider the level of competition in the mobile telephony by performing the HHI. TIME agrees with the MCMC that no single operator is in a dominant position, but both TIME and Telekom Malaysia believe that when three major mobile service providers are considered together they are collectively dominant in the relevant market. TIME supported this by the fact that the newer mobile and WiMAX operators are not able to gain significant market share from the three incumbent operators. Telekom Malaysia shared EC principles of collective dominance where there does not need to be explicit or binding agreement and that tacit engagement in the same behaviour can indicate collective dominance and that enterprise need not be part of the same entity to hold collective dominance. Collective dominance occurs where two or more undertakings act together as a collective entity. Telekom Malaysia believes Celcom, DiGi and Maxis fulfil this criterion.

### **6.3 The MCMC's Final Views**

The MCMC has carefully considered all the responses received in relation to this market.

The MCMC recognises that some respondents do not support the definition of these markets or have cautioned that the market for mobile telephony may be converging with those for SMS and data. For example, the MCMC notes DiGi's submission that mobile operators have been introducing plans bundling mobile telephony, SMS and data.

At this stage the MCMC is not of the view that the market has converged to such an extent, or will do so in the next several years to justify a finding that there is a single market for data, mobile telephony services and SMS. The MCMC notes that P1 has made similar submissions to DiGi, but stated that the differences between services are 'gradually diminishing' and acknowledged that mobile data is an add-on service for Smartphone users. This information confirms the MCMC's belief that the market has not yet converged. The MCMC has reached this conclusion taking into account Maxis' evidence of subscription patterns and carrier ability to offer a single converged service. The MCMC maintains that it is appropriate to consider the markets for products that may currently be bundled together, separately.

For similar reasons the MCMC notes but does not agree with TIME's and Telekom Malaysia's submissions that fixed and mobile telephony services should be considered in a single market, as they are now substitutes. The MCMC's final views on fixed-to-mobile substitutability are found above in section 4 of this PI Report.

The MCMC would like to emphasise that Celcom, YTL and U Mobile agree with the MCMC's market definition.

The MCMC has concluded, despite U Mobile's submissions, that there is no dominant operator in either of these markets. U Mobile has not provided data to establish that Celcom, Maxis and DiGi are dominant and has only asserted this fact.

The MCMC believes the weight of data establishes that the mobile telephony market is competitive. In particular, the MCMC notes Celcom's response and the evidence offered by Maxis that reinforces the MCMC's opinion that an appropriate level of competition is present in the market. In addition, the MCMC is not of the view that the market is sufficiently lacking in competition to justify introducing measures to assist market entrants, such as the exemption from paying termination rates which U Mobile has suggested.

The MCMC notes but does not agree with TIME and Telekom Malaysia's submissions that there is a collectively dominant group in this market. As explained in section 2 of this PI Report, the CMA does not directly contemplate the existence of joint or collective dominance.

The MCMC noted Telekom Malaysia's proposal to implement regulation on domestic and international roaming as well as develop framework to promote the entry of MVNOs on LTE network. The MCMC would like to clarify that the LTE Detailed Business Plans submitted by licensees have provisions on sharing of infrastructure, including providing access to MVNOs.

The MCMC's final view is that there are separate markets for wholesale and retail mobile telephony services and that these markets are relatively competitive and no single operator is in a dominant position in either market.

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## **7 Mobile broadband and data (including WiMAX)**

### **7.1 Overview**

Mobile broadband and data (including WiMAX) services were addressed in section 4 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Demand for mobile data and broadband has increased with smartphone penetration which has increased in Malaysia to 63% in 2013.

The MCMC reached the preliminary view that there are national retail and wholesale markets for mobile broadband and data services, including WiMAX,

which is a close substitute for mobile broadband despite having some limited similarities with fixed broadband services. The MCMC formed the preliminary view that no operator is dominant in either the wholesale or retail market for mobile broadband and data.

## **7.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

Celcom and DiGi agree with the MCMC that there is a national wholesale and retail market for mobile broadband and data services including WiMAX. However, DiGi expects that the separate retail market for mobile telephony, SMS and data will eventually converge into a single retail market.

Similarly, Maxis believes that the mobile broadband data is part of the singular mobile communications market, from consumer perspective and also from best regulatory precedence (e.g. Norway and Australia). If mobile broadband is a separate market, access via dongles (Wireless Broadband, **WBB**), has to be declared a separate market. Data only products show WBB subscriber decline from -5% to -12% in 2012 and 2013, despite efforts to resuscitate it. Operators typically sell a bundle of voice, SMS and data with varying margins to end users. Declaring each product a relevant market on its own does not reflect the competitive dynamics of the mobile market. Maxis notes that in two leading markets (UK and Singapore), there are varying margins and pricing between 4G and 3G services for the same product but this does not indicate separate markets.

P1, U Mobile and YTL agree with the MCMC's position to define fixed and mobile broadband and data in separate markets. According to P1, the justification to demarcate based on number of users for each service is not valid as even mobile broadband service, allows for multiple users to access simultaneously. Contrary to P1, U Mobile views that end users for mobile tend to be single subscription whereas fixed services can be provided over multiple access i.e. LAN/WiFi. The two separate markets provide advantage of having multiple options/solutions and extensive infrastructure to reach the target market. YTL favour separate markets due to different consumption patterns, technical limitations as well as capacity, pricing and quality of service.

TIME is of the opinion that mobile broadband and data market is still at infancy and should be left without any regulatory intervention for now.

Telekom Malaysia believes fixed and mobile broadband services should be considered in a single market.

### **(b) Do you agree with the preliminary market share findings?**

Celcom and YTL agree with the MCMC's preliminary findings where no single mobile operator has a commanding advantage in market share.

Maxis is unable to measure market share solely on product basis.

Telekom Malaysia does not believe that fixed and mobile broadband should be considered as separate markets, and therefore, do not agree that the MCMC's finding of market share is appropriate.

U Mobile does not agree with the MCMC's preliminary findings as they view Maxis, Celcom and DiGi as dominant in the mobile market with more than 30% market share and are able to control the market price and presence.

(c) **Are there any additional competition issues that the MCMC should consider before making its final determination on dominance?**

P1 is of the view that mobile broadband service can only be put to use with a Smartphone, which often comes with mobile telephony services. Therefore, grouping mobile broadband service under mobile telephony may be more logical.

Telekom Malaysia believes the market for mobile services can be strengthened through the introduction of domestic and international roaming regulations, and a framework to promote the entry of MVNOs.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Celcom, DiGi, Maxis, Telekom Malaysia and YTL agree with the MCMC's view that the mobile broadband and data services are competitive at the wholesale and retail level with no single operator dominant. Maxis presented data tariff charts to demonstrate that there has been significant price erosion for mobile broadband products over time, suggesting that the market is competitive. A general downtrend is observed, with the existence of some prepaid data packages cheaper than postpaid packages on a per megabit basis. Notwithstanding the above, Telekom Malaysia views that fixed and mobile broadband services should be considered a single market.

U Mobile disagrees with the MCMC's preliminary findings on dominance as they view Maxis, Celcom and DiGi as dominant in the mobile market with more than 30% market share and are able to control the market price and presence.

### **7.3 The MCMC's Final Views**

The MCMC has considered the submissions received in relation to mobile broadband and data services. The MCMC notes that there has been considerable difference of opinion on the appropriate market definition amongst respondents.

The MCMC agrees with the views submitted by P1, U Mobile and YTL that currently fixed and mobile broadband and data are part of separate markets. For the reasons explained below, the MCMC considers that this definition best reflects the current market status. Although the respondents did not directly address the question of whether there are separate wholesale and retail markets within the mobile broadband and data market, the MCMC is of the view that this is the case.

The MCMC notes that a number of respondents disagreed with this market definition. Telekom Malaysia is of the view that mobile broadband and data is part of the same market as fixed broadband services. Several other respondents were of the opinion that mobile broadband data is part of a single mobile communications market.

The difficulty in reaching consensus on the market definition has affected the responses to the other parts of the questions asked by the MCMC in relation to this market. The MCMC notes U Mobile's submission that there are three dominant operators in this market; however the MCMC has not been persuaded by this to shift from its opinion that there is no operator that is dominant in either the retail or wholesale market for mobile broadband and data. All other respondents have agreed with the MCMC's preliminary finding of no dominance.

The MCMC's final view is that there are national retail and wholesale markets for mobile broadband and data services, including WiMAX, and that no operator is dominant in either the wholesale or retail market for mobile broadband and data.

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## **8 Mobile messaging services (including SMS and OTT)**

### **8.1 Overview**

Mobile messaging services (including SMS and OTT message applications) were addressed in section 5 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

In the PI Paper, the MCMC considered OTT messaging services to be substitutable with SMS/MMS given the decline of SMS volumes and the rise of smartphone uptake. Accordingly, the MCMC formed the preliminary view that there is a national retail market only, as wholesale messaging products are bundled with other telephony products and there is no separate wholesale market for mobile messaging services. The MCMC formed the preliminary view that no operator is in a dominant position in this market, as it is relatively competitive at this time.

### **8.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Celcom, DiGi, Maxis and U Mobile view OTT messaging services as substitutable for traditional SMS/MMS and therefore should be defined in the same market segment.

Celcom charted the declining SMS revenue for Celcom, Maxis and DiGi and this is expected to further deteriorate based on Analysys Mason study on OTT revenue in Malaysia in the next 4 years. SMS revenue was also presented to be declining in each quarter of 2013 in Malaysia, driven by the cannibalisation of OTT services.

DiGi agrees with the MCMC's views that there is a national retail market for mobile messaging services, including both SMS and OTT messaging services. The substitution of SMS by OTT messaging services will accelerate with the growing

availability of cheaper smartphones in Malaysia via government programs and subsidy, and this would remove any barriers to the adoption of OTT messaging applications. DiGi expects smartphone prices to further decline by 9% by 2017.

Maxis believes that mobile broadband data is part of the single mobile communications market. Maxis supports the inclusion of OTT messaging into the cellular market as the impact is significant as more affordable smartphones are released into the market. Maxis provided data on SMS and mobile internet traffic trend and SMS and smartphone penetration trend for prepaid and postpaid for a period of 18 months from January 2013 until June 2014. The chart depicts significant reduction in SMS volumes in tandem with significant growth of mobile internet traffic and smartphone penetration. This indicates substitution between SMS and OTT and other social media messaging services. Maxis' SMS traffic dropped by 54%, and total mobile internet traffic increased almost 200%.

P1 opines that mobile messaging services should not be treated as a market on its own but to group it together under mobile telephony services.

TIME opines OTT services will have significant impact to the fixed and mobile market in the future. Regulatory intervention to OTT would be difficult given the future adoption of smartphones and improvement in broadband speeds offered to the end users. Curtailing OTT could stunt the creativity and innovation of local application developers and indirectly impede industry growth.

Telekom Malaysia agrees with the MCMC's view that a separate market exists for mobile messaging services.

(b) **Do you have any data to support a calculation of market share?**

Celcom submitted that they only had data for mobile telephony market share as a whole. The other operators were unable to provide any additional data.

(c) **Are there any additional competition issues that the MCMC should consider before making its final determination on dominance?**

DiGi views that due to the popularity of OTT messaging services, it is prudent for the MCMC to explore regulatory considerations of OTT services that constitute an unlevel playing field between traditional telephony providers and OTTs which include quality of service standards, required application services, spamming and privacy issues, fraudulent charging practises and national security considerations ranging from the ability of National Security Authorities identifying OTT users operating within their national jurisdiction and their ability to conduct legal interception. The current regulatory system places obligations and compliance costs on traditional operators, whereas OTTs do not have the same obligation and cost and have greater operational freedom.

Telekom Malaysia believes the market for mobile services can be strengthened through the introduction of domestic and international roaming regulations, and a framework to promote the entry of MVNOs.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Celcom, DiGi, Maxis, Telekom Malaysia and YTL agree that the market for mobile messaging is competitive and there is no single operator in a dominant position. Maxis believes that with severe substitution occurring between OTT messaging and SMS and also the robust competition between existing operators, this segment is particularly competitive.

U Mobile disagrees with the MCMC's preliminary findings on dominance as they strongly believe that Maxis, Celcom and DiGi are dominant in the mobile market, with U Mobile having less than 5% of market share in revenue.

### **8.3 The MCMC's Final Views**

The MCMC appreciates the respondents' thoughtful views in relation to the scope of the mobile messaging market. The MCMC has taken these responses into account while making its final deliberations.

The MCMC considers that the market for mobile messaging services in Malaysia is changing, and for this reason it considers that OTT services should be included in the market definition. As explained in the PI Paper, the MCMC believes the market is a retail market that operates at a national level.

Most of the respondents agree with the MCMC's initial view that OTT, SMS and MMS services should be considered part of the same market. In particular, Celcom, Maxis and DiGi agreed with the MCMC's view that the services are substitutable, and offered helpful data to support their submissions. TIME similarly referred to the rise of OTT services, but was of the view that OTT services should not be regulated. The MCMC notes TIME's view but does not believe this is a reason to exclude OTT services from the market definition, as it is a substitutable product.

The MCMC notes P1's opinion that mobile messaging services themselves are not a separate market. The MCMC disagrees with this view and notes that P1 has not offered any evidence to support its assertion.

The MCMC thanks DiGi and Telekom Malaysia for their suggestions on additional regulation on mobile messaging service providers, however the MCMC is of the view that these submissions are beyond the scope of this inquiry. The MCMC would also like to point out that adding OTT services to the definition of the mobile messaging market does not automatically result in greater regulation of those services.

The submissions received have confirmed the MCMC's original view that the market for mobile messaging services should be defined to include OTT messaging



services. The MCMC's view that no single operator is currently in a dominant position also remains unchanged. In particular, the MCMC agrees with Maxis that this sector of the market is particularly competitive. While the MCMC notes U Mobile's submission that there are three dominant operators within this market, the MCMC has not received any evidence which supports this view.

The MCMC's final view is that there is a national retail market for mobile messaging services (including SMS and OTT message applications) and that no operator is in a dominant position in this market.

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## **9 Transmission (inter-exchange)**

### **9.1 Overview**

Transmission (inter-exchange) services were addressed in section 6 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Inter-exchange transmission is often referred to as the backbone network and may be provided using a range of different technologies, but is principally fibre based. Inter-exchange transmission provided over fibre is subdivided into a wholesale national market and a separate geographic market for the transmission route from Peninsular Malaysia to East Malaysia. The MCMC has come to a preliminary finding that Telekom Malaysia (whose position is aggregated with Fiberail and Fibrecomm in which it owns a majority stake) is dominant in the national wholesale market for inter-exchange transmission (although the MCMC may make alternate findings on a route by route basis). The MCMC also found that Telekom Malaysia is dominant on a preliminary basis for the separate Peninsular Malaysia to East Malaysia route.

### **9.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Celcom and Maxis are agreeable with the MCMC's preliminary findings of a wholesale national market for inter-exchange transmission, a separate geographic market for route from Peninsular Malaysia to East Malaysia and only fibre transmission to be considered in this market.

Celcom is of the view that regulation for transmission service should be implemented nationwide without exception to any routes. Although there are multiple service providers on certain routes, each have different level of supply chain and functional dimension. Celcom is concerned that some operators may have significant market power and dampen effective competition through various conducts such as refusal to supply or delay in implementation.

Fiberail has no further comments but believes that with a good monitoring program in place to assess the market structure and market conduct of a competitive route, the MCMC would be able to establish the level of competitiveness and this may allow the MCMC to take a different approach in considering the market definition of the said services.

Fibrecomm views that market definition should emphasize more on region rather than by geographic area as this will enable the MCMC to efficiently regulate all operators. If the demarcation is smaller so as the termination link, it will be easier for the MCMC to determine the position of each operator according to region. Most operators converge in Klang Valley and are reluctant to invest in underserved area due to business viability. However, the MCMC should not put any strain on specific operators who are willing to invest in underserved area as they are merely fulfilling their social obligation and should not be penalised by determining them as dominant in that particular underserved area.

Maxis views inter-exchange transmission market should be summarised as follows:

<b>Transmission</b>	<b>Market</b>	<b>Capacity</b>	<b>Contract Period</b>	<b>Service Provider</b>
Inter-exchange (Terrestrial)	National (Wholesale)	2Mbps – 100Mbps	1-3 Years	Mainly Telekom Malaysia (nationwide) and few operators (selected location)
Peninsular-East Malaysia	Geographic (Wholesale)	1Gbps	3-10 years	Only Telekom Malaysia (main provider) and Sacofa (small scale)

Similar to Celcom, Maxis also notes that there is only limited route-by-route transmission competition in Malaysia on national market for inter-exchange transmission, such that it is not meaningful at this juncture to consider markets on a route basis. Except for Telekom Malaysia, most of the other operators only have selective transmission laid out to connect their own technical operating centres and beyond that, they have to rely largely on Telekom Malaysia for connectivity. From the demand side, the contracts for Peninsular to East Malaysia are typically longer (10 years in comparison to annual contracts for national market inter-exchange transmission). In view of the longer tenure, operators typically purchase and dimension larger capacities in the contract. From the supply side, although many NFP(I) licensee have the right to lay transmission, many have not done so, as the capital expenditure dynamics of submarine cable laying are different from land based transmission. Instead of poles/ducts/manholes, operators need to construct cable landing stations, utilise cable laying ships and use specialised cables (thicker, with added protection). Typically extra fibres are laid as

construction of a submarine cable is not regularly done. The operational expenditure is also different and higher as specialised ships are required to repair fibre cuts and carry out maintenance. From Maxis' point of view, these differences support the identification of separate geographic market for the transmission route from Peninsular to East-Malaysia.

On microwave technologies as substitute for fibre-based transmission, Maxis strongly supports the MCMC's view that it is not substitutable. Microwave and satellite transmissions are typically lower bandwidth in nature, and satellite is relatively more expensive in comparison to fibre, hence for inter-exchange transmission, microwave and satellite do not represent adequate substitutes for fibre-based transmission.

TIME is of the opinion that investment in fibre is important to support the country's economic growth. Microwave technology cannot support demand for bandwidth in LTE deployment, broadband for schools as well as infrastructure for an information based society. Therefore, microwave technologies should be withdrawn except to support installations that are very short in distance (e.g. less than 3 km) and temporary in nature (e.g. before deployment of fibre links).

Telekom Malaysia agrees on separate geographic markets for transmission between Peninsular and East Malaysia, as recognised by the MCMC in the regulation of transmission prices on this route. However, Telekom Malaysia does not share the MCMC's view that there is a national market for transmission services. Increased competition means increase fibre and developments in Peninsular Malaysia. In addition, inter-Sabah and inter-Sarawak routes have also become competitive. According to Telekom Malaysia, customers acquire transmission capacity on a point-to-point basis, hence can build and buy from a number of different sources. Telekom Malaysia believes that these transmission capacity routes and areas should be removed from the Access List, and only those services that are clearly established bottleneck services should be placed on the Access List. Where sufficient competition exists, parties should be allowed to negotiate commercially on the terms of access. Telekom Malaysia has called for a detailed review of transmission routes in submissions on Access List in 2009 and April 2014; however, this has not taken place. Telekom Malaysia provided data on the declining subscription of Telekom Malaysia's transmission services since 2011, suggesting competition in the market and alternative sources of supply. Internationally, there is compelling evidence of transmission capacity markets not to be national in nature, for example ACCC delisted transmission services in 120 geographical areas. The MCMC's reason for defining national market for transmission service is that although transmission is acquired via point-to-point, it is also provided as a bundle of geographic service. This was also considered by ACCC and as per the experience in Australia, if a purchaser of transmission capacity relies on bundled services to provide end-to-end connectivity over a large geographical area, this will be implicitly recognised through separately defined routes.

U Mobile views that it should be a separate market.

YTL agrees with the proposed market share definition, including market share assessed on a route-to-route basis, in which Telekom Malaysia, Fibrecomm and Fiberail should be considered as one supplier rather than alternative. YTL agrees to the assessment of Telekom Malaysia, Fiberail and Fibrecomm as group.

(b) **Do you have any data to support a calculation of market share?**

Fiberail has 55 wholesale subscribers comprising domestic and international companies. It also has retail subscribers which include renowned companies.

Maxis findings on key operators data revenue is in line with the MCMC's estimation of the percentage of Telekom Malaysia network coverage (89%) and no of exchanges (83%) in comparison to the other key operators in Malaysia. Based on data obtained from website and press releases, Maxis estimates Telekom Malaysia typically holds more than 80% market share in terms of revenue in comparison to the other key operators namely TIME, Maxis and Sacofa.

P1 is of the view that the determination of dominant player in whatever market segment should be by licensee i.e. individual entity and not collectively.

(c) **Do you believe that the access regulation has been effective in preventing anti-competitive conduct from occurring in the inter-exchange transmission market?**

Altel concurs that the access regulation is effective in preventing anti-competitive conduct from occurring in the inter-exchange transmission market.

Celcom, DiGi and Maxis are of the view that the current access regulation on inter-exchange transmission market has not been as effective as it was previously due to the new position taken by Telekom Malaysia on the pricing issue of transmission service.

According to Celcom, Telekom Malaysia has been allowed to implement the price according to their interpretation, which was not discussed during the PI. The enforcement of the implementation of Access Pricing Determination should be done in a more transparent manner at industry level. The price of transmission service is regulated; however, Telekom Malaysia is applying the price to only a certain element of its transmission service instead of end-to-end. As a result, operators were taken by surprise on the implementation of a new pricing structure. The additional cost in the upstream market impacts the prices in the downstream market. This misconduct by a dominant operator has the effect of substantial lessening of competition as the access seeker would not be able to match the price of Telekom Malaysia's services.

According to DiGi, Telekom Malaysia has a majority stake in two prominent fixed line operators. Telekom Malaysia via its wholly owned subsidiary, Mobikom Sdn Bhd would eventually hold 57% of shareholding in P1 Sdn Bhd. Although this will not make material effect on market assessment of inter-exchange transmission market, Telekom Malaysia would have the opportunity to vertically integrate its

newly acquired mobile business with its substantial fixed network infrastructure. The MCMC should consider and seek clarity on potential cross subsidization resulting in SLC. DiGi requested the MCMC to take necessary measures to monitor the effects of the merger on the integrated operations of Telekom Malaysia group via Regulatory Financial Statements.

DiGi expressed the need to review assessing dominance for inter-exchange transmission focusing on particular route rather than cluster. Transmission services are provided in a bundle and priced according to bandwidth over a specific period of time (a year). These prices have to continue to be regulated to ensure interest of end users is safeguarded. Further deliberation on the way this service is monitored should be carried out to reduce ambiguity and risk. Historically Telekom Malaysia has been providing transmission services on an end to end basis. However, this is being reviewed by Telekom Malaysia to be segregated between inter-exchange versus tail, where routes and distance of the separate services are unclear and disputable. Current access regulation while providing clear mandate to allow access to the services, do not constrain the monopoly licensee from acting independently in the market.

According to Maxis, the new position taken individually by Telekom Malaysia (against established industry practice), clearly indicates that Telekom Malaysia is exercising market power independently and is dominant in the transmission market. Recently Telekom Malaysia has taken the position that access regulation on inter-exchange transmission market only applies to the trunk portion and access seeker will need to subscribe to the additional element of ports and tail for transmission services. Despite no physical or technical changes to the existing service procured, the changes impose significant additional charges to the existing connection from Telekom Malaysia exchanges to the access seeker's equipment. The lower mandated prices for transmission services, now applies to a small portion of the cable distance, and access seeker is now subjected to prices of tail and port charges related to the Wholesale Local Leased Circuits (**WLLC**) service, which are also mandated. By imposing this additional charge, the Transmission service prices as mandated throughout the years is now no longer applicable. Similarly, Ethernet Transmission service is not regulated. The MCMC's distance based indicative pricing in the PI Report dated 14 December 2012, is very different from Telekom Malaysia's region based Ethernet costing, which means indicative pricing cannot be used as a reference. Maxis also believes that it is timely for the MCMC to include poles, ducts and manholes facilities as regulated facilities as done in UK, Portugal, USA and Australia. They are key network elements for the industry to expand their network coverage which in return would significantly improve broadband coverage, quality of services and competitive prices for the benefit of end users. Without this, lack of alternative transmission services will continue to exist.

Fiberail agrees that although the terms of access are regulated, such regulation alone may not be able to prevent a licensee from being dominant and engaging in anti-competitive conduct in the inter-exchange transmission. However, licensees are bound by access regulation and failure to comply shall be subjected to penalty

imposed by the MCMC. Access regulation should be reviewed and altered if the need arises in the PI on Access List.

P1 is of the view that the current access regulation has been and will be an effective tool to prevent anti-competitive conduct among the licensees.

TIME pointed out that except for Telekom Malaysia, other operators do not have significant number of exchanges. As such transmission services and tail circuits apply to Telekom Malaysia's network configuration. This leads to cumbersome market definition for transmission services and allows the incumbent to take advantage of loop holes in the access prices. TIME also noted that operators who offer transmission services, act as a One Stop Center for local authorities, and this can act as barriers for other operators to lay fibre networks since they have the visibility to cater for the wholesale demand of the geographic area. Examples are Sacofa and PDC Telco.

Telekom Malaysia believes that access regulation has been effective. The competitive impact of all regulation, including rate and access regulation, should be considered in greater detail by the MCMC.

U Mobile views that access regulation has not been effective because geographical nature serves as barriers to entry on some of the inter exchange market i.e. between East Malaysia and Peninsular.

According to YTL there are instances of exclusive tendencies of current operator in the area that makes it difficult for smaller players to provide services. Suppliers sometimes resort to delaying tactics or staggering access. Such tactics should be viewed as constructive lessening of competition.

**(d) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Celcom, U Mobile and YTL agree with the MCMC's preliminary finding on dominance.

DiGi concurs with the MCMC findings that Telekom Malaysia and its subsidiaries (Fibrecomm and Fiberail) are collectively dominant, both in retail and wholesale sectors for inter-exchange transmission market. As noted by the MCMC, Telekom Malaysia owns 92% of all fibre distance and 83% of total exchanges. Their extensive footprint and exclusive partnership (e.g. with Putrajaya Holdings) further enhances their significant market power for this market.

According to Fibrecomm, dominance assessment must be reviewed based on individual licensee rather than collective assessment. Fibrecomm is 51% owned by Telekom Malaysia and 49% by TNB. However, TNB plays a vital role in Fibrecomm's business direction as Fibrecomm is leveraging on TNB's low and high voltage infrastructure. Fibrecomm is a separate entity from Telekom Malaysia and has its own management, board of directors, network as well as NFP, NSP and ASP licences. Telekom Malaysia does not interfere in the business operation of Fibrecomm as Fibrecomm is also serving Telekom Malaysia and a competitor in

business as well. Further the MCMC sees Fibrecomm as a separate entity from Telekom Malaysia on the Mandatory Standards for Quality of Service (Digital Leased Line).

Fiberail does not agree that Telekom Malaysia's position in the market is in aggregate with Fiberail when considering dominance assessment for inter-exchange transmission market. Fiberail wish to ascertain that it is a separate independent entity from Telekom Malaysia and therefore should not be collectively deemed as dominant with Telekom Malaysia. Although Telekom Malaysia is the major shareholder, and has the same line of business, there are other shareholders namely KTMB and Petrofibre Networks (M) Sdn Bhd and their operation, is independent of Telekom Malaysia in terms of management, board of directors, selling price and pricing. Major decisions that affect the company financially or strategically require assenting votes from all three shareholders. The Malaysian wholesale fibre optic market is robust and competitive. Besides Fiberail, Maxis, TIME and Telekom Malaysia supply long distance transmission services. In localised markets such as Klang Valley, there are a range of new service providers. These players offer similar wholesale transmission and managed bandwidth services. Hence, Fiberail is a separate entity and should not be categorised as "collectively having significant market power" with Telekom Malaysia in the inter exchange transmission market. Any finding of dominance in Transmission (inter-exchange) market should be based on individual market dominance and not collectively. There is a high degree of competitive rivalry.

Maxis agrees with the MCMC's findings that Telekom Malaysia is dominant in the national market for inter-exchange transmission, and also dominant in the inter-exchange transmission between Peninsular Malaysia and East Malaysia. Maxis is of the view that making an alternate finding on dominance for particular inter-exchange transmission routes that are found to be competitive may not be the best option for the MCMC and the industry as there are only a few transmission routes that are capable of being provided by more than one service provider. Most of the time only one service provider is capable of providing inter-exchange transmission service, due to limitation at the last mile which is largely controlled by Telekom Malaysia. Hence, the MCMC should not consider making an alternative finding on dominance for particular inter-exchange transmission routes.

TIME agrees that Telekom Malaysia and its subsidiaries are dominant in the transmission market (inter-exchange and tail).

Telekom Malaysia does not believe a national transmission market is appropriate for the purpose of ex-ante regulation. Dominance should be evaluated on individual transmission routes.

- (e) **Should the MCMC make a non-dominance finding if high market share is the result of lack of investment by rivals, depending on the barriers to entry in this market?**

Celcom is of the view that the MCMC should not make the non-dominance finding due to lack of investment by rivals because the most important aspect to consider

is the significant market power and political influence, where the dominant operator is likely to take advantage and can dampen effective competition in the downstream market.

According to DiGi, current access regulation, while providing clear mandate to allow access to the services, do not constrain the monopoly licensee from acting independently in the market. Other operators have resorted to building their own transmission networks and associated civil infrastructure to achieve cost efficiencies.

Fibrecomm believes that lack of investment by rivals is not a determining factor in considering dominance finding because business direction and viability of business by each operator is rested entirely on the operator itself.

According to Fiberail, an operator should not be held dominant if they have taken the effort to invest significantly to meet the national objective as provided by the MCMC.

Maxis does not agree that lack of investment by rivals is the key factor for Telekom Malaysia's significantly higher market share. The comparison of network investment made by TIME (approximately RM171 million in 2013) is not insignificant but it is not reflected in its current market share of Transmission market. Maxis has also invested RM c-i-c for fiberisation of transmission and fibre to the home (**FTTH**). Other operators also continue to invest selectively on the transmission and fibre rollout, but with the Government financing Telekom Malaysia, most of competitors business cases becomes challenging. According to Maxis, unlike regulation on mobile infrastructure, the lack of regulation on sharing of fixed network infrastructure have contributed to Telekom Malaysia being dominant in the inter-exchange and Peninsular to East Malaysia transmission market. In addition, it is technically and financially not feasible to have duplicate and redundant fixed infrastructure network due to the significant capital and construction cost as this will increase cost of providing the service and congest the area. Hence, the best option is for the fixed network infrastructure to be shared by the operators at cost base charges, similar to infrastructure sharing such as towers, rooftop, in-building, etc. that has proven to be successful among the cellular operators. Another reason cited by Maxis is the long term contracts in the market constitute barrier to entry that prevents or restricts potential entrants from accessing certain area or customers. This includes the exclusivity or preferential terms of supply enjoyed by the incumbent operator e.g. Putrajaya Corporation and Penang Development Corporation that makes it difficult for alternative operators to lay their infrastructure such as fibre, ducts and manholes within those areas.

P1 supports the intention to make dominance findings in the high market share as a result from the lack of interest by the rivals to invest. In an industry that is highly CAPEX intensive, dominance is unavoidable. The capacity to build and strategies to re-coup investment is a normal goal for any business. The service providers should be applauded for taking the risk to invest to build a comprehensive network and should not be penalised for appearing to be big.



TIME believes the MCMC should clarify with operators who have substantial financial resources as to why they have not sufficiently invested in laying fibre networks as this is crucial to support the delivery of high quality mobile broadband services.

Telekom Malaysia agrees that many other operators should have made investment in transmission infrastructure and services. Where barriers to entry do not prevent or obstruct operators from making commercial feasible investment, Telekom Malaysia expects the MCMC to take this into consideration when assessing dominance.

U Mobile views that the MCMC should conduct a more detail analysis on barriers to market especially the different geographical areas i.e. transmission between Peninsular and East Malaysia and the cost involved in deploying the transmission infrastructure.

YTL pointed out that Telekom Malaysia has been a fixed line operator and has developed skills and competencies that allow it to be a more efficient operator. Telekom Malaysia also has economies of scale and access to more exchanges. According to YTL, there are legacy issues as a result of Government investment that resulted in Telekom Malaysia having a large market share. Although Telekom Malaysia has invested in replacement cost, such investment is lower for Telekom Malaysia which has control over ducts, pits and poles compared to other service providers. The HSBB Government funding has unlocked funds that Telekom Malaysia can use for inter-exchange transmission services. Investment by Telekom Malaysia is mainly to service its markets. Similarly, the mobile operators need to invest in mobile infrastructure in order to service the mobile markets. The MCMC can encourage investment by other licensee through the inclusion of ducts, poles and pits in the standard access obligations. The common trenching policy that was introduced in the late 1990s need to be revitalised and reintroduced. Common trenching will lower cost of investment in fixed line transmission services just like tower-sharing has lowered costs of mobile services rollout.

### **9.3 The MCMC's Final Views**

All of the responses in relation to inter-exchange transmission were reviewed carefully by the MCMC and have assisted in forming its final views.

The MCMC notes that there was widespread support for its market definition. The MCMC also wishes to reiterate that a finding of dominance is not intended as punishment or penalty for investment; it is a means of ensuring that the MCMC can adequately regulate markets. There is no remedy being imposed on dominant licensees currently and therefore no ill consequences as a result of a finding of dominance.

The MCMC considered with interest Maxis' and TIME's comments that microwave technologies are not appropriate substitutes due to lower bandwidth and the inability to support future demand and LTE deployment. The MCMC considered that this accords with its market definition.

The MCMC has considered the arguments raised by Telekom Malaysia in relation to its disagreement with the identification of a national market for inter-exchange transmission. The MCMC notes that Telekom Malaysia should raise its concerns in relation to inter-exchange transmission studies in a submission to the Access List Review.

The MCMC notes P1's and Fibrecomm's comments that dominance should not be found on a collective basis but notes that this goes against accepted principles of competition law. Market power can be combined collectively and dominance established in this manner. The MCMC wishes to clarify that a majority or significant shareholding in a subsidiary does not lead to an automatic finding of collective dominance; the MCMC will assess each market and situation on a case by case basis. The MCMC has also considered Fiberail's comments that although Telekom Malaysia is a major shareholder in Fiberail, Fiberail operates independently of Telekom Malaysia. Nevertheless, the MCMC is not convinced that Fiberail and Fibrecomm are sufficiently autonomous such that they will compete fully independently from Telekom Malaysia. Hence, the MCMC believes that aggregation of these companies into a single dominance assessment is warranted.

The MCMC is concerned by the range of responses that considered that access regulation has not been effective in these markets and requests all respondents to consider making submissions to the upcoming Access List Review on this matter, particularly in relation to interpretation of rules or principles that may be the subject of disagreement between access providers and access seekers. The MCMC notes that many respondents were concerned with issues of definition or interpretation in the current access regulations and how these provisions were being circumvented.

There was broad support for the MCMC's preliminary findings of dominance in this market.

The MCMC notes that variety of views expressed in relation to whether the MCMC should make a non-dominance finding where high market share is due to non-investment. The MCMC notes the issues raised by participants that lack of investment was not the only factor which has led to Telekom Malaysia's high market share including long term contracts in this market and the competencies gained by Telekom Malaysia in its time as the only provider in Malaysia.

The MCMC's final view is that there is a wholesale national market and a separate market for the transmission route from Peninsular Malaysia to East Malaysia. Telekom Malaysia (whose position is aggregated with Fiberail and Fibrecomm in which it owns a stake) is dominant in the national market and Telekom Malaysia alone is dominant in the market for the transmission route from Peninsular Malaysia to East Malaysia.

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## **10 Transmission (tails) or local leased lines**

### **10.1 Overview**

Transmission (tails) or local leased lines services were addressed in section 7 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Tail transmission is a technology neutral service involving the transmission between an end user at a fixed location and the nearest local exchange. The market for transmission tails does not include the high speed broadband (**HSBB**), ULL or wireless products which are not close enough substitutes. The MCMC has found that there are separate national wholesale and retail markets for tail transmission and came to a preliminary finding that Telekom Malaysia was dominant in both transmission tails markets.

### **10.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Celcom is of the view that market definition should include scope of operators who provide the facilities in Golden Triangle areas, Free Trade Zone and Heritage Zone in Pulau Pinang and Melaka, as these are the important areas for new development which require effective competition.

Maxis supports the MCMC's views that there are separate wholesale and retail markets for tail transmission and that both markets operate at a national level. However, Maxis wish to clarify the MCMC's reference to Digital Leased Line in point 7.2. Digital Leased Line is an end-to-end solution, and typically has two (2) tail segments plus one (1) trunk/junction segment, such that two markets are involved. This is different from the WLLC that typically only has one (1) tail segment and thus can be assessed solely.

Maxis also supports the MCMC's view that HSBB is not a viable substitute for tail transmission. From the technical perspective, tail transmission is more on dedicated link or bandwidth, whereby the HSBB is more on the shared link or bandwidth. The pricing and transmission capability that are being offered are also different between the HSBB and tail transmission, in which the latter typically has better quality but at higher price.

Telekom Malaysia is of the view that it is possible for HSBB services to be considered as part of the tail transmission market. Although there are differences in quality compared to a dedicated leased line, Telekom Malaysia believes there is an adequate degree of substitution to warrant the inclusion of HSBB.

Telekom Malaysia is also of the view that wireless should be considered as it can be used as an effective substitute, including in last-mile network rollout and other situations in which fibre is too impractical or costly to be used. While the MCMC has acknowledged this, it has provided no substantive reason why fibre should be considered as the only viable technology for the purpose of market definition.

Similar to Telekom Malaysia's view that transmission capacity market is not a national market, a further exception is supported in the case of access to towers. As Telekom Malaysia has submitted previously, some remote or impassable towers are only accessible to certain operators. Telekom Malaysia believes this represents a bottleneck in the provision of transmission services and has not been adequately addressed by the MCMC.

YTL agrees with the dynamic and flexible definition of markets. The MCMC should be prepared to define localised markets where a certain service provider is the sole provider such as in in-building coverage (common antenna systems). While Telekom Malaysia is dominant at the national level, small localised players can be dominant in the local environment and be able to make supply decisions independently.

**(b) Do you agree with the preliminary market share findings?**

Celcom, U Mobile and YTL agree that Telekom Malaysia is the dominant player in this market.

DiGi agrees with the preliminary market share findings as Telekom Malaysia has the scale and reach to provide an end-to-end transmission service. But as noted by the MCMC, Telekom Malaysia has not explicitly explained the tails and port segments of their service which has led to extra costs to the Access Seekers: which Telekom Malaysia has yet to resolve with the other operators.

DiGi is of the view that tails and inter-exchange transmission services should be considered together as a single service especially when the trend is to provide an end-to-end service where often tails are transparent to the Access Seeker.

Fiberail agrees with the method adopted by the MCMC in its preliminary market share findings by taking into account factors such as size of the operator's network and lack of investment.

Maxis findings on the key operators data revenue is in line with the MCMC's estimation of the percentage of Telekom Malaysia network coverage (89%) and number of exchanges (83%) in comparison with other key operators in Malaysia. Based on the data and analysis conducted by Maxis, Maxis estimates that Telekom Malaysia is holding approximately between 71% to 81% of the market share for transmission (inter-exchange), transmission (tails) or local leased line, and domestic managed data services.

P1 is of the view that the determination of a dominant player in whatever market segment should be by licensee i.e. individual entity and not collectively.

Telekom Malaysia disagrees that a national transmission market is appropriate for the purpose of ex-ante regulation. Telekom Malaysia opines that dominance should be evaluated on the basis of individual transmission routes and with consideration given to the substitutability of fibre technology with wireless alternatives.

(c) **Do you have any examples of a wholesale tail transmission provider leveraging its position in other markets (e.g. local access services, inter-exchange transmission, etc.) to negatively affect competition in the tail transmission market?**

Celcom cited that there has been a very small number of operators acquiring WLLC from Telekom Malaysia. Celcom notices that Telekom Malaysia is trying to change the definition of the Transmission Service that operators are acquiring from them, to suit the definition of WLLC. As a result, operators will be paying additional tail and port charges.

Maxis agrees with the MCMC views that Telekom Malaysia's strong presence across regional areas provides it with an advantage across the national market by offering the most comprehensive point-to-point connectivity capabilities across the country. Even where particular transmission routes may appear to be competitive, other operators still need to subscribe to Telekom Malaysia's tail transmission as it is technically not feasible due to co-location at the local exchanges not being allowed by Telekom Malaysia.

In addition, entry or expansion in the market for tail transmission would incur significant capital and construction cost. Therefore, it would not be feasible from the technical and financial perspective for the other operators to duplicate the existing extensive tail transmission network infrastructure owned by Telekom Malaysia.

Maxis is of the view that Telekom Malaysia is able to leverage on its extensive tail transmission market to strengthen its market power in the other transmission markets such as inter-exchange and international (not the other way around).

Telekom Malaysia submits that it is unaware of any examples. Telekom Malaysia further states that it is not able to use its position in the tail transmission market in a way that affects competition in any other market.

U Mobile named Telekom Malaysia and TIME but did not elaborate further.

YTL states that the strategy used by Telekom Malaysia as the price leader in the fixed wholesale market to set prices while putting pressure on smaller players to follow their preferred pricing. Telekom Malaysia has been able to use its dominant position to pressure access seekers to pay additional charges for tail and port segments apart from the trunk segment that is in compliance to the Access Pricing regulation.

(d) **Do you believe that the access regulation has been effective in preventing anti-competitive conduct from occurring in the inter-exchange transmission market?**

Altel is of the view that the access regulation is effective in preventing anti-competitive from occurring in the inter exchange transmission market. However, Altel also shares the same view as other operators on the additional charges

imposed by Telekom Malaysia on the tail and port segments as results of the contradictory definition of the Transmission Service published in Telekom Malaysia's ARD.

Celcom is of the view that access regulation has not been effective. This is due to Telekom Malaysia adopting their own interpretation in their ARD and applying the price to only a certain element of its Transmission Service instead of end-to-end. Telekom Malaysia claims that the price determined in MSAP only applies to the trunk segment. As such, in order to have an end-to-end connection, an Access Seeker needs to pay additional charges for what Telekom Malaysia claims to be tail and port segments.

Celcom states that the enforcement of implementation of the Access Pricing Determination should be done in a more transparent manner at industry level which includes consultation with all operators on matters not raised in the PI Paper.

Fiberail is of the view that access regulation has been effective in preventing anti-competitive conduct but it needs to be reviewed and updated subject to the findings made by the MCMC in this PI Paper.

Maxis is of the view that the Access List implementation has not been successful due to technical constraint imposed by Telekom Malaysia. The WLLC provided by Telekom Malaysia is technically not feasible as network co-location is not allowed in the local exchanges, and the access route to the co-located space is not regulated under the existing scope of network co-location. Telekom Malaysia imposed fibre splicing, outside the exchange area where the WLLC is to be provided to the access seeker.

In addition, Maxis is of the view that it is highly timely for the MCMC to include poles, ducts and manholes as the regulated facilities in the Access List.

P1 states that the current access regulation has been and will be an effective tool to prevent anti-competitive conduct among the licensees.

Telekom Malaysia believes that the access regulation has been effective. In addition, Telekom Malaysia submits that the competitive impact of all regulation, including rate and access regulation, should be considered in greater detail by the MCMC.

U Mobile and YTL share the same view as Celcom on the access regulation being ineffective in its prevention of the anti-competitive measures in the tail transmission market due to Telekom Malaysia's interpretation and pricing application without the tail segment cost at its own advantage. Therefore, access seekers to pay additional charges for tail and port segments apart from the trunk segment.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Celcom, Maxis, U Mobile, YTL agree with the MCMC's preliminary finding on dominance.

Fiberail agrees with the method adopted by the MCMC in its preliminary market share findings by taking into account factors such as size of the operator's network and lack of investment.

Maxis reiterates the importance of the MCMC to regulate the sharing of poles, ducts and manholes service in view of the refusal of Telekom Malaysia to offer it on commercial basis as they are the key fixed network elements for network coverage expansion which in return would improve the broadband coverage, quality of services and competitive prices for the benefit of end users.

Telekom Malaysia disagrees that a national transmission market is appropriate for the purpose of ex-ante regulation. Telekom Malaysia opines that dominance should be evaluated on the basis of individual transmission routes and with consideration given to the substitutability of fibre technology with wireless alternatives.

Overall, TIME agrees that Telekom Malaysia and its subsidiaries are dominant in the transmission market (inter-exchange and tails). TIME pointed out that operators who offer transmission services also acts as One Stop Centers (**OSC**) for local authorities and this is a barrier for other operators to lay fibre networks since they have the visibility to cater for the wholesale demand of the geographic area (e.g. Sacofa and PDC Telco).

(f) **Should the MCMC make a non-dominance finding if the market share is the result of lack of investment by rivals, depending on the barriers to entry in this market?**

Celcom is of the view that the MCMC should not make the non-dominance finding because the most important aspect to consider is the significant market power and political influential power where the dominant operator is likely to take advantage and can dampen effective competition in the downstream market.

Maxis disagrees with the MCMC's view that lack of investment by rivals is the key factor for operator to have significantly higher market share in the market. Maxis has invested substantially for fiberisation of transmission and in fibre to the home (**FTTH**) since year 2010. Maxis also believes that other operators continue to invest selectively on the transmission and fibre roll-out, but the only difference with Telekom Malaysia is that they are being financed by the Government. Therefore, most of competitors business cases becomes challenging.

Maxis also provided other factors that contribute to Telekom Malaysia having a higher market share namely, lack of regulation on sharing of fixed network infrastructure, technically and financially not feasible to have a duplicate and redundant fixed infrastructure network and contractual restrictions.

P1 states that the MCMC's intention to make a dominance finding in the high market share that resulted from the lack of interest by the rivals to invest is wise. In an industry that is highly CAPEX intensive, dominance is unavoidable. Having the capacity to build and strategies to re-coup the investment is a normal goal for any business. The service providers should be applauded for taking the risk to invest to build a comprehensive network and should not be penalized for appearing to be big.

Telekom Malaysia agrees that in many cases other operators should have made investments in tail transmission infrastructure and services. Barriers to entry do not prevent or obstruct operators from making necessary and commercially feasible investments. Therefore, Telekom Malaysia hopes the MCMC would take this into consideration when assessing dominance.

TIME believes the MCMC should clarify with operators who have substantial financial resources as to why they have not sufficiently invested in laying fibre networks when it is a known fact that fibre networks is crucial to support the delivery of high quality mobile broadband services.

U Mobile is of the view that the MCMC should conduct a more detail analysis on the barriers to entry to the market especially on the different geographical areas i.e. transmission between Peninsular and East Malaysia and the cost involved in deploying the transmission infrastructure.

YTL is of the view that lack of investments is due to many factors including historical and logical factors. Other factors that need to be taken into account are related to the availability of funding such as the Government funding for HSBB, which means that in many cases tail transmission services are actually funded by the Government. Additionally, the provision of Government funding for HSBB has freed funds that Telekom Malaysia can now use to fund transmission and local leased lines. Fixed line services that are subject to the Rate Rules are exempted from the calculation return on net revenue for contribution to the USP fund. This means that Telekom Malaysia needs to contribute less to the USP fund, leaving it with more funds that it can reinvest.

YTL also states that there are high barriers to entry into the fixed line market, including limitations imposed by state backed companies in certain states. Access to ducts, poles and pits is the biggest barrier to entry into the fixed line market. YTL suggests that any relaxation of the dominance must be preceded with initiatives to improve access to these facilities.

### **10.3 The MCMC's Final Views**

The MCMC has considered all the responses in relation to these markets before making its final determination.

The MCMC notes the variety of views on market definition but does not agree with Telekom Malaysia that the HSBB or wireless solutions could be considered as viable substitutes for transmission tails or local leased line. As the MCMC has



previously noted in its Market Definition Analysis Paper, this is consistent with the approach taken by other regulators overseas. For example, OFCOM did not consider superfast broadband to be substitutable with tail transmission due to differing functionalities and prices. Similarly the MCMC wishes to clarify that areas such as the Golden Triangle zone and Heritage Zone in Pulau Pinang will be captured by the market definition as the market is nationally defined.

The MCMC noted the claims that Telekom Malaysia was leveraging its position as price leader to pressure smaller start-up to follow its pricing strategies and that there was also pressure exerted by Telekom Malaysia on access seekers to get them to pay additional charges for tail and port segments.

The responses also show that there is some concern about the efficacy of current access regulation with some respondents noting that Telekom Malaysia often interprets access obligations in a manner that does not accord with prevailing industry practice. The MCMC once again urges concerned parties to make a submission to the Access List Review.

The MCMC has noted the general support for its preliminary findings on dominance with the exception of Telekom Malaysia.

Operators once again noted to the MCMC that lack of investment by rivals was only a single factor in a broad range of issues which have led to the high concentration of market share in these markets, such as the financial resources of operators which influences their ability to compete, poor regulation, historical factors etc.

The MCMC's final view is that there are separate national wholesale and retail markets for tail transmission or local leased lines and Telekom Malaysia is dominant in both these markets.

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## **11 Domestic managed data services**

### **11.1 Overview**

Domestic managed data services were addressed in section 8 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

Managed data services are provided using frame relays, ATM, IP-VPN and Metro-E and cannot be substituted with transmission tails.

In the PI Paper, the MCMC outlined its preliminary view that there is a national market for domestic managed data services and that Telekom Malaysia is dominant in this market.

## **11.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

Maxis supports the MCMC views that there is a national market for the provision of domestic managed data services in Malaysia separate from the tail transmission market. Telekom Malaysia is of the view that domestic managed data services should not be defined in a separate market but it should be included within the market for tail transmission services. There is no evidence to support the establishment of separate markets for domestic managed data services.

### **(b) Do you have any data to support a calculation of market share?**

Maxis supports the MCMC views that domestic managed data services are closely connected with the inter-exchange and tail transmission services in that both the inter-exchange and tail transmission are typically provided as inputs to the provision of domestic managed data services. Therefore, Maxis expects the analysis of data on market share for transmission market is also applicable to the market for domestic managed data services.

### **(c) Do you have any examples of a provider leveraging its position in the tail transmission market to negatively affect competition in the domestic managed data services market?**

DiGi notes that Telekom Malaysia is considered dominant in the WLLC market as it has the most significant tail transmission service in the country.

Maxis and DiGi share the same view on tail transmission being a key input to domestic managed data services

In addition to that, Maxis also views that the inter-exchange and Peninsular to East-Malaysia transmission also play a significant input to provision of the domestic managed data services. Hence, it supports Maxis' view that the operator who has a dominant position in the transmission market is most likely to have a dominant position in the domestic managed data services market.

Maxis is of the view that Telekom Malaysia being in the dominant position in all the transmission market surely would hold the significant advantages and be able to leverage on its extensive transmission market to negatively affect the competition in the domestic managed data services markets.

U Mobile believes Telekom Malaysia is in the dominant position in the tail transmission market as Telekom Malaysia currently own 89% fibre optic link and also 83% of total number of exchanges in the country.

(d) **Based on the number of new entrants in the domestic managed data services market, do you believe this has had a significant impact on competition in the market?**

Fiberail is of the view that new entrance has not (or yet to) cause major impact on the competition in the domestic managed data services.

Fibrecomm is of the view that the new entrant in the domestic managed data services market has established competitive pricing among all operators. However, in the long run, many face difficulties in sustaining stability due to huge CAPEX and also high expectation of profit.

Maxis does not believe that the number of new entrants in the domestic managed data services market has had a significant impact on competition in the market. The key reason is because the new entrants would also have to rely on Telekom Malaysia for providing the transmission services for them to provide the managed services. Their pricing and offering would significantly be influenced by the transmission cost imposed by the incumbent operator and they would not be able to offer the competitive price to the end users. In some cases, the providers of domestic managed data services are not full-fledged NFP (I) licensees and often have to buy full transmission from the incumbents.

In addition, the quality of services, fault restoration, operation and maintenance of the domestic managed data services would also significantly depend on the incumbent operator, who can favour its own direct customers.

Telekom Malaysia believes that competition will get more intense with the entrance of new players.

YTL is of the view that this is not significant as these service providers do not own infrastructure.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

DiGi, Fiberail, Maxis, U Mobile, YTL agree with the MCMC's preliminary findings that Telekom Malaysia should be considered as dominant in the market for domestic managed data services.

Fiberail states that lack of investment in the tail transmission tantamount to the presence of Telekom Malaysia in the rural area and as such have the niche to provide point-to-point services across Malaysia.

Maxis states that based on the growth of market share of Telekom Malaysia in the domestic managed data services and Telekom Malaysia's influence (in the related transmission markets), the barriers to entry remain high and significant enough to prevent any real competition in the domestic managed data services market.

P1 is of the view that the determination of a dominant player in any market segment should be by licensee i.e. individual entity and not collectively.

Telekom Malaysia disagrees with the MCMC preliminary finding on dominance in this market as there is no need for domestic managed data services to be separately defined, hence no reason for finding on dominance for a market which should not exist in the first place.

### **11.3 The MCMC's Final Views**

All respondents except Telekom Malaysia agreed with the MCMC's preliminary view that there is a national market for the provision of domestic managed data services in Malaysia, which is separate from the tail transmission market.

The MCMC notes Telekom Malaysia's view that local managed data services should be considered part of the general market for transmission services. However, the MCMC maintains that although transmission tails are one of the inputs to domestic managed data services, they are not a substitute for those services.

The MCMC notes Maxis' submission that the markets for domestic managed data services and tail and inter-exchange transmission services are closely related; meaning that Telekom Malaysia's dominance in one market is a strong indicator of its dominance in the other. Other respondents have also drawn the MCMC's attention to a link to tail transmission services.

The MCMC received submissions expressing a range of views on the state of competition in the market. Telekom Malaysia and Fibrecomm argued that new entrants to the market have increased competition, however others did not note any such increase in competition. The MCMC notes that only Maxis attributed the lack of improvement in competition to Telekom Malaysia's dominance.

Despite a lack of consensus between respondents on the current state of competition, the MCMC has concluded that Telekom Malaysia is dominant in the market for domestic managed data services. All respondents except Telekom Malaysia agree with this finding and have offered different reasons for it, which the MCMC has considered carefully.

The MCMC notes that Telekom Malaysia's objection to the MCMC's finding of dominance is based on their assertion that the market is incorrectly defined. Telekom Malaysia has not offered evidence to address any of the issues raised by other respondents.

The MCMC's final view is that Telekom Malaysia is dominant in the national market for domestic managed data services.

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## **12 Transmission (international) and international managed data services**

### **12.1 Overview**

Transmission (international) and international managed data services were addressed in section 9 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

International transmission provides capacity on international backbone networks for voice and data traffic between Malaysia and international destinations.

The PI Paper set out the MCMC's preliminary view that there are national retail and wholesale markets for international private leased circuit (**IPLC**) transmission and a separate single national market for international managed data services in Malaysia. The MCMC's preliminary view was that Telekom Malaysia is dominant in all of these markets.

### **12.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Maxis agrees and supports the market definition on international transmission. However, on the market definition of international managed data services, Maxis is of the view that it is only a single national market which is closely related to the retail or corporate customers. Based on Maxis's experience, the licensed operator generally prefers the international transmission rather than international managed data services as they prefer to manage their own data, content, router, international partners, etc.

Telekom Malaysia is of the view that international managed data services should not be defined in a separate market but it should be included within the market for transmission (international) services.

#### **(b) Do you have any data to support a calculation of market share?**

Maxis does not have the sufficient data to calculate the market share owned by Telekom Malaysia in the international transmission and international managed data but based on their rough estimation, Telekom Malaysia could be holding approximately 70-80% of the market share in terms of revenue and capacity (the remaining 20-30% is shared amongst the remaining Service Providers in Malaysia).

#### **(c) Should the MCMC consider countervailing buyer power as a possible competitive constraint on a dominant provider of international connectivity services?**

Fiberail submitted that in order for the MCMC to ascertain if countervailing buyer power may cause competitive constraint on a dominant provider, further analysis

should be carried out on the state of the market pertaining to the international connectivity because countervailing buyer power can take a variety of forms. In each case, the said analysis should establish how the countervailing power create constraints of a competitive nature and thereby lessens competition.

Fibrecomm is of the view that the MCMC has limited jurisdiction within border to border in Malaysia for end to end requirement. It depends mainly on the pricing and services offered by the international operators. Therefore, Fibrecomm sees no point of regulating it.

Maxis is of the view that even though it is technically possible for some large wholesale customers in Malaysia to seek international connectivity by hubbing through another location (e.g. Singapore, Hong Kong, AIMS, etc.) and then seeking connectivity to all other countries through that hub, it is not preferable from an economic, commercial or technical perspective. Therefore, Maxis supports the MCMC views that it does not consider countervailing buyer power as a legitimate competitive constraint on dominant provider.

Telekom Malaysia is of the view that the MCMC should consider countervailing buyer power as a possible competitive constraint on a dominant provider of international connectivity services.

YTL opines that countervailing buyer power is not significant here due to the absence of other licensees. There are also high barriers to entry that prevent other licensees from coming into the market in the short term.

**(d) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

DiGi, Maxis, U Mobile, YTL agree with the MCMC's preliminary finding on dominance.

DiGi agrees with the MCMC's preliminary findings that Telekom Malaysia is dominant in the IPLC market due to its high level vertical integration and its continuing ability to leverage its dominance in the tail transmission market.

Fiberail is agreeable with the MCMC's preliminary finding on dominance which identified the significant factors such as market structure, extensive network, infrastructure cost and operator's ability to retain its market power and/or influence to offer the most comprehensive transmission service.

Fibrecomm disagrees with the MCMC's preliminary finding on dominance as it is of the view that there is equal opportunity for all licensees.

Maxis opines that it is not that other service providers refused to invest in the international submarine cable system, but the key barrier to entry is because they would still have to rely on Telekom Malaysia for the domestic portion of the international transmission which typically is at higher prices.

P1 is of the view that the determination of a dominant player in any market segment should be by licensee i.e. individual entity and not collectively.

Telekom Malaysia is not agreeable with the MCMC's approach in defining this as separate market. Telekom Malaysia also wishes to highlight that there are viable substitutes available as foreign operators can also provide IPLC services to Malaysian customers via foreign order.

### **12.3 The MCMC's Final Views**

The MCMC has considered respondents' submissions on international transmission and international managed data services.

The MCMC has taken particular care to consider Maxis and Telekom Malaysia's additional comments related to the market for international managed data services. However, the MCMC disagrees with Telekom Malaysia's and Maxis' submissions that the market for international managed data services is part of the market for international transmission services.

The MCMC has considered the potential competitive constraint of countervailing buyer power. Respondents' submissions on this issue were varied, however importantly only Telekom Malaysia was of the view that countervailing buyer power should be considered by the MCMC. In the absence of any evidence that large wholesale customers are able to exert countervailing power in the market for international managed data services, the MCMC continues to take the view that countervailing power does not provide a legitimate competitive constraint in the market at this time.

The MCMC views that Telekom Malaysia is dominant in the market for international managed data services is reinforced by the data provided by Maxis, and by the submissions of DiGi and Fiberail. The MCMC disagrees with Telekom Malaysia's assertion that there are viable substitutes available as foreign operators can also provide IPLC services to Malaysian customers via foreign order. The MCMC notes Maxis' submission that this is prohibitively expensive and commercially difficult for all but the largest industry operators.

The MCMC's final view is that there are separate national wholesale and retail markets for IPLC and that there is a single national market for international managed data services in Malaysia. The MCMC's final view is that Telekom Malaysia is dominant in all of these markets.

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## **13 Transmission to submarine cable landing stations and earth stations**

### **13.1 Overview**

Transmission to submarine cable landing stations and earth stations were addressed in section 10 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

Transmission to a submarine cable landing station or earth station may be provided as a backhaul transmission service.

The MCMC formed the preliminary view that due to the remote location and lack of true substitutes for access to such stations each operator of a cable landing or earth station is dominant in relation to that station.

### **13.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

DiGi states that it is worth noting that Telekom Malaysia does not always provide co-location services despite it being mandated in the Access List.

Maxis also stated similarly as DiGi on not being able to co-locate. The transmission access sold under the point of access (**POA**) to submarine cable landing stations are often priced very high in comparison to other types of transmission, indicating that there is separate characteristics for this bottleneck service. Access seekers unfortunately have no choice but to use this service as they cannot co-locate and the alternative to build its own landing station is not realistic to the access seeker as the cable does not terminate there.

Maxis also views that an urban exchanges access is not substitutable as often the access seeker does have a point of presence (**POP**) nearby the submarine cable landing station and does not need the traffic to be carried back to an urban centre which would incur additional cost to the access seekers.

Telekom Malaysia agrees that there is a separate market for transmission to submarine cable landing stations and earth stations.

#### **(b) Do you have any data to support a calculation of market share?**

Maxis estimates Telekom Malaysia current market share for transmission to submarine cable landing stations is definitely higher than its market share for the tail and/or inter-exchange transmission market (i.e. > 80%) as currently only Sacofa has the other submarine cable landing station and it is only for connectivity from Peninsular to East-Malaysia.

#### **(c) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Maxis, U Mobile and YTL agree with the MCMC's preliminary finding on dominance.

DiGi states that based on Telekom Malaysia's position as the principal provider of the transmission service between East and West Malaysia through the submarine cables, DiGi concurs with MCMC's observation that Telekom Malaysia has extensive reach in its fibre transmission network, and its finding that Telekom Malaysia is dominant in the provision of managed services and WLLC - both predominantly due to the tail transmission. In relation to this, DiGi elaborated further on



domestic connectivity to international service (**DCIS**). Although the price of this service is regulated the price results in higher cost for international bandwidth compared to neighbouring countries. As noted in the PI paper, pricing for transmission access to submarine cable landing stations tends to be much higher when compared to other forms of transmission over similar distances.

Maxis agree with the MCMC views to consider each operator of a transmission facility to a submarine cable landing station as dominant. However, presently only two (2) operators are operating the submarine cable landing station in Malaysia i.e. Telekom Malaysia for both international and Peninsular to East Malaysia connectivity, and Sacofa for Peninsular to East-Malaysia connectivity only. Hence, it clearly indicates Telekom Malaysia is dominant in the markets for transmission to submarine cable landing station.

Telekom Malaysia agrees that operators of a transmission facility to a submarine cable landing station or earth station should be considered dominant.

TIME would like to point out that an operator of a transmission facility to a submarine cable landing station or earth station is dominant only if the operator has a policy of not allowing other operators to install their transmission equipment in the submarine cable landing station or earth station. TIME recommends the alignment of the MCMC's published guidelines with the guidelines or directives issued by other government agencies pertaining to "Sasaran Penting Negara" to ensure that access seekers will have cost effective access to the bandwidth subscribed on the wet segment of the submarine cable systems.

### **13.3 The MCMC's Final Views**

The MCMC has reviewed and taken into account all responses relating to transmission to submarine cable landing stations and earth stations. All respondents, including Telekom Malaysia, agreed that the market for transmission to submarine cable landing stations and earth stations is separate from the general market for transmission services. The MCMC notes Maxis' suggestions that pricing may be another indicator of differentiation of this market and that urban exchange access is not a substitute for these transmission services.

The MCMC has focused on analysing the responses to question 10(c) regarding the preliminary finding on dominance. The MCMC's final view is that each owner of a submarine cable or earth station is dominant in relation to that station. Most respondents, including Telekom Malaysia, agree with this conclusion.

In reaching this conclusion, the MCMC has considered the submissions of respondents who have suggested that the MCMC take into account additional frames of reference.

Maxis submitted that Telekom Malaysia should be found to be dominant in relation to this market for the whole country, as they own and operate all but one of the submarine cable landing stations. DiGi made similar submissions that Telekom Malaysia is the principal provider of transmission service between East and West

Malaysia. The MCMC acknowledges these submissions but believes that the relevant market is the market for individual stations, rather than one national market. Furthermore, to further support the dominance findings, should new entrants establish new submarine cable landing stations, satellite earth stations, then these new entrants will also be considered dominant. This is a key advantage of not naming operators as dominant in these markets.

The MCMC notes TIME's submission that station operators should only be considered dominant if they have a policy of not allowing other operators to co-locate. The MCMC disagrees with this submission. A finding of dominance does not imply that a station operator has engaged in anti-competitive conduct. For this reason, an operator's willingness to allow other access seekers to share their facilities is not relevant to the assessment of dominance.

DiGi and Maxis raised issues about co-location and pricing which are not within the scope of this dominance review. The MCMC notes their concerns and recommends that they be raised in relation to the Access List Review.

The MCMC's final view is that each submarine cable landing station and satellite earth station is a separate market and that the owner of each submarine cable landing station and satellite earth station is dominant in that market.

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## **14 Broadcasting transmission**

### **14.1 Overview**

Broadcasting transmission was addressed in section 11 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

Broadcasting transmission is the end-to-end delivery of content from a broadcaster to an end user.

The MCMC reached the preliminary view that there is a national market for broadcasting transmission to towers for analogue signals and that Telekom Malaysia is dominant in that market. The MCMC also considered that there is a separate national market for digital transmission and that Puncak Semangat Sdn Bhd (**PSSB**) is dominant in that market.

### **14.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

PSSB raised the point that digital terrestrial television (**DTT**) forms an effective monopoly as broadcasters are left with no other option for broadcasting their digital content but that this monopoly is heavily regulated already.

Telekom Malaysia welcomed the award of the DTT contract to PSSB and noted that the DTT service will be a monopoly service, which would affect the market definition and as a general rule a monopoly service such as DTT and satellite TV services (offered by Astro) should be subject to access and dominance regulation.

Telekom Malaysia also noted that the geographical structure and the reach of each broadcasting tower, transmission could be carried out via microwave and all operators are capable of providing this.

(b) **Do you have any data to support a calculation of market share?**

There were no responses received in relation to this question.

(c) **Are there further examples of Telekom Malaysia attempting to use its position as the sole provider of broadcasting transmission services to improve its own position?**

U Mobile noted that while it had no evidence of Telekom Malaysia's conduct this could be because of the fact that Astro is the dominant player in the satellite broadcasting services.

Telekom Malaysia claimed there was no evidence that they had been able to enjoy an improved position by leveraging its dominance (which has yet to be determined) and noted that its position in the market was achieved due to its position as sole telecommunications provider for many years and as a result of its legacy network.

(d) **Should the MCMC define separate markets for VSAT and/or Freesat NJOI satellite services?**

There were mixed views from industry participants on whether VSAT and Freesat services should be defined as separate markets.

U Mobile considered that these services could form a single market and that the MCMC should conduct a dedicated review on whether to differentiate the market for VSAT and/or NJOI satellite services.

Astro considered that the MCMC should not define a separate market for Freesat NJOI as the service should form part of an 'All TV' market.

Maxis noted that satellite services such as VSAT and Digital Satellite News Gathering are already a niche market, in which case the attempt to define a market may not be necessary.

On the other hand, Telekom Malaysia and YTL considered that these could form separate markets, with Telekom Malaysia considering that this would be in keeping with the MCMC's granular approach to market definition.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

The majority of submission agreed with the MCMC's findings of dominance in both the broadcasting transmission to towers market and the digital transmission markets.

U Mobile, DiGi, Maxis and YTL agreed with the MCMC's initial findings on dominance for both markets.

TIME urges the MCMC to further investigate the validity of the claim of the free to air (**FTA**) provider. TIME anticipates that PSSB will have monopsony power when purchasing backhaul transmission to support their digital terrestrial television broadcast (**DTTB**) network in the near future.

PSSB disagreed with the finding of dominance in the market for digital transmission, as not only is access to the DTT's multiplexer capacities mandated, with priority given to FTA broadcasters and the broadcasting rates being closely regulated by the MCMC but the right to provide DTT was conferred in an open tender and such rights may be removed if PSSB abuses its position. Therefore PSSB submits that it is not necessary to find PSSB dominant in the market for digital transmission as the market is already heavily regulated.

Telekom Malaysia also disagreed with the preliminary finding of dominance in relation to PSSB as it was placed in its dominant position due to its appointment as the Common Integrated Infrastructure Provider (**CIIP**).

Telekom Malaysia disagreed with the finding of dominance in the broadcasting transmission to towers markets because such position is not accorded to Telekom Malaysia by choice but due to legacy networks and its existence as the sole telecommunications provider years ago.

### **14.3 The MCMC's Final Views**

The MCMC has carefully considered all the comments and issues raised by respondents and notes that the responses have assisted in clarifying the MCMC's analysis and conclusions.

The MCMC notes that the responses from participants regarding VSAT and Freesat were varied with support both for and against separate markets.

The MCMC notes that there was support for the finding of dominance in both markets and found that the responses that disagreed with the findings of dominance generally did so on the basis that PSSB gained their position due to winning an open tender and being declared as the CIIP. Similarly, MCMC notes that Telekom Malaysia's position in the market was achieved due to its legacy networks and its existence as the sole telecommunications provider for many years. The MCMC acknowledges this point but notes that the manner in which an operator came to be dominant does not change the fact that they are dominant.

The MCMC's final view is that Telekom Malaysia is dominant in the national market for broadcasting transmission to towers and that PSSB is dominant in the national market for digital transmission.

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## **15 Directory services**

### **15.1 Overview**

Directory services were addressed in section 12 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

Directory services provide end-users with information about businesses or individuals, such as telephone numbers or other contact information.

The MCMC's preliminary view was that there is a national market for the provision of directory services across three main product segments (i.e. voice, online and paper directories) and that this market is reasonably competitive without a dominant operator.

### **15.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Several mobile services providers commented that the market definition for directory services should take into account the fact that calls to 103 directory services incur a higher fee if they are made from non-Telekom Malaysia networks i.e. the flat fee of RM 0.30 is what Telekom Malaysia charges its own customers for directory calls, while it charges RM 0.95 to other operators.

U Mobile noted that the RM 0.30 fee for customers calling 103 is for those on Telekom Malaysia's network. Customers calling 103 from U Mobile's network would have to pay a different price due to an interconnection charge which is largely dictated by Telekom Malaysia.

Celcom also noted that directory services are charged at RM 0.95 per directory call by Telekom Malaysia for other operators as opposed to the RM 0.30 that Telekom Malaysia charges to its own customers. Celcom also identified that Telekom Malaysia is the sole provider of voice and paper directories while Maxis provides online directories limited to business listings only.

Celcom also raised the point that the directory services market, in Celcom's opinion has never had any competition issues and that directory services appear to be unpopular as the same information is freely available on the internet.

Maxis considered that attempting to define separate markets for online directory services or premium directory services is difficult as many of these are new and evolving services. Maxis notes barriers to entry in such markets are low and competition is considerable.

Telekom Malaysia specifically supported the finding that there was insufficient evidence to support a separate market for premium directory services. Telekom Malaysia further noted that the directory market was changing as there is declining usage of print directories and also growing competition from both domestic and global online directories and search companies.

Telekom Malaysia also noted that voice directories are offered as an additional service for mobile subscribers and are unlikely to play a significant role in influencing consumer decisions about their service providers.

(b) **Do you have any data to support a calculation of market share?**

Maxis submitted limited data for market share calculation based on publicly available reports on the number of smartphone users in Malaysia and news source reports on Google search from Malaysian smartphones in comparison to the number of unique FINDIT users.

(c) **Do you believe that bundling (e.g. with mobile and fixed telephony services) is likely to have an impact on competition in the online and/or voice directory services markets moving forward?**

There were differing views on whether bundling was likely to have an impact on the competitiveness of the directory services market, with U Mobile noting that bundling could have some impact as it will be a value added service to subscribers at no extra charge, however U Mobile notes that due to the recent Personal Data Protection Act 2010, subscribers will have to provide explicit consent for their data to be included in the directory.

Telekom Malaysia considered that bundling would be unlikely to have a significant impact on the consumer decisions regarding their service providers.

Celcom also considered that bundling would be unlikely to have any impact as directory services is a non-essential communications service and that the average number of calls from Celcom subscribers to Telekom Malaysia's directory service in 2013 was only 2 million.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support for the MCMC's preliminary finding that no licensee is dominant in the market for the provision of directory services, including from DiGi and Celcom, although U Mobile disagreed and claimed that Telekom Malaysia is dominant in this market.

Telekom Malaysia agreed that there is no evidence to support a finding of dominance.

### **15.3 The MCMC's Final Views**

The MCMC has carefully considered all of the comments received from respondents.

With regard to the comments on market definition, the MCMC notes that most respondents appear to support a national market for the provision of directory

services across the three main product segments (i.e. voice, online and paper directories).

The MCMC notes that several mobile providers commented that the market definition for directory services should take into account the fact that calls to the 103 directory service incur a higher fee if made from a non-Telekom Malaysia network. The MCMC wishes to point out that this was explicitly taken into account by the MCMC in the Market Definition Analysis and PI Paper.

The MCMC notes the broad support for its preliminary view that no licensee is dominant in any of the three directory services markets. While the MCMC notes U Mobile's view that Telekom Malaysia is in a dominant position in these markets, in the absence of data and evidence to support that view, the MCMC continues to take the view that each of these markets are reasonably competitive at present and that no operator is dominant in these markets.

The MCMC's final view is that there is a national market for the provision of directory services across three main product segments (i.e. voice, online and paper directories), and that no licensee is dominant in these markets.

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## **16 Broadcasting services**

### **16.1 Overview**

Broadcasting services were addressed in section 13 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

The MCMC has identified separate national markets for free to air (**FTA**) and subscription broadcasting services (including OTT broadcasting such as IPTV).

The MCMC came to the preliminary view that Astro is dominant in the national market for the supply of subscription broadcasting services and that in the FTA national market TV 3, ntv7, 8TV and TV9 are collectively dominant.

### **16.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Telekom Malaysia agreed with the MCMC's definition of separate markets for FTA and subscription broadcasting services.

Maxis wished to clarify that Astro-On-the-Go is an OTT service available across all networks and is not limited to Maxis only. Maxis notes that it has co-marketing arrangements with Astro whereby Maxis Broadband and Measat Broadcasting Networks Services Sdn Bhd jointly offer their retail products as a bundle of broadband and IPTV. Maxis considers that there is a similar arrangement between Astro and TIME.

Astro disagreed with the MCMC's preliminary findings that FTA and pay-TV (including IPTV) should be defined as distinct markets for a number of reasons

including (among others):

- the MCMC's analysis was not based on a robust analysis of all factors relating to market definition and lacked empirical analysis such as consumer surveys;
- the MCMC's approach of considering market definitions from overseas jurisdictions such as Australia as there may be technological or regulatory differences between these jurisdictions and Malaysia;
- the MCMC's failure to consider content piracy as a legitimate substitute to Pay-TV and FTA;
- the MCMC's failure to address evidence provided by Astro that demonstrates actual churn from pay-TV to FTA;
- the MCMC failed to address evidence that FTA exerts a competitive constraint on pay-TV based on overlap and desirability of content; and
- market definition cannot be divorced from the specific factual or empirical context of the enquiry which would take into account the diverse viewing preferences of Malaysia's multicultural society.

(b) **Do you agree with the preliminary findings on market share?**

There was broad industry support for the MCMC's preliminary findings on market share including from U Mobile, YTL and Telekom Malaysia.

However, Astro disagreed with the MCMC's findings on market share on the basis that the market was incorrectly defined and therefore market shares will naturally be erroneous and in any event the MCMC relied on unqualified market share data that may not have been the best data available, the MCMC failed to provide analysis on the appropriate method for assessing market share and failing to incorporate the future impact of IPTV and OTT markets arriving at market share.

(c) **Is there any evidence of a particular FTA provider acting independently of its competitors in the FTA broadcasting services market?**

No comments were received from respondents.

(d) **Do you believe the growth of IPTV services is likely to have a substantive effect on the level of competition in the subscription broadcasting services market in the future?**

There was some support from U Mobile for the view that IPTV could have a substantive effect on the competition in subscription broadcasting services market in the future. There was also similar support from YTL although YTL noted that this effect may depend on the quality of service available.



Telekom Malaysia noted its belief of the potential of IP services to influence competition in the broadcasting market; however, the current situation is that IPTV services do not seem to be adequately substitutable with established broadcasting services yet.

Astro considered that IPTV services are already having an impact on the level of competition in the subscription broadcasting services market and the broadcasting services market generally, as there is some evidence that the Malaysian IPTV market share is growing at a faster rate than the overall Pay-TV market as provided in the Information and Telecoms Media Annual reports.

Astro also noted that IPTV has advantages over DTH i.e. its ability to offer both linear and non-linear services and quadruple play services and that Telekom Malaysia is in a position to exploit the opportunities presented by this platform through its Unifi subscribers who constitute an easily accessible market for Telekom Malaysia's Hypp TV services.

(e) **Are you able to provide further data (e.g. viewership numbers) to support the calculation of market share for the broadcasting services markets?**

YTL provided data for the calculation of market share from an AC Nielsen study (which was not further identified) which is reproduced below.

<b>2013 CHANNEL</b>	<b>Viewership ('000)</b>	<b>%</b>
TV3	672	21.85
TV9	220	7.16
TV2	175	5.69
8TV	156	5.06
ntv7	139	4.54
TV1	134	4.36
TV ALHIJRAH	30	0.00

<b>Top 10 pay-TV channels</b>	<b>Viewership ('000)</b>	<b>%</b>
SUN-TV	100	3.24
RIA	90	2.91
PRIMA	85	2.77

<b>Top 10 pay-TV channels</b>	<b>Viewership ('000)</b>	<b>%</b>
CERIA	70	2.29
WARNA	59	1.91
DISNEY XD	49	1.6
CITRA	45	1.45
OASIS	41	1.35
HUA HEE DAI	39	1.26
VT	35	1.14

Astro also provided data from a Nielsen study (CMV 2013) to support market share calculations which shows that there are other options available to consumers for video-based entertainment. The study data concludes that Astro only has a 41% market share of the viewing hours in Malaysia.

Astro considers that a further 25% of these Astro viewing hours are consumed by watching FTA channels over the Astro platform and that as a result, pay-TV viewership hours could be as low as 30% of the total viewing hours per week, meaning there are a range of competing options with FTA being the most popular option.

(f) **Do you agree or disagree with the MCMC's preliminary findings on dominance?**

U Mobile agreed with the MCMC's preliminary findings on dominance. DiGi also agrees that Astro is dominant due to its price setting independence and also that Media Prima owned terrestrial channels (TV3, 8TV, ntv7 and TV9) are dominant on a collective basis.

Astro disagreed with the MCMC's preliminary findings of dominance for a range of reasons including (among others) by incorrectly defining the market, which means that the finding of dominance is erroneous. Astro also considered that the MCMC's analysis was not comprehensive because the MCMC:

- relied on unqualified data relating to market share;
- failed to incorporate the impact of piracy, OTT and IPTV into its dominance assessment;
- used unsubstantiated allegations made against Astro as a possible indication of dominance;

- incorrectly referenced Astro's churn rate as a sign of pricing independence without noting how high the churn rates were and the fact that they do not materially differ from the churn rates of other providers identified by the MCMC; and
- made comparisons between countries without accounting for differences.

Telekom Malaysia and YTL agreed with the MCMC's findings on dominance in the markets for broadcasting services.

### **16.3 The MCMC's Final Views**

#### **(a) Market definition**

The MCMC has reviewed and carefully considered all submissions on its preliminary views on market definition in relation to broadcasting services. The MCMC wishes to emphasise that it has taken into account all evidence provided during the PI process in reaching its views on market definition.

The MCMC notes Astro's comments regarding the MCMC's reliance on the Australian Competition and Consumer Commission's assessment in the Foxtel-Austar Merger in support of its preliminary view that there are separate markets for FTA and pay-TV in Malaysia. The MCMC agrees that care should be taken when applying decisions made by regulators in other jurisdictions to the Malaysian context.

In reaching its preliminary view on market definition, the MCMC had regard to the approach taken by a number of regulators in other jurisdictions, including Australia, the UK and the EU, in relation to broadcasting markets, as well as the particular circumstances of the market in Malaysia. In particular, the MCMC has had regard to the UK Competition Commission's assessment of the merger between British Sky Broadcasting and ITV in 2007. However, the MCMC notes that, while the UK Competition Commission considered there to be an "all-TV" market in assessing that merger, this approach has not been followed by the EC in more recent cases. For example, in *Case No COMP/M.5932 – News Corp/BskyB*, the EC defined separate FTA and pay-TV markets in the UK and Ireland. The MCMC considers Astro's assertion that considering a merger between a pay-TV and a FTA provider requires greater empirical analysis than a merger between two pay-TV providers to be unfounded.

The MCMC remains of the view that, while FTA may provide some level of constraint to subscription TV operators in Malaysia, this is not sufficient for FTA and subscription TV to be considered part of the same market at this time. While there is some overlap in the content offered by pay-TV and FTA providers in Malaysia, Astro offers a broader range of premium content which is not available on FTA, including premium sports content, which subscribers are unlikely to consider substitutable for FTA. The MCMC disagrees with Astro's position that evidence regarding the popularity of FTA programmes and content in Malaysia

indicates that FTA is a substitute for pay-TV. Unlike pay-TV, viewers of FTA content are not required to pay a subscription fee to get access to a particular type of content or programme. Accordingly, it is to be expected that FTA would have larger audience numbers when compared to pay-TV and, therefore, that surveys which measure the popularity of programmes would be skewed towards FTA.

The MCMC notes the criticisms raised by Astro regarding its reliance on the SSNIP that occurred between 2012 and 2014 in reaching its preliminary view on market definition. In its PI Paper, the MCMC noted that the stable churn rates could be partially explained by corresponding improvements in content offering. However, the MCMC notes that no evidence was provided to support an argument that a corresponding increase in the quality of Astro's content or channels also occurred between 2012 and 2014. In the absence of such evidence, the MCMC considers, the fact that Astro was able to increase its prices by 10% while maintaining a relatively stable subscriber base is compelling evidence that Astro exercises a large degree of independence in setting prices and supports the MCMC's view that FTA and pay-TV are not demand-side substitutes.

The MCMC notes Astro's comments regarding content piracy. The MCMC acknowledges that content piracy has been an ongoing concern in many jurisdictions. However, the MCMC disagrees with Astro's views that content piracy provides an effective and pervasive substitute to pay-TV as well as FTA in Malaysia. Pirated content supplied by websites such as the Piratebay is supplied to users free of charge. By contrast, pay-TV subscribers are charged a subscription fee. The MCMC considers that users who typically download illegal content from the internet are less likely to pay a subscription fee for pay-TV, regardless of the price point. If it were the case that pay-TV subscribers generally considered the ability to download content illegally from file sharing websites or other websites that host pirated content to be a close substitute for pay-TV, the MCMC would expect to see evidence of either Astro's subscriber base declining over time or a steady decline in its pricing. The fact that Astro was able to increase the price of its basic package plus sport by 10% between 2012 and 2014 while maintaining a relatively stable subscriber base, suggests that subscribers do not generally consider pirated content to be substitutable for pay-TV.

Further, the MCMC notes that there is no evidence that content piracy is more pervasive in Malaysia compared to other jurisdictions. In this regard, the MCMC notes that it has undertaken extraordinary measures to combat content piracy, including directing Malaysian ISPs in May of 2011 to block access to certain websites hosting pirated content (including the Piratebay).

The MCMC also notes Astro's comments regarding the potential for the new digital broadcasting platform, which is currently being developed in Malaysia will have an impact on the substitutability of FTA and pay-TV. The MCMC will continue to monitor the impact of the platform on market definition.

The MCMC notes that most licensees support having separate FTA and subscription television broadcasting markets.

Accordingly, the MCMC remains of the view that there are separate markets for FTA and subscription television services in Malaysia.

(b) **Assessment of dominance**

The MCMC has carefully considered all of the comments and criticisms raised by respondents in relation to its assessment of dominance in the FTA and subscription television broadcasting markets.

The MCMC notes Astro's disagreement with the preliminary findings on dominance. Astro provided evidence showing actual and projected growth figures of IPTV subscribers in the Asia Pacific Region and Malaysia. While the MCMC accepts that the growth rate in the number of IPTV subscribers has been higher than for pay-TV during the period 2011 to 2013, according to the data provided by Astro, subscriber numbers for pay-TV also experienced growth over the same period and the market share of IPTV remains relatively low in Malaysia. Accordingly, the MCMC believes that IPTV is not exerting a significant competitive constraint on Astro at this time, a view which is supported by the other respondents.

Further, as explained in the PI Paper and noted above, between 2011 and 2013 Astro increased the price of its basic package plus sport by approximately 10%. During this same period, Astro's subscriber base remained relatively stable, based on the fact that Astro's churn rate did not increase over this period. The MCMC disagrees with Astro's comments that a churn rate cannot be used as evidence of a stable subscriber base. Further, the MCMC notes that no evidence has been provided that suggest that Astro's stable subscriber base over this period occurred as a result of other factors, including as a result of improvements in quality.

The MCMC notes that there was general support amongst the other respondents for its preliminary dominance findings.

The MCMC remains of the view that Astro is currently in a dominant position in the subscription TV market. However, the MCMC acknowledges that, with the continued roll-out of broadband in Malaysia and the growth in IPTV, this may change in the future. The MCMC will continue to monitor developments in this market and will revisit its findings on dominance if required.

The MCMC's final view is that Astro is dominant in the subscription television services market and that TV 3, ntv7, 8TV and TV9 are collectively dominant in the FTA market.

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## **17 Content acquisition**

### **17.1 Overview**

Content acquisition was addressed in section 14 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. The MCMC formed the preliminary view that separate markets exist for premium and ordinary content and that Astro is likely to be dominant in the market for the acquisition of premium content. The MCMC came to the preliminary view that the market for the acquisition of ordinary content is relatively competitive and no one provider is dominant at the present time.

### **17.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Astro considers the MCMC's market definition is flawed for a number of reasons, including a lack of clarity as to what constitutes premium content which renders it incapable of forming the basis for a finding of dominance, the national nature of the market, and a lack of evidence to support the separate markets for premium and ordinary content in the Malaysian context.

Telekom Malaysia agrees with the MCMC's finding that there are separate markets for premium and ordinary content and notes that premium content is likely to be sought on exclusive terms and on the basis of long-term arrangements that could potentially give rise to anti-competitive behaviour. Telekom Malaysia also agrees with the MCMC's analysis of the major issues surrounding exclusive content agreements and the purchasing power enjoyed by Astro as the major pay-TV provider in the Malaysian market.

DiGi agrees that there are separate national markets for premium and ordinary content.

#### **(b) Do you agree with the preliminary finding on market share?**

Several mobile service providers agree with the MCMC's preliminary findings on market share including U Mobile and YTL.

Telekom Malaysia also agrees with the MCMC's findings on Astro's market share, noting that this, together with Astro's profitability and the high penetration rate of Astro's pay-TV service is a good indication of dominance.

Astro claims that there was no preliminary finding on market share for the content acquisition market in the PI Paper.

(c) **How do you think the transition to digital broadcasting is likely to impact competition in the content acquisition market?**

U Mobile considers that the change to digital broadcasting will enable greater competition across the industry in terms of quality and pricing. YTL considers that the transition to digital broadcasting will greatly reduce barriers to entry and give rise to the potential for subscription TV, IPTV and FTA players to compete with each other and spur the need for better quality programs and broadcasts but may also lead to the cost of content acquisition increasing for players. Digitisation may also make it easier for consumers to switch service providers. U Mobile submits that the transition to digital will lead to greater competition in terms of quality and pricing.

Astro considers that digitisation will lead to increased competition as this has been the case in countries that have made a similar transition to digital, such as the UK and Australia. Astro considers that as there is additional bandwidth created by DTT, FTA operators will have increased capacity to compete with pay-TV providers. Astro also notes the DTTB platform provides the opportunity to have pay infrastructure embedded in it which will generate revenue and allow operators to compete even more aggressively as DTT is expected to achieve a full rollout by the end of 2015.

Telekom Malaysia considers that digital broadcasting will have a profound effect on content distribution both in Malaysia and globally due to the ability to provide high-definition content and also the increase in the number of channels digital technology provides. The operator notes that digital content distribution was a major factor in BskyB's acquisition of KirchPayTV in Germany. Telekom Malaysia urged the MCMC to carefully monitor developments in the area of digital broadcasting and digital applications as although these areas are generating benefits for consumers, there is potential for digital broadcasters to gain unfair advantages.

(d) **Do you agree with the MCMC's preliminary view that the market for the acquisition of ordinary content is relatively competitive at the moment?**

A range of fixed and mobile operators agree with the MCMC's preliminary findings that the market for the acquisition of ordinary content is relatively competitive at the moment including Telekom Malaysia and YTL.

U Mobile considered that the market for ordinary content is quite competitive as licensees compete with each other.

Astro considers that there is no evidence to define a separate market for ordinary content as opposed to premium content and so competition needs to be addressed on a case by case basis.

(e) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There is broad support from operators for the MCMC's preliminary findings on dominance in premium market including from U Mobile, YTL and Telekom Malaysia.

Astro disagrees with the preliminary finding of dominance in this market due to incorrect market definition and the failure of the MCMC to take into account Telekom Malaysia's significant financial resources and ability to bundle pay-TV products with broadband and voice services. Astro also considers that the vague definition of premium content determined by the MCMC fails to acknowledge the specific manner in which rights are sold i.e. certain rights are not available to FTA operators because of this.

Astro notes that the finding of dominance is unfair as it appears to be premised on Astro's revenues and does not take into account the significant risk and investment that Astro has had to make in order to achieve such results.

Astro also considers that international precedents on content exclusivity remedies have not delivered economic value and were specific to the particularities of the markets in which they were offered. Astro considered that proper infrastructure would stimulate competition more effectively, as opposed to content regulation.

DiGi urged that there be a further anti-siphoning consultation for premium sports content and notes that in Singapore, there is a regulatory system for premium content in place that saw SingTel's premium content such as the exclusive rights to the World Cup 2014 being made available on SingTel's rival, StarHub, platform.

DiGi also considers that the Ministerial Determination on Sports Events of National Significance issued in 2012 requires strengthening in light of recent difficulties with the Thomas Cup broadcast where FTA broadcasters were allowed to access this content due to the 'corporate benevolence' of other parties only.

### **17.3 The MCMC's Final Views**

The MCMC has considered the comments raised by respondents in relation to its findings on market definition and dominance.

The views of respondents on the MCMC's market definition were mixed, with Astro considering the market definition to be flawed, while others agreed with the MCMC's findings. The MCMC disagrees with Astro's comments regarding the validity of its market definition. The MCMC believes that it is unnecessary to define what constitutes premium content at the level of granularity that Astro suggests is required to make a finding of dominance. As explained in the PI Paper, the MCMC notes that there is a selection of content that has a high public interest component. This content is likely to support a finding of a premium content market where "premium" correlates with content in which there is a high public interest. Unlike the EU, there are no ex-ante or other remedies attaching to the relevant determination of dominance process and hence the MCMC does not



believe it is necessary to define this definition with precision and does not consider the EU as being relevant.

The MCMC notes the evidence that was provided by Astro to show that 'premium' content, such as live sport and blockbuster movies, do not attract a greater number of viewers than other forms of content (e.g. drama/series) in Malaysia. While the MCMC notes that the data provided is based on TV Ratings, the period of time over which those ratings were calculated and a breakdown of the number of programmes that were measured in obtaining those ratings was not provided. The MCMC considers that the number of viewers viewing a genre of program may not necessarily provide an accurate depiction of a person's viewing preferences. For example, a drama series may be broadcast daily, while a popular sports event (e.g. a big English Premier League, **EPL** match) may be a once-off event that last only a few hours. Further, there are likely to be a greater number of television series being aired on television overall than popular sporting events. Accordingly, it is to be expected that television series would attract a greater number of viewers than a popular sporting event even though the shorter event could drive subscriptions.

Telekom Malaysia and DiGi were supportive of the MCMC's market definition, and in particular Telekom Malaysia noted that premium content is more likely to be sought on exclusive terms and on the basis of long-term arrangements.

The MCMC notes that the rights to certain content may be sold on a regional rather than a national basis. The MCMC will consider whether the market definition for premium content requires amendment when it investigates specific conduct for the purposes of sections 133 or 139 of the CMA.

There was broad support from operators for the MCMC's preliminary finding that Astro is dominant in the market for premium content. While Astro disagrees with this finding, the MCMC considers that this disagreement largely arises as a result of a disagreement between Astro and the MCMC as to the appropriate market definition. Astro also noted its view that the finding of dominance is unfair and appears to be premised on its revenue figures. The MCMC's findings on market definition and dominance are based on information obtained from interviews with licensees, questionnaire responses and submissions from key industry participants and extensive research on the content acquisition market. The MCMC also wishes to point out that a finding of dominance does not lead to additional regulation per se, rather, it gives the MCMC the ability to take action against a dominant player once the MCMC has investigated complaints of anti-competitive behaviour in relation to that operator. Finally, the MCMC notes that the means by which a licensee has obtained a dominant position will not generally preclude a finding of dominance.

The MCMC notes DiGi's comments regarding the Ministerial Determination on Sports Events of National Significance issued in 2012, but notes that this is outside of the scope of the current PI.

The MCMC's final view is that separate markets exist for premium and ordinary content and that Astro is dominant in the market for the acquisition of premium content.

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## **18 Termination (fixed and mobile) calls and messages**

### **18.1 Overview**

Termination for fixed and mobile calls and messages was addressed in section 15 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets.

The MCMC made the preliminary findings that there is a separate wholesale market for fixed and mobile termination with each operator being dominant in the market for call termination on its own network and a separate market for SMS termination services, with each provider being dominant in the market for SMS termination on its own network.

### **18.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

While there was broad support for the MCMC's market definition, several submissions urged the MCMC to extend their market definitions to include additional products and services or exclude others.

Maxis, while it supported the MCMC's proposal to define separate wholesale voice call and termination markets for each network, also urged the MCMC to follow the EU example of specifically excluding video calls from the call termination market definition. Maxis also considered that the markets for SMS termination should not be limited to mobile operators but should be extended to include fixed networks with SMS functionality.

Telekom Malaysia agreed with the MCMC's view that there are separate wholesale termination markets for fixed and mobile networks and a separate market for SMS/multimedia messaging service (**MMS**) terminating services including OTT messaging.

Telekom Malaysia considers wholesale SMS and MMS termination markets should be covered by access obligation as the wholesale rates for these services could be considered grossly excessive and that reductions in these charges could have positive flow on effects for retail consumers. Telekom Malaysia cited support for this argument from the ACCC in Australia who came to the conclusion that MNOs have the incentive and ability to exploit their market power over termination services.

Telekom Malaysia also urged the MCMC to consider a separate market for the termination of international roaming calls, as the costs of such roaming services are out of proportion to their underlying wholesale termination costs and that there is support for regulation in such a market from the EC.

(b) **Are existing regulatory instruments able to constrain the ability of interconnection service providers from abusing their position of dominance in the markets for call and SMS termination?**

The majority of responses, including those from YTL, Maxis and Celcom agreed that the existing regulations including the Access List and Mandatory Standard on Access and existing licence conditions are able to adequately constrain the ability of interconnection service providers from abusing their position of dominance in the markets for call and SMS termination

U Mobile disagreed and claimed that the existing regulations were not enough to constraint dominant licensees from abusing their position and claimed that ex-ante regulation is necessary to ensure all network operators provide terminating access for calls and SMS.

Telekom Malaysia also considered that the existing regulation was insufficient and called for ex-ante regulation of termination markets.

(c) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support for the MCMC's preliminary finding of dominance in the markets for call and SMS termination, where each operator (or mobile operators only in the case of SMS termination) is dominant for termination on its own network. U Mobile agreed with this finding, as did Telekom Malaysia, YTL, Celcom and DiGi.

### **18.3 The MCMC's Final Views**

The MCMC has considered the comments raised by respondents, in particular the comments to explicitly exclude video calls and include fixed networks with SMS functionality. The MCMC does not consider it necessary to explicitly include fixed networks with SMS functionality or to explicitly exclude video calls. SMS is not sufficiently prevalent on fixed networks to constitute a significant issue for market definition. Similarly the MCMC does not consider the termination of video calls to be of such significance to affect market definition.

The MCMC also notes the comments made by Telekom Malaysia in relation to the termination of international roaming calls but does not consider wholesale termination of roaming services to be within the ambit of this market as it is not substitutable for domestic termination.

The MCMC has taken note of the calls for ex-ante regulation in the termination access markets for calls and SMS.

The MCMC continues to be of the view that there is a separate wholesale market for fixed and mobile termination with each operator being dominant in the market for call termination on its own network. The MCMC also considers that there is a

separate market for SMS termination services, with each provider being dominant in the market for SMS termination on its own network.

The MCMC's final view is that there is a separate national wholesale market for fixed and mobile termination with each operator being dominant in the market for call termination on its own network and that there is a separate market for SMS termination services, with each provider being dominant in the market for SMS termination on its own network.

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## **19 Origination (fixed and mobile) calls**

### **19.1 Overview**

Origination for fixed and mobile calls was addressed in section 16 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. The MCMC formed the preliminary view that there are separate national wholesale markets for fixed and mobile call origination and that each fixed and mobile operator with a network is dominant in the market for call origination from its own network.

### **19.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

There were mixed views from operators concerning market definition. Telekom Malaysia considered that it was unnecessary to define a market for call origination, while U Mobile fully supported the MCMC's market definition.

YTL commented that the market definition concerning national and local calls should take into account IP platforms where a provider is using or is planning to use LTE networks.

Maxis agreed that there should be separate national wholesale markets for call origination on each fixed and mobile network. Maxis noted that although the EU position related to origination from fixed networks only, this may be because EU mobile operators charge full retail rates to connect to special service numbers e.g. 1800 numbers, while this situation is not the same in Malaysia where retail calls from mobiles to special numbers such as 1800 are free.

#### **(b) Do you have any data to support a calculation of market share?**

No operators provided data for the calculation of market share for fixed and mobile call origination, although Maxis noted that market share does not need to be considered if each operator is viewed as having a monopoly on call origination on their own network.

(c) **Are existing regulatory instruments able to constrain the ability of interconnection service providers from abusing their position of dominance in the market for call origination?**

Most respondents including Celcom and Maxis, agreed that the existing regulatory instruments including the Access List are able to constrain the ability of interconnection service providers to abuse their positions of dominance in the markets for call origination. YTL agreed with this and noted that interconnection is a condition of Individual NSP licences.

U Mobile disagreed and stated that the current regulatory instruments were not effective enough to constrain the abuse of dominance but did not elaborate further.

Telekom Malaysia noted that the impact of all regulation including access regulation should be considered in greater detail by the MCMC.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support for the MCMC's preliminary findings on dominance for call origination markets, including from U Mobile, Celcom and DiGi, although Telekom Malaysia disagreed with the finding of dominance on the principle that there should not be a separate market for origination.

### **19.3 MCMC's Final Views**

The MCMC notes Telekom Malaysia's comments that it is not necessary to define this market. However, Telekom Malaysia was the only respondent who expressed such a view, and the MCMC has considered that in light of the support for the MCMC's findings on dominance in this market, defining this market is necessary to promote and safeguard competition.

The MCMC also acknowledges and has given careful consideration to the comment in relation to IP networks and redefining effective national and local calls.

The MCMC noted only one response out of several considered that current access regulation has not been effective in constraining the ability of interconnection service providers from abusing their position of dominance. The MCMC has also considered the comments made by Altel, Celcom and YTL who all considered that the current access regulations were adequate.

The MCMC has considered Telekom Malaysia's disagreement with the MCMC's findings on dominance on the basis that the market should not have been defined to begin with but considers that this comment precedes from a flawed position in relation to market definition. In particular, the market for originating calls to services such as 1800 and 1300 services constitutes a wholesale market which needs to be recognised and is not subsumed into any other market.

The MCMC's final view is that there are separate national wholesale markets for fixed and mobile call origination and that each operator with a network is dominant in the market for call origination on its own network.

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## **20 Inter-connect links**

### **20.1 Overview**

Inter-connect links were addressed in section 17 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Inter-connect links are the physical connection between different networks and the MCMC has determined that there are separate markets defined on a link by link basis at the wholesale level. Accordingly, the MCMC has formed the preliminary view that each operator with a network is dominant in the inter-connect link market for each point of presence along that operator's network.

### **20.2 Summary of submissions received**

(a) **Do you have any further comments on market definition?**

Operators provided a range of comments on the MCMC's market definition.

YTL cautioned that the market definition should be technologically neutral in order to capture the use of IP networks for inter-connection links and noted that this approach will enable operators to do away with the Full Span/In Span transmission cost and that IP networks will do away with the need to have regional POI which is a result of dominant operators leveraging their market power to demand the establishment of regional POI.

Telekom Malaysia noted that mid-span/in-span links are the preferred form of interconnection by all market participants and estimated that less than 10% of all services are not in-span.

Maxis broadly agreed with the MCMC's market definition. The operator considered that the market trend of operators using a single point of inter-connect means that there is a lack of redundancy in their network and that the MCMC should regulate to ensure multiple points of interconnection are required.

(b) **Do you agree with the MCMC's decision to update the geographic dimension of the market for inter-link services?**

There was support for the MCMC's decision to update the geographic dimension of the market from Fiberail and U Mobile who noted that this update on the geographic dimension would allow for the boundaries of a particular point of presence to be aligned with the location of point of interconnection.

However, Celcom noted it was not aware of any commercial arrangement for particular points of presence on a link by link basis and considered that any such arrangement could possibly constitute discriminatory conduct as being inconsistent with the standard access obligations in section 149 of the CMA.

(c) **Has access regulation been effective in mitigating anti-competitive outcomes in the market?**

Overall, the submissions from the respondents confirmed that access regulation has been effective in mitigating anti-competitive outcomes in this market. Fiberail considers current access regulation as effective.

Celcom also agreed that access regulation has been effective, noting that it had not experienced any issues in this market.

Telekom Malaysia also considers that access regulation is quite effective although it urges the MCMC as a matter of policy to consider in greater detail the competitive impact of all regulation.

U Mobile considered that access regulation has been quite effective, particularly the MSA's specification of the preferred method of connectivity for inter-connect link service (**ILS**) as in-spans.

YTL cautioned that access regulation will need to be updated to include IP networks as the current focus of the relevant regulatory instruments is access to legacy networks such as the PSTN.

Maxis cautioned that the MCMC will have to scrutinise access regulation in the market in more depth, in light of recent suggestions by incumbent operators that all in-span should be midway.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad agreement with the MCMC's finding of dominance including from U Mobile, Celcom, YTL and DiGi.

Fiberail disagreed with the preliminary finding on dominance on the basis that it considered that an operator with a network could not be dominant in the inter-connect link market for each point of presence along the operator's network.

Two operators disagreed with the findings of dominance, one for unspecified reasons, the other, Telekom Malaysia, disagreed on the principle that there should not be a separate market for inter-connect links and therefore no finding of dominance should be made.

### **20.3 The MCMC's Final Views**

The MCMC notes YTL's comments that the market definition should be technologically neutral to encompass IP networks.

The MCMC has also taken into account the comment made by Telekom Malaysia that in-span links are the preferred form of interconnection.

The MCMC acknowledges the agreement of YTL, Fiberail and U Mobile with the MCMC's preliminary decision to update the geographic dimension of the market

and has taken into account Celcom's consideration that it was not aware of any commercial arrangement for particular points of presence on a link by link basis.

The MCMC notes there was broad support from Fiberail, Telekom Malaysia, Celcom and U Mobile concerning the success and effectiveness of access regulation for this market. The MCMC has noted the concern from YTL that access regulation will need to be updated to include IP networks and will consider this comment for further access regulation inquiries or investigations. The MCMC notes Maxis' comments that there have been recent suggestions that all in-span interconnection should be midway and therefore requests operators to bring any information forward relating to this or similar incidents.

The MCMC has noted the widespread support for its preliminary findings on dominance with only Telekom Malaysia and Fiberail disagreeing on the basis that it considered it unnecessary to define this market.

The MCMC's final view is that there are separate markets defined on a link by link basis at the wholesale level for inter-connect links. The MCMC considers that each operator with a network is dominant in the inter-connect link market for each point of presence along that operator's network.

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## **21 Wholesale internet interconnection**

### **21.1 Overview**

Wholesale internet interconnection was addressed in section 18 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. The MCMC formed the preliminary view that the MyIX provides a central space for domestic interconnection between all major Internet Services Providers and Content Providers and therefore has a moderating effect on the market which consequently does not have a dominant operator.

### **21.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Telekom Malaysia considers that there should not be a separate market for wholesale internet interconnection as this service is usually provided as part of wholesale broadband and data plans and not as a separate product. Therefore Telekom Malaysia considers that wholesale internet access should be included in the wholesale broadband and data market.

Maxis noted that this market definition, while it can be used, may be of limited utility. Maxis considers that, increasingly, peering is not between licensed ISPs as traffic at the MyIX is increasingly concerned with content. Accordingly content providers such as Facebook and Twitter are becoming important peering partners. Maxis provided a confidential forecast to support its conclusion that foreign traffic makes up a greater proportion of MyIX traffic.



Further, Maxis notes that wholesale internet interconnection is different to a traditional communications market where the bulk of the traffic is between Malaysian licensed operators. As a large proportion of the internet traffic comes from outside Malaysia's boundaries, Maxis considers that this will impact the MCMC's ability to regulate the market because key overseas ISPs are not subject to the MCMC's jurisdiction.

(b) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was general support amongst respondents for the MCMC's preliminary finding that the market for wholesale internet interconnection does not have a dominant operator, including from operators such as U Mobile, Telekom Malaysia, YTL, Maxis and DiGi.

### **21.3 The MCMC's Final Views**

The MCMC has considered the comments and issues raised by respondents and notes Telekom Malaysia's comments that there should not be a separate market for wholesale internet interconnection.

The MCMC continues to take the view that a separate market for wholesale internet interconnection exists in Malaysia. As explained in the PI Paper, wholesale internet interconnection services are fundamentally different services to wholesale broadband and data services. Wholesale internet interconnection services are the interconnection services required by network operators to provide end-to-end transit for full connectivity to the internet, whereas wholesale broadband and data services are the transmission services themselves.

In any event, the MCMC notes the general support from all respondents for its findings that the market for wholesale internet interconnection does not have a dominant operator.

The MCMC's final view is that there is a separate market for wholesale internet interconnection and that no operator is dominant in this market.

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## **22 Access to lead-in ducts and manholes**

### **22.1 Overview**

Access to lead-in ducts and manholes was addressed in section 19 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Lead-in ducts provide access to a particular network or end user location while manholes allow a person to enter underground utility vaults used to access points for making cross connections or performing maintenance on communication cables. The MCMC formed the preliminary view that there is a national market for lead-in duct and manholes that does not include aerial or sewer access as these are not viable or desirable substitutes. The MCMC formed the preliminary view that Telekom Malaysia is dominant in this market.

## **22.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

Several mobile operators agree with the MCMC's market definition, particularly the decision to exclude aerial and sewer access from the market definition including YTL and Maxis.

DiGi urged the MCMC to explicitly include lead-in-ducts owned by state backed companies (**SBCs**) in the market definition as tower owners are imposing prohibitive prices that are non-transparent.

### **(b) Do you have any data to support a calculation of market share?**

Maxis extrapolated market data, noting that as Telekom Malaysia has approximately 80% of the transmission tails market in terms of revenue, this market share can be used as a proxy for market share in the market for lead-in ducts and manholes, as these products are used in conjunction.

### **(c) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was widespread support among fixed network and mobile operators for the MCMC's preliminary finding that Telekom Malaysia is dominant in the national market for lead in ducts and manholes.

Fiberail agreed with this assessment of dominance, as did U Mobile, YTL, Celcom, DiGi, Maxis and even Telekom Malaysia agreed it was dominant in this market.

TIME agrees with the MCMC's finding that Telekom Malaysia is dominant in relation to the access market associated with each network location across Telekom Malaysia's national network. TIME is of the view that access to lead-in ducts and manholes in high rise residential and business premises is crucial in ensuring a competitive high speed broadband offering in those markets. The access should also include fair access to telecommunications rooms, as stipulated in JTM's REG-T007.

DiGi urged the MCMC to include access to lead-in ducts and manholes on the Access List to ensure that the prices for access are regulated.

## **22.3 The MCMC's Final Views**

The MCMC has carefully considered the comments made by all respondents in relation to lead-in ducts and manholes.

The MCMC notes both YTL and Maxis support the MCMC's views on market definition and the decision to exclude aerial and sewer access products. The MCMC notes DiGi's suggestion to explicitly include SBC owned lead-in ducts in the market definition. The MCMC considers this to be unnecessary as the market definition is

ownership neutral, i.e. it encompass all lead-in-ducts and their substitutes regardless of which operators own those ducts.

The MCMC notes that Telekom Malaysia has agreed with the preliminary finding that it is dominant in this market. A number of other respondents also supported this finding.

Accordingly, the MCMC continues to hold the view that Telekom Malaysia is dominant in the national market for access for lead-in ducts which excludes aerial or sewer access products. DiGi's request to have access to lead-in ducts and manholes added to the Access List has been noted by the MCMC for future reference.

The MCMC's final view is that there is a national market for lead-in duct and manholes that does not include aerial or sewer access and that Telekom Malaysia is dominant in this market.

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## **23 Access to inter-exchange and mainline ducts**

### **23.1 Overview**

Access to inter-exchange and mainline ducts was addressed in section 20 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Inter-exchange and mainline ducts are ducts used to connect larger exchanges and the main ducts which run down streets and past homes (but not into homes). The MCMC has come to the view that there is a national market for inter-exchange and mainline ducts which may include aerial or sewer access systems where available. The MCMC has determined on a preliminary basis that this market is relatively competitive as there are alternate forms of ducting available (e.g. aerial access via power poles, etc.) which form a viable competitive alternative to the use of Telekom Malaysia's inter-exchange and mainline ducts, and that no operator is dominant in this market.

### **23.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

YTL disagreed with the inclusion of aerial and sewer ducts in the market definition as these are not always readily available forms of access in Malaysia, unlike the Singaporean and Australian examples used by the MCMC which have more extensive sewer networks than Malaysia. Also YTL considered that the MCMC should have examined the regulatory framework governing sewer and aerial access in those countries before including it in this market definition.

Maxis considered that the MCMC should reconsider its decision to include aerial and sewer alternatives in the market definition and also raised the point that where available, aerial access via electricity poles may be dangerous and heavily regulated under utilities laws due to the high voltage capacity of the cable, and highly skilled electricity workers are needed to lay equipment and restore faults.

Similarly, sewer access also requires the use of highly specialised equipment such as robots which can increase the cost. Sewer access is also unlikely to be a viable option in rural areas.

Maxis also notes that there are insufficient gas distribution networks to act as a form of alternate ducting, as Gas Malaysia Sdn Bhd has only 2000km of gas pipelines, significantly less than Telekom Malaysia's equivalent.

DiGi agrees there is a national market for wholesale supply of inter-exchange and mainline ducts but considers that in reality there is almost no wholesale access to aerial and sewer ducts as the owners of such infrastructure commonly refuse requests by Access Seekers which can be treated in a purely commercial manner i.e. there is no mandatory access scheme, and as a result some Access Seekers have been forced to build their own infrastructure, leading to unnecessary infrastructure duplication.

**(b) Do you have any data to support a calculation of market share?**

No respondents provided any such data.

**(c) Should the MCMC follow the Singapore approach and find that the market for inter-exchange and mainline ducts is relatively competitive due to the availability of alternative forms of ducting (e.g. power, road, etc.)?**

There were mixed views as to whether the MCMC should follow the Singaporean approach and find that the market is competitive due to the availability of alternate forms of ducting, with the majority of operators ultimately concluding that the Singaporean approach should not be followed in Malaysia.

Fiberail considered that the Singaporean approach may not be suitable for the Malaysian market due to the more limited forms of ducting.

Celcom, DiGi, Maxis and YTL did not support the Singaporean approach due to the more limited forms of alternate ducting available in Malaysia which is more geographically extended than the 'city-state' of Singapore which has extensive sewer networks. Telekom Malaysia noted that the Singaporean approach may be considered so long as the geographical differences between Malaysia and Singapore are taken into account.

YTL also rejected the Singaporean approach, firstly because a feasibility study should be conducted as to the availability of alternate forms of ducting in Malaysia and secondly that best regulatory framework has to be in place to ensure access.

Celcom disagreed with using the Singaporean approach, basing its comments on feasibility study conducted under the Malaysian Access Forum Berhad in 2012. Celcom noted that there are limited forms of ducting in Malaysia and there is no mandatory access obligation on public utility providers to allow access to these facilities and there is also no clear mechanism to calculate compensation to any

owner or occupier for any incurred losses. Celcom recommends that the following measures if sewer and aerial facilities are to be utilised as an alternate means of access:

- that applicable laws and by-laws governing sewer and aerial access be standardised and a uniform legislative framework be put in place to ensure a common set of rules and access principles;
- that the technical requirements of such access be developed and common guidelines and planning requirements be circulated to all parties;
- The MCMC to encourage other industries to recognise in practise, the legislative position in the CMA that telecommunications are a public utility and require access to certain forms of infrastructure.

Only U Mobile submitted that the Singaporean approach is feasible in Malaysia on the basis that the markets were similar in nature and relatively competitive in terms of substitution.

(d) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

Several operators disagreed with the MCMC's preliminary findings on dominance and submitted that Telekom Malaysia should be found dominant due to the size of its duct network, including YTL.

DiGi notes that Telekom Malaysia is dominant and has no intention of opening up its duct network to competition as its attempts to negotiate an industry framework for poles, ducts and manholes initiated by the MCMC Broadband For All- Entry Point Project has only resulted in Telekom Malaysia agreeing to provide access to lead in ducts only in greenfield areas.

Maxis urges the MCMC to consider declaring Fibrecomm and Fiberrail jointly dominant with Telekom Malaysia due to Telekom Malaysia's stake in those companies and that the MCMC found these three companies jointly dominant in the market for Transmission (inter-exchange).

Celcom considered that SBCs may also be potentially dominant in this market in addition to Telekom Malaysia.

Telekom Malaysia and U Mobile agreed with the MCMC's findings that there is insufficient evidence to support a finding of dominance in this market.

### **23.3 The MCMC's Final Views**

The MCMC has taken into consideration the variety of views and issues raised by respondents in relation to access to inter-exchange and mainline ducts.

The MCMC notes the comments made by Maxis and DiGi that aerial and sewer ducts are not always readily available in Malaysia. However, the MCMC notes that

aerial and sewer ducts may become available and may place a future constraint on access to inter-exchange and mainline ducts provided by Telekom Malaysia. Accordingly, the MCMC considers that these facilities of other utilities are in the same market as inter-exchange ducts and mainline ducts currently used for communications purposes. The MCMC also notes that these companies have significant financial resources and can invest in inter-exchange and mainline ducts, if they wish.

The MCMC has also considered the comments that in rural areas, electricity poles and sewer networks are underdeveloped. While this may be the case, the MCMC considers that the market is a national one and the conditions outside urban areas are not so distinct from urban areas so as to constitute a separate geographic market. Accordingly, the MCMC will make its dominance assessment on a national basis.

The MCMC has also given serious consideration to the point raised in relation to the danger of electricity pole access due to high voltage currents and the need for specialised equipment and personnel to utilise aerial and sewer access as an alternative to mainline or inter-exchange access. The MCMC accepts that protocols will need to be developed around the sharing of this utility infrastructure, but notes that such protocols have been developed in other jurisdictions to ensure the safety and robustness of this form of sharing. As mentioned above, the MCMC notes that alternatively, licensees have significant financial resources to invest in their own ducting infrastructure.

In relation to whether the Singaporean approach should be followed in Malaysia, i.e. that the market for access to inter-exchange and mainline ducts should be found to be competitive due to alternate forms of ducting, the MCMC noted that the majority of operators did not consider that this approach should be utilised. Maxis and DiGi stressed that Malaysia has more limited alternatives to these ducts than Singapore with one operator noting that Singapore is a 'city-state' and thus there is a different geographic dimension to the market and a higher degree of availability for alternative forms of ducting and Celcom considering that a feasibility study must take place before such an approach can be taken to ensure proper access regimes for these utilities (where they exist).

Even though Singapore may be distinguishable, the MCMC remains of the view that no licensees are dominant in the market for inter-exchange and mainline ducts. The MCMC notes that sharing with other utilities remains an option and that any barriers to entry can be overcome by the financial resources of other licensees to invest in this important infrastructure.

The MCMC has considered Maxis' comments that Telekom Malaysia and the entities it controls, Fibrecomm and Fiberail should be declared dominant on the basis that Maxis considers there are few alternatives to inter-exchange and mainline ducts and that aerial and sewer access should be excluded. The MCMC notes this comment but reiterates that it cannot automatically assume that subsidiaries should be aggregated with their major shareholders and Maxis has not

provided any evidence to justify the extension of a dominance finding to Fiberail and Fibrecomm. In any case, the MCMC does not consider Telekom Malaysia to be dominant in this market for the reasons expressed above.

The MCMC has formed the final view that there is a national market for access to inter-exchange ducts and mainline ducts, which includes aerial or sewer access and that no operators are dominant in this market.

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## **24 Access to towers**

### **24.1 Overview**

Access to towers was addressed in section 21 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Tower access is principally required for the rollout of wireless technologies e.g. WiMAX, mobile etc. The MCMC formed the preliminary view that there are state-based geographic market for access to towers, mastheads and rooftop space. The MCMC considered that Sacofa is dominant in the Sarawak state tower access market, but determined that Konsortium Jaringan Selangor (**KJS**) in Selangor and Common Tower Technologies (**CTT**) in Sabah are not dominant in their respective state tower access markets.

### **24.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

There was broad support for the MCMC's market definition, particularly in terms of the geographic dimension of the market which is state-based.

P1 fully agreed with the MCMC's proposal on the geographic dimensions of the market, as did DiGi. U Mobile also supported the MCMC's market definition, particularly the geographic aspect. YTL also agreed with the 'flexible' market definition employed by the MCMC.

Celcom urged the MCMC to expand the market definition beyond towers and include all passive infrastructure and rights of way on government land in this market.

PPIT were of the view that the market definition should not focus on the provision of towers alone, as this will not adequately and fairly address issues regarding coverage and capacity. Instead, PPIT proposed inclusion of mastheads and rooftop space, as well as poles and other structures that provide coverage and capacity for mobile services in the definition.

PPIT also noted that this is the only market that the PI Paper considers at a state level, rather than a national level. PPIT are concerned that this approach targets SBCs, and pointed out that some providers of access to towers operate at a national level, including major players such as Telekom Malaysia, Maxis, Celcom, DiGi, P1, U Mobile and YTL. The dominance of these tower providers should be considered in relation to their specific markets. PPIT believes that many of the

regulatory constraints that the MCMC has used to justify defining the market at state level are no longer implemented.

In addition to suggesting that the MCMC consider the market at a national level, PPIT proposes two exceptions to that defined market. Firstly, PPIT believes that the rural market should be considered separately, as most of the issues regarding coverage and capacity are faced in urban areas and large cities. Secondly, the market should be confined to existing towers. Tower providers should be permitted to make decisions to build new towers based on commercial considerations. They should not be considered to be acting in an anti-competitive manner if they refuse to build towers at new locations which are not commercially viable.

Maxis notes that the market definition should take into account barriers to entry in terms of the difficulties in gaining local and state approvals to build towers including some states which do not permit non-SBCs to build towers such as Sarawak, Melaka, Negeri Sembilan, Pahang and Johor. The concentration of tower ownership in SBC hands will also increase over time as they are required to build additional towers to support urban growth.

**(b) Do you have any data to support a calculation of market share?**

PPIT provided market share data for towers in Melaka which showed that the incumbent SBC, Melaka ICT Holdings Sdn Bhd, owns 42% of towers in the state, the most of any operator. Similarly in Perlis, the incumbent SBC owns 34% of the towers in that state, also more than any other operator. In Johor the SBC owns 25.43% of the towers, the most of any operator, with the nearest competitor holding 21.61%. While the infrastructure representative body provided market share data for the state of Kelantan, the information mixed towers and rooftop ownership and thus the MCMC could not extrapolate the appropriate data for the current market definition, although it notes that the incumbent SBC still owns more towers and rooftops than any other competitor in that state. Despite providing this data, PPIT noted that it believes market share is only an initial indication of potential dominance within the market.

Fiberail provided limited market share data in terms of the revenue it gained in 2013 and 2014 (limited to June 2014) from its towers and the number of customers (11) who purchased this product.

Maxis provided an estimate of market share data of towers owned by SBCs as a percentage of total tower ownership in each state, based on Maxis' own internal data, with the highest concentration of SBC ownership in Sarawak (c-i-c), Pahang (c-i-c), Kelantan (c-i-c), Terengganu (c-i-c) etc. Maxis' market share estimates are reproduced below (with c-i-c information removed).



<b>State</b>	<b>SBC market share (towers only)</b>	<b>Land/Local Authority Approval Restrictions</b>
Wilayah Persekutuan	c-i-c	-
Perlis	c-i-c	-
Kedah	c-i-c	-
P Pinang	c-i-c	-
Perak	c-i-c	-
Selangor	c-i-c	-
Negeri Sembilan	c-i-c	Yes
Melaka	c-i-c	Yes
Johor	c-i-c	Yes
Kelantan	c-i-c	-
Terengganu	c-i-c	-
Pahang	c-i-c	Yes
Sarawak	c-i-c	Yes
Sabah	c-i-c	-

(c) **Are you able to provide examples of a particular tower operator acting anti-competitively due to its position as the dominant provider in a particular state market?**

Altel noted that while it did not have examples of per se anti-competitive conduct undertaken by tower owners, the recent acquisitions by YTL group companies of a 60% controlling stake in KJS, which owns towers predominantly in Selangor, and possible further acquisitions of KJS shares by a YTL subsidiary are cause for concern and may stimulate future anti-competitive behaviour in the access to tower markets. Altel is concerned that if the second acquisition is completed, KJS will become a subsidiary of YTL. This will mean that YTL, who is a licensee, will have control over the towers currently owned by KJS and will have the power to create barriers to entry.

Celcom noted that it is facing difficulties bordering on anti-competitive in a number of Malaysian states such as Sarawak and Kelantan where only the relevant SBC can build towers. There are also high permit fees or slow permit processing in

some states. Celcom also noted that there have been instances of operators in Johor being requested to tear down rooftop structures.

Telekom Malaysia and U Mobile both maintain that Sacofa is acting anti-competitively due to its dominant position in Sarawak as only Sacofa can provide towers in this market. Telekom Malaysia also noted that a SBC in Penang has acted anti-competitively.

YTL considered that this subject was covered adequately in the PI Paper.

PPIT considered that the MCMC's request for information about examples of tower operators acting anti-competitively is misleading and biased. PPIT urged the MCMC to consider other licensees and major mobile operators, as well as SBCs. PPIT acknowledged that SBCs' primary business is to offer tower capacity, while Telekom Malaysia and other mobile operators only offer some tower capacity. If the MCMC is calculating market share based on the number of towers, those owned by mobile operators should also be taken into account.

PPIT also rejected the assertion at page 154 of the PI Paper concerning CTT's alleged requirements that operators use fibre access owned by CTT's affiliates, claiming that such assertions were false and that the fibre in question belongs to another operator, not CTT.

**(d) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was extremely broad support for the preliminary finding that Sacofa is dominant in the market for tower access in Sarawak, with a number of fixed and mobile and SBC tower operators supporting this conclusion, including Sacofa itself.

Sacofa did note its dominance in this market. However, they provide access to communications services to as many participants as possible and they promote sharing of infrastructure on an equal and non-discriminatory basis. This, together with Sacofa's industry engagement and commercial dealings with the industry (in which Sacofa does not act unilaterally) means that Sacofa pursues a collaborative approach.

P1 proposed that dominance be based on the geographic area and the number of towers owned in each of those geographic areas and that the restriction on tower building to non-SBCs is impacting the competitive dynamics of the tower market.

Telekom Malaysia agrees with the MCMC's finding that Sacofa is in a dominant position in the market for access to towers in the state of Sarawak.

Fiberail fully agreed with the MCMC's preliminary finding on dominance. U Mobile also fully agreed with the MCMC's preliminary findings on dominance in relation to Sacofa in Sarawak and has noted that U Mobile was forced to access Sacofa's towers in Sarawak as no substitute was available.

YTL supported the MCMC’s findings on dominance, noting that market share is a key aspect in the determination of dominance and that there are regulatory instruments that the MCMC could utilise to address access to towers.

DiGi noted that in practice SBCs exert influence over local authorities in not approving tower construction applications in a number of states such as Johor, Melaka, Selangor etc. and that there is little rivalry among tower operators in their respective states. DiGi agrees that Sacofa is dominant in Sarawak but urges the MCMC to take account of the fact that state authorities are limiting tower construction to SBCs only, in its assessment of dominance, as this will mean that SBC tower share will increase in their respective states.

DiGi considers that the industry would benefit if the MCMC conducted an investigation or study into towers and tower ownership in Malaysia, and is encouraged by the MCMC’s efforts to develop industry codes on licensee’s rights and obligations regarding public utilities.

Celcom agreed that Sacofa was dominant in Sarawak but also recommend that the MCMC find every SBC to be dominant in its state. Celcom provided the MCMC with a table listing (as below) a range of planning restrictions imposed by State Governments. In particular, Celcom noted that in the States of Kelantan, Melaka and Negeri Sembilan, only the SBC located in that State can build towers, namely Infra Quest Sdn Bhd, Melaka ICT Holdings Sdn Bhd and Rangkaian Minang Sdn Bhd.

<b>State</b>	<b>Issues</b>
Johor	Operators are requested tear down rooftop infrastructure in Muar as only D’Harmoni Telco Infra Sdn Bhd and Stealth Solution Sdn Bhd can build such rooftop infrastructure.
Kelantan	Only the Infra Quest Sdn Bhd can build tower.
Kuala Lumpur	Portable BTS is not allowed on Government land (although it is always an interim solution due to scarcity of land to build a permanent structure)
Melaka	Only Melaka ICT Holdings Sdn Bhd (MICTH) is allowed to build towers. Telcos can only build structure via MICTH contractors and seriously impact the rollout timeline.
Negeri Sembilan	Only Rangkaian Minang (NS) Sdn Bhd can build tower.
Pahang	Delay in approval for application for rooftop/ vacant land tower etc.
Perak	Rooftop structure is not allowed in Kuala Kangsar district
Sarawak	Only Sacofa is allowed to build towers.

State	Issues
Terengganu	High permit renewal fees i.e. RM10,000 for each site under Majlis Perbandaran Dungun and Majlis Daerah Setiu.

A range of other fixed and mobile operators agree with the MCMC's finding of dominance in relation to both Sacofa and the findings that KJS and CTT are not dominant in Selangor.

Asiaspace submitted that the market for tower access is very competitive and there is no dominant operator due to the high number of providers and the high number of towers; there is an estimated 2,500 towers owned by state-backed companies alone.

PPIT disagreed with the methodology used to arrive at the preliminary findings on dominance, although they do not disagree with the findings themselves. PPIT asserts that space in towers owned by SBCs is usually used by mobile operators. They note that the MCMC did not consider countervailing buyer power of mobile operators, who are able to considerably influence the terms and conditions of tower access.

### **24.3 The MCMC's Final Views**

The MCMC notes the broad support for its market definition amongst the respondents and has considered the comments urging the inclusion of additional infrastructure such as poles and other structures that can provide coverage but considers that such infrastructure is not always substitutable for access to towers. Similarly the MCMC has noted the request to extend the market definition to include all passive infrastructure and rights of way on government land but also considers this as too far an extension of the market definition.

In relation to the geographic aspect of the market definition, the MCMC notes some operators comments that the market should be national. On the other hand, other operators commented that there may be urban or rural markets, however the MCMC considers that in light of the unique difficulties in gaining access to towers in certain states based on local regulations and the lack of sufficient alternatives in those states, the geographic element of the market should remain as individual state markets.

The new market data provided by Maxis, PPIT and Fiberail has been taken into account by the MCMC in its assessment of dominance.

The MCMC notes the range of responses on anti-competitive conduct but considers that those responses did not provide any distinct examples of anti-competitive behaviour. The MCMC has noted the acquisition by the YTL group of a controlling stake in KJS, although this is not anti-competitive per se, and has also considered the criticism from PPIT that the question as to whether there were any examples

of anti-competitive behaviour was biased against SBCs. The MCMC does not agree with this submission as the question did not specifically identify SBCs as those accused of anti-competitive behaviour.

The MCMC notes the support for the finding of dominance in relation to the Sarawak market, including by the dominant licensee itself, Sacofa.

In relation to the assessment of dominance in other state markets the MCMC notes the varying views ranging from the request from Celcom and Maxis that all or most SBCs be found to be dominant in their respective states to Asiaspace's view that the market for access to towers is extremely competitive, to PPIT that considers the methodology used to determine dominance to be flawed.

The MCMC has found two aspects of influential arguments put forward by operators. First, market share data shows that several SBCs have high market shares in their respective states. While in some cases the SBC does not have the highest market share, this market share is likely to increase due to the restrictions noted by Celcom and Maxis in their submissions. That is, market shares of other licensees may have been obtained prior to the introduction of the planning restriction and hence the market share of these competitive operators is likely to diminish over time.

Secondly, the MCMC directly acknowledges that the states impose restrictions that limit the construction of towers to SBCs and notes that there may be very good environmental reasons and reasons associated with sharing of infrastructure for doing so. Nevertheless, the MCMC notes that these restrictions are likely to have the economic effect of constituting significant barriers to entry and it is within the MCMC's purview to assess the economic effect of such barriers to entry under the CMA.

Accordingly, the MCMC's final view is that there are state based markets for access to towers, mastheads and rooftops. The MCMC believes that the following licensees are dominant in their respective state markets due to a combination of market share and restrictions on the construction of new towers:

- Infra Quest Sdn Bhd in the Kelantan tower market;
- Melaka ICT Holdings Sdn Bhd in the Melaka tower market;
- Rangkaian Minang Sdn Bhd in the Negeri Sembilan tower market; and
- Sacofa in the Sarawak tower market.

Finally, the MCMC notes that it will continue to monitor the market share and behaviour of other SBCs and may add SBCs to the dominance list based on the MCMC's dynamic approach to dominance assessments.

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## 25 Access to co-location and exchange buildings

### 25.1 Overview

Access to co-location and exchange buildings was addressed in section 22 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Exchange buildings are a core feature of the PSTN network where interconnection takes place to establish telephone calls between subscribers. The PI Paper set out the MCMC's preliminary views that a market for the wholesale supply of co-location services exists at each exchange building and that owners of each co-location facility or exchange building that are licensees are dominant in relation to that facility or exchange building.

### 25.2 Summary of submissions received

#### (a) Do you have any further comments on market definition?

Several operators agreed with the MCMC's preliminary view on market definition, including the updated geographic element of the definition including YTL. Telekom Malaysia believes the MCMC's reconsideration more accurately reflects the state of the market but also suggested that the MCMC should consider co-location at other locations and not just at exchange buildings as part of the market.

#### (b) Has access regulation been effective in curtailing the effect of dominance in the market?

While operators, including U Mobile and YTL considered that current access regulations have been effective in curtailing the effect of dominance in the market, Maxis disagreed. Maxis noted that access to co-location is often bundled with other products to circumvent regulatory requirements and that the scope of the current regulated access to co-location and exchange buildings does not include the access route e.g. poles, ducts and manholes to the co-location space and incumbent operators often require the access seeker to meet them at those points or purchase transmission into the building.

Telekom Malaysia noted its view that network co-location is already sufficiently regulated under the access list and MSAP and urged the MCMC to consider the competitive impact of all regulation in greater detail.

#### (c) Do you agree or disagree with the MCMC's preliminary finding on dominance?

There was support from fixed and mobile operators for the MCMC's preliminary findings of dominance; Fiberail completely agreed with this finding, as does U Mobile, DiGi and YTL.

DiGi considers that all parties who provide services in this market should be licensed by the MCMC.

Fibrecomm disagreed with the MCMC's preliminary finding because many of the building owners are not licensees and thus are not subject to the MCMC's jurisdiction which extends to licensees only. Fibrecomm considered that the building owners leased their buildings to third parties on the basis of location and market value.

### **25.3 The MCMC's Final Views**

The MCMC notes that there was general support amongst respondents for its preliminary findings on market definition and dominance. The MCMC therefore continues to hold the view that there is a market for the wholesale supply of co-location services at each exchange building and the owner of each co-location facility or exchange building is in a dominant position in that market.

The MCMC notes that Fibrecomm disagreed with the MCMC's preliminary findings of dominance on the basis that many of the building owners are not licensees. As explained in the PI Paper, the MCMC can only determine licensees to be dominant and therefore only those owners of co-location facilities or exchange buildings that are licensees will be the subject of a dominance classification.

The MCMC's final view is that a market for the wholesale supply of co-location services exists at each exchange building and that owners of each co-location facility or exchange building that are licensees are dominant in relation to that facility or exchange building.

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## **26 Access to submarine cable landing stations and earth stations**

### **26.1 Overview**

Access to submarine cable landing stations and earth stations was addressed in section 23 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Earth stations are buildings which transmit or receive radio-frequency signals from a geostationary space station, while submarine cable landing stations are buildings located near shorelines that house specialist undersea telecommunication cables. The PI Paper set out the MCMC's preliminary view that there is a market for the wholesale supply of access to each and every submarine cable and earth station, and that each owner of each submarine cable landing station and earth station that are licensees are dominant in relation to that submarine cable landing station and earth station.

### **26.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

Maxis agreed with the MCMC's market definition, noting that as submarine cables usually only come ashore at a single landing station, that access to every station is necessary to ensure anti-competitive behaviour does not occur. Maxis also noted

that urban points of presence are not adequate substitutes for access to submarine cable landing stations.

Telekom Malaysia considered that the market definition should also include other points of presence which have the characteristics of bottleneck facilities.

(b) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

A range of operators agreed with the MCMC's preliminary findings on dominance in this market, including U Mobile, YTL and Maxis. However, Telekom Malaysia disagreed with the preliminary dominance findings on the basis that the market definition used to determine dominance is too narrow.

While DiGi agreed with the preliminary findings on dominance, it urged the MCMC to require all owners of necessary inputs in communications markets to be licensed under the CMA. DiGi also notes that access to these facilities is mandated on the Access List but providers often bundle transmission with access to cable landing stations.

### **26.3 The MCMC's Final Views**

The MCMC notes that Telekom Malaysia considered that the market definition adopted by the MCMC was too narrow. However, no data or other information was provided to support that view. The MCMC notes that there was general support amongst the other respondents for the market definition adopted by the MCMC and the MCMC's preliminary findings on dominance. Accordingly, the MCMC continues to hold the view that there is a market for the wholesale supply of access to each and every submarine cable and earth station, and that each owner of each submarine cable landing station and earth station that are licensees are dominant in relation to that submarine cable landing station and earth station.

The MCMC notes that Telekom Malaysia submitted that the MCMC's market definition should also include other points of presence which have the characteristics of bottleneck facilities. In the PI Paper, the MCMC considered a number of other such points of presence, including exchange buildings.

The MCMC's final view is that there is a market for the wholesale supply of access to each and every submarine cable and earth station, and that each owner of each submarine cable landing station and earth station that are licensees are dominant in relation to that submarine cable landing station and earth station.

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## **27 Access to full access (local loop unbundling), sub-loop, line sharing and bitstream services**

### **27.1 Overview**

Access to full access (local loop unbundling), sub-loop, line sharing and bitstream services was addressed in section 24 of Part B of the PI Paper released for the



Assessment of Dominance in Communications Markets. Unbundling of local loop (**ULL**), sub-loops and line sharing refers to the network of lines that run from end users premises to the local exchange. The PI Paper set out the MCMC's preliminary view that there is a single national market for the wholesale provision of local access services and that Telekom Malaysia is dominant in that market.

## **27.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

There were mixed responses to the MCMC's market definition with Telekom Malaysia submitting that this market should not have been considered for the purposes of dominance as it is already regulated, while Maxis supported the MCMC definition on the basis that it was supported by the regulatory approach in the EU and has worked effectively in markets such as the UK.

### **(b) Do you have any data to support a calculation of market share?**

Maxis noted that it believed Telekom Malaysia's market share in this market was similar to that of the retail broadband market as there are high barriers to entry. Maxis estimates that Telekom Malaysia has a 93% market share in the retail broadband market and thus a similar market share for the market for access to full access, sub-loop, line sharing and bitstream services.

### **(c) Has access regulation been effective in curtailing the effect of dominance in the market?**

There were mixed views as to whether the current access regulations have been effective in curtailing the effect of dominance in the market, with Telekom Malaysia claiming that the regulations were effective and that the MCMC should consider the competitive impact of all regulation in greater detail, while U Mobile disagreed and claimed that access regulation was not effective in curtailing the effect of dominance in the market.

### **(d) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support for the MCMC's preliminary finding that Telekom Malaysia is dominant in this market including from YTL.

Both DiGi and Maxis agreed with the finding of dominance while noting that this was particularly pertinent in light of the fact that the HSBB ministerial determination defers the implementation of Full Access Service, Line Sharing Service and Sub Loop Service until September 2015 which grants Telekom Malaysia an effective monopoly on ADSL. U Mobile also agreed with the preliminary findings.

Telekom Malaysia disagreed with the findings on dominance on the basis that the market should never have been considered for the purposes of dominance. The

operator noted that other operators had the ability to invest in fixed line infrastructure but chose not to do so for purely commercial reasons i.e. to pursue more lucrative markets and that there were no barriers to entry for investing in such fixed network infrastructure. Telekom Malaysia considered that finding them to be dominant was to punish them for investing in infrastructure others considered to be unprofitable.

### **27.3 The MCMC's Final Views**

The MCMC has carefully considered the comments and issues raised by respondents on the MCMC's market definition and dominance findings.

The MCMC notes the mixed responses to its views on market definition. The MCMC notes Telekom Malaysia's comments that it is not necessary to define this market. However, Telekom Malaysia was the only respondent who expressed such a view, and the MCMC has considered that in light of the support for the MCMC's findings on dominance in this market, defining this market is necessary to promote and safeguard competition. From an economic standpoint, the MCMC believes that a market clearly exists.

The MCMC notes Telekom Malaysia's comments regarding the ability of other operators to invest in fixed line infrastructure and its views that barriers to entry are low in the national market for the wholesale provision of local access services. The MCMC disagrees that barriers to entry are low in this market. Fixed line infrastructure has characteristics that are similar to a natural monopoly, and Telekom Malaysia is likely to enjoy significant economies of scale. Further, the MCMC believes that the cost of investing in fixed infrastructure is significant.

The MCMC notes Telekom Malaysia's views that, by concluding that it is dominant, it is being 'punished' for investing in infrastructure that others consider to be unprofitable. As explained in the PI Paper, a finding of dominance does not connote or imply that any offence has been committed by the dominant operator and does not, in and of itself, trigger the power under section 139 of the CMA.

The MCMC's final view is that there is a single national market for the wholesale provision of local access services and that Telekom Malaysia is dominant in that market.

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## **28 Access to dark fibre**

### **28.1 Overview**

Access to dark fibre was addressed in section 25 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. Dark fibre is fibre optic cabling that is not currently being used to transmit information and is therefore 'unlit'. The MCMC formed the preliminary view that there is a national market for the wholesale provision of access to dark fibre and that Telekom Malaysia is dominant in this market.

## **28.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

There were a range of views concerning the MCMC's market definition.

P1 noted that as access to dark fibre is not available as a commercial offering that defining a market for this product was irrelevant.

Fibrecomm also disagreed with the market definition on the grounds that access to dark fibre is not a market segment that operators offer commercially and further noted that many operators have their own dark fibre to support their network expansion to meet future customer demands.

U Mobile noted that it was of the view that dark fibre should be made available as an alternative to providing transmission services particularly in greenfield areas where operators may have trouble deploying services due to a lack of a dark fibre alternative.

Telekom Malaysia did not agree that access to dark fibre constitutes a market as it is not a product that operators sell in its pure form and many operators have their own dark fibre. Telekom Malaysia also noted that there are various alternatives to dark fibre including transmission technologies such as copper networks and radio links etc.

However, Altel agreed with the MCMC's market definition and stressed the importance of dark fibre for the purposes of backhaul and the need for adequate access regulation to dark fibre. Access to dark fibre is also crucial for Altel to comply with a directive from the MCMC to use fibre backhaul for the purpose of connectivity of base stations in the 2600 MHz rollout. Other operators also agreed with the MCMC's market definition and noted that inter-exchange transmission and tails transmission are not effective substitutes for dark fibre.

DiGi noted that transmission services are not likely substitutes for access to dark fibre.

Maxis supported the MCMC's definition, noting that that legacy technologies and wireless are not easily substitutable for dark fibre. Maxis noted that there was anecdotal evidence that certain operators have withdrawn their dark fibre products from the market.

### **(b) Do you have any data to support a calculation of market share?**

Maxis noted that it did not consider that the market share of dark fibre differed significantly from that of the transmission market because they rely on similar infrastructure and that Maxis have previously provided details about the market share of Telekom Malaysia in regard to transmission.

(c) **Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support for the MCMC's preliminary finding on dominance with Fiberail, YTL fully agreeing with the finding. U Mobile also agreed that Telekom Malaysia is dominant in this market.

Celcom agreed that while Telekom Malaysia is dominant the finding of dominance should be extended to SBCs in their respective states as some do not allow trenching e.g. in Putrajaya, Cyberjaya and Pulau Pinang. Maxis considered the finding of dominance should be extended to include Telekom Malaysia's subsidiaries Fibrecomm and Fiberail.

Telekom Malaysia disagreed with the preliminary findings of dominance as it is related to a product that is never sold in its pure form.

### **28.3 The MCMC's Final Views**

The MCMC has considered the range of responses concerning access to dark fibre and notes that there was a wide variety of views that have aided the MCMC in its understanding of this market and the assessment of dominance.

The MCMC has considered the criticism of its market definition raised by Fibrecomm, Telekom Malaysia and P1, that access to dark fibre cannot constitute a market because it is not a product that operators sell in its pure form and that most operators have dark fibre of their own.

The MCMC notes this argument but considers that there are several conclusions that can be drawn from this information. The fact that this product is not available in its pure form may be an indication that there is an absence of competition, or that dominant players in the market are withholding access to dark fibre from their competitors. The MCMC considers that the current absence of dark fibre as a product in the Malaysian communications markets does not necessarily mean that there is no market for such products.

There were mixed views from the respondents as to whether there were effective substitutes for dark fibre, with Altel supporting the MCMC's market definition and stressing the importance of dark fibre for backhaul purposes and noting that tails and inter-exchange transmissions are not effective substitutes because fibre provides for a much higher degree of scalability and economy of scale. The MCMC considers this a very valid argument. Telekom Malaysia and U Mobile have noted that there are other substitutes for dark fibre, mainly transmission technologies such as copper networks, however the MCMC is persuaded by the consideration that these transmissions technologies do not offer the scalability or economies of scale that dark fibre does which is increasingly relevant with larger volumes of traffic.

While the responses varied in their ultimate conclusions of how many operators should be assessed as dominant, they were broadly supportive of the MCMC's preliminary view of dominance, that Telekom Malaysia is dominant. The MCMC has

considered Celcom's argument that SBCs should also be declared dominant in their respective states as some do not allow trenching. The MCMC notes that this is a concerning development however, this does not necessarily mean that the SBC is dominant; the question of whether trenching is permitted would inform the question of whether there are barriers to entry in this market, but it does not mean that SBCs own, control, or even have market power over access to dark fibre. This is but one competitive constraint on the access to dark fibre market, and by itself is not enough to prompt a finding of dominance in relation to SBCs.

The MCMC carefully considered Maxis' comment that Fiberail and Fibrecomm should also be declared dominant together with Telekom Malaysia as they are partially owned or controlled by Telekom Malaysia. The MCMC understands that this view is not out of step with the MCMC's own position in the market for Transmission (inter-exchange) where it found Telekom Malaysia, Fibrecomm and Fiberail dominant in the aggregate. However, in that particular market there was clear market data that showed that Fiberail and Fibrecomm both owned extensive backbone networks across key transmission routes such as Peninsular Malaysia. The MCMC does not have adequate market data showing the unlit fibre owned by these subsidiaries, in the absence of this information the MCMC does not believe that it is appropriate at this time to include Fibrecomm and Fiberail in the dominance finding.

The MCMC notes Telekom's Malaysia's response that the preliminary finding of dominance was incorrect based on the principle that the market should not have been defined. For the reasons set out above the MCMC considers the market for access to dark fibre was correctly defined and consequently considered that Telekom Malaysia's comments on dominance proceed from a flawed position in relation to market definition.

The MCMC's final view is that there is a national market for the wholesale provision of access to dark fibre and that Telekom Malaysia is dominant in this market.

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## **29 Access to main distribution frames and associated in-building wiring**

### **29.1 Overview**

Access to main distribution frames (**MDFs**) and associated in-building wiring was addressed in section 26 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. An MDF is the frame on which incoming cables and local distribution cables within a building are terminated or cross connected. The MCMC determined that the market for access to MDFs and in-building wiring services in each building constitutes a separate market and came to the preliminary view that each building owner is dominant in the market for access to MDFs and in-building wiring in each building, if they are a licensee.

## **29.2 Summary of submissions received**

### **(a) Do you have any further comments on market definition?**

Telekom Malaysia disagreed with the inclusion of this as a market in the dominance assessment, as such facilities belong to building owners who are usually not licensees and thus are beyond the jurisdiction of the MCMC.

Maxis noted that there are few substitutes for access to MDFs and associated in-building wiring, the only real substitute being possible cellular coverage from outdoor sites but such coverage is not always feasible.

### **(b) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

A number of operators agreed with the MCMC's preliminary findings on dominance in this market including U Mobile, YTL and Maxis. DiGi, Maxis and Celcom considered that the dominance finding should be expanded to include licensees appointed by building owners to operate the MDF and in-building wiring.

Telekom Malaysia disagreed with the finding of dominance on the principle that there should not be a separate market for access to MDFs and associated in-building wiring.

## **29.3 The MCMC's Final Views**

The MCMC has carefully considered the responses it received in relation to this market and these responses have been taken into consideration in forming the final views of the MCMC.

The MCMC notes the comment made by Telekom Malaysia that MDF and in-building wiring facilities belong to building owners who are usually not licensees and that therefore access to MDFs and in-building wiring should not be considered as a communications market. The MCMC considers that this is a flawed approach to defining communications markets; the fact that a communications system or essential elements of a communication system may be owned by parties who are not licensees does not diminish the fact that it forms part of a communications market. The fact that the dominant players in such markets may be beyond the jurisdiction of the MCMC is a question of the effectiveness of the current regulatory scheme rather than market definition.

The MCMC also acknowledges comments made by Maxis that there are few substitutes for access to MDFs and in-building wiring, the only possible substitute being possible cellular coverage from outside the building, an option which Maxis noted, was not always feasible. The MCMC considers that this supports the market definition provided by the MCMC.

The MCMC has carefully considered the support for its preliminary views on dominance in the responses from YTL, U Mobile and DiGi and the comments made by Celcom and Maxis that the dominance finding should be extended to include

the operators of MDF and in building wiring systems. The MCMC agrees that as the operators of such systems are appointed by building owners and have significant influence on access to those systems, then the operators of such systems should also be declared dominant together with the owners of these systems. If a building owner is not a licensee and the operator of the system is a licensee, then the operator of the system would be dominant.

For the reasons stated above, the MCMC has not altered the market definition for access to MDFs and in-building wiring, but has altered its views on the assessment of dominance by expanding the dominance determination in these markets to include operators who own and/or operate these systems.

The MCMC's final view is that there is a separate market for access to MDFs and in-building wiring for each building and that each building owner and/or operator of the MDF and in-building wiring is dominant, if they are a licensee.

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## **30 Access to common in-building mobile systems**

### **30.1 Overview**

Access to common in-building mobile systems in-building wiring was addressed in section 27 of Part B of the PI Paper released for the Assessment of Dominance in Communications Markets. The MCMC's preliminary view was that access to common in-building mobile systems in each building constitutes a separate market and that the provider (i.e. owners) of access to in-building mobile systems is likely to be dominant in relation to their building if they are licensees.

### **30.2 Summary of submissions received**

#### **(a) Do you have any further comments on market definition?**

U Mobile noted that in its view, sub 1GHz spectrum was only held by two operators and thus those two operators have a significant advantage over other without that access to spectrum.

Maxis noted that Maxis, Celcom, DiGi and Telekom Malaysia have access to the sub 1GHz spectrum, albeit in differing band sizes.

YTL agreed with the MCMC's market definition.

#### **(b) Do you agree or disagree with the MCMC's preliminary finding on dominance?**

There was broad support from both fixed and mobile operators for the MCMC's preliminary findings on dominance. U Mobile and YTL supported the MCMC's preliminary finding that the building owners are dominant in such markets.

Telekom Malaysia agreed with the MCMC view that the provider of access to in-building mobile systems is likely to be dominant at each location.

Maxis considered that the dominance finding should be expanded to include licensees appointed by building owners to operate the common in-building mobile system and gave an example that Malaysian Airports (Sepang) Sdn Bhd is a licensee operating a single in-building mobile system which other operators must utilise and noted it considered that this licensee had acted in an anti-competitive manner.

Celcom disagreed with the MCMC's preliminary finding on dominance that the owners of each building will be dominant, and considered that this should be expanded to include licensees appointed by the building owners to operate such systems. Celcom noted that this would ensure consistency with the Access List (Variation 2009) which mandates access from Common Antennae Systems that are owned or operated by an MNO in association with in-building coverage.

While DiGi agreed with the finding on dominance, DiGi urged the MCMC to consider requiring the owners of such systems to be licensed and thus within the jurisdiction of the MCMC.

DiGi considered that these products should be mandated on the Access List.

### **30.3 The MCMC's Final Views**

The MCMC has carefully considered all the comments made by respondents in relation to access to common in-building mobile systems and notes that the responses have assisted the MCMC in forming its final views.

The MCMC notes that there was support for its market definition from YTL in relation to access to common in-building mobile systems with no operators disagreeing with the findings that there is a separate market for access to each common in-building mobile system. The MCMC acknowledges the point raised that access to spectrum is an important barrier to entry in this market but notes that Maxis has submitted that several operators have access to the appropriate sub 1GHz block of spectrum.

In relation to the MCMC's preliminary view on dominance in these markets, there was a general support from YTL, U Mobile, Maxis and Telekom Malaysia for the finding that the building owner is dominant when they are also a licensee.

The MCMC has considered the argument raised by Celcom and Altel that the operators of common in-building mobile systems rather than the owners should be dominant as they are within the jurisdiction of the MCMC and as they are the ultimate decision makers in terms of whether an additional mobile system can operate concurrently with the existing mobile system. For the same reason as described above in relation to MDFs, the MCMC believes there is considerable merit in these arguments. The MCMC understands that operators of the common in-building mobile systems are usually appointed exclusively and have significant influence over access to these systems.

Therefore, for the reasons stated above, the MCMC has changed its preliminary view on dominance and considers that each owner and/or operator of a building



with a common-in-building mobile system is dominant in the market at each location. If a building owner is not a licensee and the operator of the common in building system is a licensee, then the operator of the system would be dominant.

The MCMC has also noted DiGi's request that access to common in-building mobile systems be mandated on the Access List. However, MCMC would like to clarify that this service is already mandated in the Access List.

The MCMC's final view is that access to common in-building mobile systems in each building constitutes a separate market and that the owner and/or operator of common in-building mobile systems is dominant in relation to their building, if they are licensees.

## 31 Appendix 1

No	Communications market	Geographic scope	Dominant position
<b>Retail</b>			
1.	Fixed telephony (including VoIP) <ul style="list-style-type: none"> <li>▪ Access line and local calls (Business)</li> <li>▪ Access line and local calls (Residential)</li> <li>▪ National calls (separate Business/Residential)</li> <li>▪ International calls (separate Business/Residential)</li> <li>▪ Fixed-to-mobile calls (separate Business/Residential)</li> </ul>	National market	Telekom Malaysia (all markets)
2.	Fixed broadband and data <ul style="list-style-type: none"> <li>▪ High speed and quality (Business)</li> <li>▪ Low speed and quality (Residential)</li> </ul>	National market	Telekom Malaysia (all markets)
3.	Mobile telephony	National market	No dominance finding
4.	Mobile broadband and data (including WiMAX)	National market	No dominance finding
5.	Mobile messaging services (including SMS and OTT messaging)	National market	No dominance finding
6.	Transmission (tails) or local leased lines	National market	Telekom Malaysia
7.	Transmission (international) or IPLCs	National market	Telekom Malaysia (all markets)
8.	Domestic managed data services	National market	Telekom Malaysia
9.	International managed data services	National market	Telekom Malaysia
10.	Directory services <ul style="list-style-type: none"> <li>▪ Voice or call centre services</li> <li>▪ Online directories</li> <li>▪ Published directories</li> </ul>	National market	No dominance finding
11.	Broadcasting services <ul style="list-style-type: none"> <li>▪ Free-to-air television</li> </ul>	National market	TV 3, ntv7, 8TV and TV9 collectively dominant – FTA broadcasting

No	Communications market	Geographic scope	Dominant position
	<ul style="list-style-type: none"> <li>▪ Subscription television</li> </ul>		Astro – subscription television broadcasting
<b>Wholesale</b>			
12.	Fixed telephony (including VoIP) <ul style="list-style-type: none"> <li>▪ Access Line (Business)</li> <li>▪ Access Line (Residential)</li> <li>▪ Local calls (Business/Residential)</li> <li>▪ National calls (Business/Residential)</li> <li>▪ International calls (Business/Residential)</li> <li>▪ Fixed-to-mobile calls (Business/Residential)</li> </ul>	National market	Telekom Malaysia (all markets)
13.	Fixed broadband and data (Business/Residential)	National market	Telekom Malaysia (all markets)
14.	Mobile telephony and messages (including SMS and OTT messaging)	National market	No dominance finding
15.	Mobile broadband and data (including WiMAX)	National market	No dominance finding
16.	Transmission (inter-exchange)	National market, excluding the route from Peninsular Malaysia to East Malaysia  Route from Peninsular Malaysia to East Malaysia	Telekom Malaysia, Fiberail, Fibrecomm collectively dominant  Telekom Malaysia
17.	Transmission (tails) or local leased lines	National market	Telekom Malaysia
18.	Transmission (international) or IPLCs	National market	Telekom Malaysia (all markets)
19.	Transmission to submarine cable landing stations and earth stations	Boundaries of each individual point of presence	Operator of each individual point of presence
20.	Broadcasting transmission: <ul style="list-style-type: none"> <li>▪ to broadcast towers</li> <li>▪ for digital transmission</li> </ul>	National market	Telekom Malaysia – to broadcast towers  PSSB – for digital transmission
21.	Content acquisition: <ul style="list-style-type: none"> <li>▪ Premium content</li> <li>▪ Other ordinary content</li> </ul>	National market	Astro – premium content  No dominance finding – ordinary content
22.	Termination (fixed and mobile)	Each terminating	Each network operator

No	Communications market	Geographic scope	Dominant position
	calls and messages	network	(fixed and mobile)
23.	Origination (fixed and mobile) calls	Each originating network	Each network operator (fixed and mobile)
24.	Inter-connect links	Each individual link	Operator of each individual link
25.	Wholesale Internet interconnection	National market	No dominance finding
26.	<p>Access to facilities and upstream network elements</p> <ul style="list-style-type: none"> <li>▪ Access to lead-in ducts and manholes</li> <li>▪ Access to inter-exchange and mainline ducts</li> <li>▪ Access to towers</li> <li>▪ Access to exchange buildings and co-location</li> <li>▪ Access to submarine cable landing stations and earth stations</li> <li>▪ Access to local access services, including local loop unbundling, sub-loops, line sharing and bitstream services</li> <li>▪ Access to dark fibre</li> <li>▪ Access to main distribution frames and associated in-building wiring (and other in-building facilities)</li> <li>▪ Access to common in-building mobile systems</li> </ul>	<p>Individual markets for access to each facility and network element, except:</p> <ul style="list-style-type: none"> <li>▪ state based market for access to towers;</li> <li>▪ national market for lead-in ducts and manholes;</li> <li>▪ national market for access to inter-exchange and mainline ducts;</li> <li>▪ national market for access to local access services; and</li> <li>▪ national market for access to dark fibre.</li> </ul>	<p>Each network operator in respect of:</p> <ul style="list-style-type: none"> <li>▪ exchange buildings and co-location;</li> <li>▪ submarine cable landing stations and earth stations;</li> </ul> <p>Each of the building owner and/or operator (to the extent they are licensees) for access to:</p> <ul style="list-style-type: none"> <li>▪ MDF and in-building wiring; and</li> <li>▪ common in-building mobile systems.</li> </ul> <p>Telekom Malaysia as dominant operator for access to:</p> <ul style="list-style-type: none"> <li>▪ lead-in ducts and manholes;</li> <li>▪ local access services; and</li> <li>▪ dark fibre.</li> </ul> <p>In relation to towers:</p> <ul style="list-style-type: none"> <li>▪ Sacofa is dominant in the Sarawak tower market;</li> <li>▪ Infra Quest Sdn Bhd in the Kelantan tower market;</li> <li>▪ Melaka ICT Holdings Sdn Bhd in the Melaka tower market; and</li> <li>▪ Rangkaian Minang Sdn Bhd in the Negeri</li> </ul>

No	Communications market	Geographic scope	Dominant position
			<p>Sembilan tower market.</p> <p>No dominance finding for access to inter-exchange and mainline ducts.</p>