



**CONSULTATION PAPER ISSUED BY**  
**THE INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY**  
**ON**  
**A CONVERGED COMPETITION CODE FOR THE MEDIA AND**  
**TELECOMMUNICATION MARKETS**

**20 FEBRUARY 2019**

## CONTENTS

PART I: INTRODUCTION .....	3
PART II: MARKET OVERVIEW AND CONVERGENCE .....	6
PART III: REGULATORY PRINCIPLES .....	14
PART IV: DOMINANCE CLASSIFICATION AND DUTIES OF DOMINANT ENTITIES .....	17
PART V: ANTI-COMPETITIVE CONDUCT .....	29
PART VI: CONSUMER PROTECTION .....	43
PART VII: MERGERS AND ACQUISITIONS .....	61
PART VIII: RESOURCE SHARING .....	66
PART IX: PUBLIC INTEREST OBLIGATIONS .....	69
PART X: TELECOMMUNICATION INTERCONNECTION .....	73
PART XI: ADMINISTRATIVE AND ENFORCEMENT PROCEDURES .....	85
PART XII: COMPETITION IN A DIGITAL ECONOMY .....	92
PART XIII: INVITATION TO COMMENT .....	98
ANNEX A - ASSESSMENT OF COMPETITION IN KEY MEDIA AND TELECOMMUNICATION MARKETS IN SINGAPORE.....	100
ANNEX B - PROPOSED DRAFTING FOR REGULATORY PRINCIPLES .....	123

## PART I: INTRODUCTION

- 1.1 The Infocomm Development Authority of Singapore (“**IDA**”) and the Media Development Authority of Singapore (“**MDA**”) were restructured to form the Info-communications Media Development Authority (“**IMDA**”), a converged regulator of the info-communications media market, on 1 October 2016.
- 1.2 Currently, IMDA regulates competition and market related matters through the Code of Practice for Competition in the Provision of Telecom Services 2012 (also known as the Telecom Competition Code, or “**TCC**”) and the Code of Practice for Market Conduct in the Provision of Media Services (also known as the Media Market Conduct Code, or “**MMCC**”). The TCC and the MMCC were first issued by then-IDA and then-MDA in 2000 and 2003 respectively. Both the TCC and the MMCC aim to maintain fair market conduct and effective competition, and safeguard consumer interests in the telecommunication, broadcasting and newspaper media markets<sup>1</sup>.
- 1.3 Broadly, both the TCC and the MMCC govern the following areas:
  - (a) dominance classification and duties of dominant entities;
  - (b) anti-competitive conduct;
  - (c) acquisitions and consolidations;
  - (d) consumer protection;
  - (e) infrastructure / resource sharing; and
  - (f) administrative and enforcement procedures.

There are also provisions which are market specific, such as telecommunication network interconnection in the TCC and public interest obligations in the MMCC.

- 1.4 Then-IDA and then-MDA committed to a triennial review of the TCC and the MMCC, respectively. The TCC was last reviewed in 2012 to streamline the provisions pertaining to the use of End User Service Information (“**EUSI**”) by telecommunication licensees, while the MMCC was last reviewed in 2014 which focused on the obligations of Regulated Persons<sup>2</sup> towards consumers in the provision of media services.
- 1.5 In recent years, the telecommunication and media landscape has evolved rapidly. The increased availability of high-speed Internet access and advances

---

<sup>1</sup> The MMCC applies to such person who holds any broadcasting licence granted under the Broadcasting Act, or who is the proprietor of any newspaper, as defined in Section 2 of the Newspaper and Printing Presses Act (Cap. 206).

<sup>2</sup> “Regulated Person” is defined in paragraph 1.5(b)(xxix) of the MMCC to mean “any person specified by the Minister under section 16(3) of the MDA Act”. Pursuant to the Media Development Authority of Singapore (Regulated Persons) Notification 2003, such Regulated Persons include, *inter alia*, any person who holds a broadcasting licence granted under the Broadcasting Act (Cap. 297), whether before, on or after 1 January 2003, to provide (*inter alia*) subscription nationwide television services. The Info-communications Media Development Authority (Saving and Transitional Provisions) Regulations 2016 provides for the Media Development Authority of Singapore (Regulated Persons) Notification 2003 to be in force, and deems the same to be made under section 2 of the Info-communications Media Development Authority Act 2016.

in new technologies have had significant impact on businesses and industries, as well as on the way services are provided to, and consumed by the public.

- 1.6 Digital transformations such as e-commerce, Over-the-Top (“OTT”) content distribution, online ride hailing and e-payment applications are having a disruptive effect on the competitive dynamics across multiple industries. On one hand, the Internet has made it easier to deliver services to consumers and compare prices online, potentially intensifying competition. On the other, new business models that offer free or discounted goods and services (whilst recovering revenues elsewhere) have emerged, shifting the mode of competition from price to other dimensions. With data-driven business models becoming the norm in the digital economy, access to data and the use of algorithms is likely to drive competition dynamics in various markets. Network effects, scale and scope economies accentuate scale advantages in platform markets, which can lead to concentrated market structures. Some of these global companies are attracting the attention of competition authorities around the world, with questions being raised about the impact of their business models on competition and the relevance of current competition frameworks to address potential anti-competitive behaviour.
- 1.7 As these new business models transcend markets and geographic boundaries, IMDA recognises that both domestic and international coordination will be required to better manage competition concerns.
- 1.8 While IMDA continues to monitor these developments in the digital economy, IMDA will ensure that the competition frameworks for the telecommunication and media markets remain applicable and fit for purpose in the current environment. As highlighted by the Minister for Communications & Information in the Second Reading Speech on the Info-communications Media Development Authority Act 2016 (“IMDA Act”), IMDA will “*develop a holistic approach to regulation and competition management for the infocomm media sector through streamlined rules and regulations. This will make it easier for businesses to grow.*” Accordingly, IMDA has embarked on a holistic review of the TCC and the MMCC with the aim of developing a harmonised competition code for the Singapore telecommunication and media markets (the “**Converged Code**”).
- 1.9 IMDA is now launching this public consultation on the proposed Converged Code that will broadly cover the following topics:
  - (a) Market Overview and Convergence;
  - (b) Regulatory Principles;
  - (c) Dominance Classification and Duties of Dominant Entities;
  - (d) Anti-Competitive Conduct;
  - (e) Consumer Protection;
  - (f) Mergers and Acquisitions;
  - (g) Resource Sharing;
  - (h) Public Interest Obligations;
  - (i) Telecommunication Interconnection; and
  - (j) Administrative and Enforcement Procedures.

- 1.10 IMDA will conduct the public consultation on the proposed Converged Code in two stages. In the first public consultation, IMDA will consult on the broad policy proposals that IMDA is proposing to adopt in the proposed Converged Code. As the TCC and the MMCC are similar in various aspects (e.g., competition rules, acquisition and consolidation framework, consumer protection, etc.), IMDA will seek to harmonise the provisions that are substantively similar in effect and align the drafting of these provisions in the Converged Code. Where there are provisions that are found in only one code and not the other, IMDA also proposes to extend these provisions to the other market (e.g., telecommunication to media and vice versa), where appropriate or remove them. The objective is to ensure that a consistent regulatory framework is applied across both the telecommunication and media markets, to the extent possible.
- 1.11 Comments received from the first public consultation will be reviewed and incorporated into the policy proposals where accepted by IMDA. The second public consultation will seek comments on the actual drafting of the proposed Converged Code. IMDA targets to launch the second public consultation around end of 2019 or in early 2020.
- 1.12 The subsequent Parts II to XI of this consultation document set out the broad policy proposals for the proposed Converged Code.
- 1.13 IMDA is also seeking early views and comments in Part XII, on the issues and challenges brought about by the changing competitive dynamics in the digital economy and its impact on competition policy in the longer term.

## PART II: MARKET OVERVIEW AND CONVERGENCE

### Trends in Media and Telecommunication Markets

- 2.1. Between 2014-2018, IMDA undertook general market studies of key media and telecommunication markets to obtain an overview of the level of competition in these markets in Singapore. IMDA's market studies noted five key macro technology and business trends that have material impact on competition in the media and telecommunication markets over the next few years. These macro trends provide the broad context that guide this review and harmonisation of the TCC and the MMCC. The five key macro trends are as follows:
- (a) transition to Internet protocol ("IP")-based services on the Nationwide Broadband Network ("NBN");
  - (b) increasing competitive edge of service bundling;
  - (c) increasing competition from non-traditional digital services and platforms;
  - (d) growth of OTT media services; and
  - (e) diminishing reach of traditional media platforms.

The following sections provide a brief summary of the five key macro trends and the implications on the existing regulatory frameworks. Please refer to **Annex A** for a more detailed discussion.

#### Transition to IP-based Services on the NBN

- 2.2. A key development in the Singapore telecommunication markets has been the deployment of a nationwide optical fibre network infrastructure (i.e., the NBN), and the migration of residential Internet access, fixed-line telephone and Pay TV services from legacy copper-based Digital Subscriber Line ("DSL") and coaxial cable network infrastructure to the NBN infrastructure.
- 2.3. The NBN has allowed more broadband Internet service providers to enter the market to offer high-speed broadband services with a better End User experience and at more competitive prices. This has encouraged End Users to migrate from the incumbent platforms to the NBN platform, to enjoy ultra-high-speed (i.e. up to 10 Gbps) broadband services, including fibre-based IPTV services, and also migrate from the traditional Direct Exchange Lines ("DEL") to Voice over Broadband ("VoBB") for voice services. As of September 2018, fibre broadband subscriptions form about 89% of the total residential broadband Internet service subscriptions in Singapore, and of these, about 80% subscribe to broadband speeds of 1 Gbps and above.

#### Increasing Prevalence of Service Bundling

- 2.4. The equal access to wholesale inputs on the NBN has allowed new entrants to compete effectively in the broadband Internet access market. This has resulted in the gradual commoditisation of high-bandwidth fixed-line

broadband Internet access services, and in turn has driven the need for service providers to differentiate themselves and provide value to customers in other ways, including service bundling. One of the most popular service bundles is the “triple-play” combination of broadband Internet access with TV content (e.g., Pay TV) and mobile services. For example, IMDA estimates that close to 70% of StarHub’s broadband customers were on bundled services (three or more services)<sup>3</sup>, while about 82% of Singtel’s broadband customers were on bundled services.

- 2.5. Mobile network operators (“**MNOs**”) are also competing in the broadband Internet access market by offering substantial discounts on mobile services for customers who subscribe to both fixed-line broadband Internet access services and mobile services from the same operator, trying where possible to capture more of a household’s expenditure on telecommunication services and reduce “churn” across all services. Similarly, fixed-line broadband Internet service providers are seeking to enter the mobile market to compete by offering similar bundles.
- 2.6. It should be recognised that the prevalence of service bundling can be observed across industries, and is no longer unique to telecommunication and media markets. In fact, it is observed that this is how many technology firms and platform markets operate, providing multiple user-centric services using the same platform. For example, Grab has evolved from a company providing a platform to match ride hailing service between drivers and riders, to providing payment solutions, and food delivery services.

#### Increasing competition from non-traditional digital services and platforms

- 2.7. The nationwide availability of high-bandwidth fixed-line and mobile broadband services, and emergence of highly sophisticated End User devices, has enabled new, non-traditional players<sup>4</sup> to enter and play a key role in the media and telecommunication markets. Between Q1 2013 and Q3 2018, the total number of Short Message Service (“**SMS**”) messages carried over the mobile network decreased by 64%. Over the same period, the amount of mobile data sent over the mobile network increased by 244%, which indicate the increasing use of OTT communication services by consumers.
- 2.8. Consumers now have the ability to choose their service provider(s) based on a broader set of considerations, including content and services provided by players that lie outside of the traditional media and telecommunication space (e.g., OTT services, or a service provider’s own applications made available to its subscribers), in addition to network capabilities or service variants

---

<sup>3</sup> This is based on StarHub’s and Singtel’s financial results. For StarHub, as of 30 December 2017, there were 326,000 households with three or more services of Post-paid Mobile, Pay TV and Broadband and/or Digital Voice services. StarHub had a total of 471,000 broadband customers (based on bundled services or standalone broadband service). For Singtel, as of 30 December 2018, there were 515,000 households on triple play or quad play service bundles, while there were 628,000 fixed broadband Internet subscribers (based on bundled or standalone service).

<sup>4</sup> These include handset manufacturers and operating system providers such as Google and Apple, as well as OTT service providers such as WhatsApp, Skype and Netflix.

brought about by vertical integration. These developments, in some ways, reduce the competitive advantage of service providers who differentiate their services based on a vertically-integrated business and operational model.

### Growth of OTT Media Services

- 2.9. In recent years, significant growth of OTT media services has been observed globally. Singapore's OTT media services market (in terms of revenue) is projected to grow at a compounded annual growth rate ("CAGR") of 15.9% to hit US\$128m in 2022.<sup>5</sup> Online video consumption is also growing – the monthly reach, i.e., those who watched online movies/TV/videos or downloaded videos in the past month, has increased from 44% in 2012 to 81% in 2018.<sup>6</sup> Examples of OTT media services that have launched in Singapore include Netflix, Viu and CatchPlay etc.

### Diminishing Reach in Traditional Media Platforms

- 2.10. Traditional media markets such as Pay TV, radio and newspaper are operating under more challenging environment. The subscription TV revenue is projected to fall at a CAGR of 2.3% from US\$328m in 2017 to US\$292m in 2022<sup>7</sup>. This is mainly due to the growth of OTT services, as articulated in the earlier paragraph. In the Singapore radio market, radio advertising revenue is forecast to grow from US\$122m in 2017 to US\$124m in 2022.<sup>8</sup> Having said that, IMDA notes that Pay TV operators are also moving towards the OTT platform and Pay TV operators may pursue a platform exclusivity strategy whereby content is exclusive to the Pay TV operator's OTT platform.

### **Impact Arising from Macro Trends**

- 2.11. This section sets out the impact of the macro trends on six key markets:

- (a) Fixed-line Broadband Internet Access;
- (b) Domestic Fixed-line Telephony;
- (c) International Telephony;
- (d) Mobile Services;
- (e) Business Capacity Services; and
- (f) Pay TV.

#### Fixed-line Broadband Internet Access

- 2.12. The NBN is available to all providers on an open and non-discriminatory basis. This equal access to wholesale inputs has allowed new entrants to compete effectively in the retail fixed-line broadband Internet access market. This has resulted in (i) a trend towards the commoditisation of broadband connectivity as the market moves into services that are provided using the NBN; (ii) entry of new broadband retail service providers ("RSPs") who engage in service

<sup>5</sup> Source: PwC Global Entertainment and Media Outlook: 2018-2022, [www.pwc.com/outlook](http://www.pwc.com/outlook)

<sup>6</sup> Source: Nielsen Media Index 2012-2018

<sup>7</sup> Source: PwC Global Entertainment and Media Outlook: 2018-2022, [www.pwc.com/outlook](http://www.pwc.com/outlook)

<sup>8</sup> Source: PwC Global Entertainment and Media Outlook: 2018-2022, [www.pwc.com/outlook](http://www.pwc.com/outlook)

differentiation as well as price-based competition; and (iii) growing market share of existing players. As a result, there are now eight players in the retail residential broadband Internet access market. The same can be observed in the retail business broadband Internet access market, where there are close to 20 retail players providing high-speed broadband Internet access services either through the NBN, or through other operators' fibre network. The average household broadband speed has also increased from less than 6.9Mbps in September 2010 (before the introduction of services using NBN)<sup>9</sup>, to more than 190Mbps in December 2018.<sup>10</sup> In terms of prices, a non-NBN 100 Mbps product used to cost around S\$70 - S\$100 a month before September 2010; now, residential End Users can purchase a 300 Mbps broadband Internet access service at just S\$26 a month.<sup>11</sup> A 1 Gbps broadband Internet access service subscription can be obtained at as low as S\$34 per month.<sup>12</sup> This has brought about increased competition in the market and the current status whereby Dominant Licensee obligations are not applied in this market, can be maintained.

- 2.13. In addition, new entrants are now more likely to enter the market using fibre rather than using legacy networks. As a result, the Dominant Licensee obligations imposed on Singapore Telecommunications Limited ("Singtel") and StarHub Limited ("StarHub") for their respective legacy wholesale broadband products over copper and co-axial cable have become irrelevant, and will need to be reviewed.
- 2.14. However, there are other trends that may impact these competitive dynamics. An important example is the bundling of TV content and mobile services with a fixed-line broadband Internet access connection. There is also a trend of consumers accessing OTT content/services that may be provided independently from network connectivity, which may place a check on the impact of players' bundled offers. As for the bundling of mobile services, it is possible for new entrants that currently offer only fixed-line broadband Internet services to establish themselves as Mobile Virtual Network Operators ("MVNOs") to offer bundled services.
- 2.15. Given the above trends, there is a need for the Converged Code to address the potential impact on competition arising from bundling practices.

#### Domestic Fixed-line Telephony

- 2.16. Fixed-line broadband Internet service providers have been bundling VoBB with broadband Internet access at low or zero incremental cost, and as such, IMDA's studies found that the VoBB penetration for residential segments has increased with broadband penetration. However, a segment of the market is

---

<sup>9</sup> Based on Ookla NetIndex. See <https://www.mci.gov.sg/pressroom/news-and-stories/pressroom/2013/2/mcis-response-to-pq-on-internet-speed?pagesize=24&page=23>.

<sup>10</sup> Based on Ookla NetIndex. See <http://www.speedtest.net/global-index>.

<sup>11</sup> IMDA notes that RSPs no longer offer 100 Mbps broadband Internet access services using the NBN to new residential end users.

<sup>12</sup> Whizcomm offers a 24-month 1 Gbps broadband Internet access service that does not come with a wireless router at S\$34 per month.

likely to remain on traditional voice services delivered over the public switched telephone network (“**PSTN**”). These customers (e.g., in lower socio-economic categories and higher age groups), will continue to rely on standalone voice-only services.

- 2.17. Take-up of business VoBB is also dependent on the overall telecommunication needs of the business customer, hence there may be other competitive constraints in this market. It is noted that unlike for residential broadband Internet subscriptions, most fixed-line broadband Internet service providers do not bundle business VoBB with broadband Internet access service, which may explain the slower growth in the take up of business VoBB.
- 2.18. While residential domestic fixed-line telephony in the form of VoBB service is increasingly being treated as an add-on to broadband connectivity, IMDA’s studies showed that the market is mature with limited growth potential. The market share of Singtel in the residential domestic fixed-line telephony market remained stable over the past few years with competitors focusing on other markets such as broadband Internet access services and mobile services.
- 2.19. In terms of business fixed-line telephone services (wholesale and retail), IMDA’s market studies noted limited substitutability of traditional fixed-line telephony for VoBB. Whilst integrated services digital network (“**ISDN**”) solutions may be replaced by IP-based equivalents, a dedicated connection will still be required. While many operators have deployed their networks that are able to provide IP-based connections, these networks are limited to business districts. Further, getting dedicated connections from the NBN to provide only business fixed-line telephone service may not be cost-efficient. As such, any purchase of dedicated connections on a nationwide basis for the provision of business fixed-line telephone service is typically obtained from Singtel, while we recognise that the NBN provides a possible alternative if business fixed-line telephone services are bundled with broadband or managed data services provided over the NBN.
- 2.20. In view of the above, current Dominant Licensee obligations on Singtel’s fixed-line telephony services will continue to be relevant.<sup>13</sup> That said, there is a need to review the interconnection regime to take into account the ongoing migration of services and End Users from the traditional copper-based networks to IP-based networks.

#### International Telephony

- 2.21. International telephony is affected by OTT services, which are highly competitive and have exerted pressure on prices of traditional international telephony services. Consumers are turning to different ways of communicating overseas, using other widely available platforms such as Skype, etc.

---

<sup>13</sup> These obligations are stated under Section 4 of the TCC on the Duty of Dominant Licensees to Provide Service on Just, Reasonable and Non-Discriminatory Terms, and Section 6 on Interconnection with Dominant Licensees

- 2.22. The international telephony market (both residential and business) is already highly competitive in Singapore. Indeed, the increasing use of OTT services will provide additional competition within this market. As such, the current regulatory approach, whereby no single operator is found to be dominant and *ex ante* Dominant Licensee obligations are not applied in this market, can be maintained.

### Mobile Services

- 2.23. IMDA notes that the mobile market has become more vibrant with more competitive and innovative offerings in recent years. The take-up of OTT messaging and voice services has placed competitive restraints on traditional voice and messaging services such as SMS. However, it has also facilitated demand for data services. This, together with changes in consumer consumption behaviours, has the impact of changing the competitive dynamics for some services in the mobile market (messaging and to some extent, voice), with mobile service operators focusing their efforts on marketing data services and bundled offers.
- 2.24. Another trend is the increase in number of mass market (instead of niche) MVNOs. The entry of MVNOs such as Circles.Life, Zero Mobile, Zero1 and MyRepublic have introduced new competition dynamics to the mobile services market, such as data plans that have become more competitively priced. With the impending entry of a fourth MNO, TPG Telecom Pte Ltd, retail competition for mobile services is set to increase. The current regulatory approach, whereby no single operator is found to be dominant and *ex ante* Dominant Licensee obligations are not applied in this market, can be maintained.

### Business Capacity Services

- 2.25. Today, the availability of the NBN network can support a greater number of services than simply broadband connectivity and VoBB. These include dedicated, symmetrical links, and products that make use of this type of connectivity, such as business telephony and local managed data services (“**LMDS**”). However, Singtel remains a significant player in the provision of local leased circuits (“**LLCs**”) and LMDS. IMDA’s market studies noted that while the NBN provides the opportunity for RSPs to develop their own downstream business capacity products<sup>14</sup>, to date take-up by RSPs for such offerings via NetLink Trust’s network has not been significant. IMDA notes that the prices of Singtel’s LLC services and LMDS services have fallen by up to 80% since 2009.<sup>15</sup> While this may imply increasing competitive pressure faced by Singtel from operators who either roll out their own fibre networks or rely on the NBN for fibre access, IMDA notes that declining local connectivity prices may also be a global trend<sup>16</sup>, which suggests other factors causing the

---

<sup>14</sup> NetLink Trust offers dedicated (1:1) link to end users (and therefore structurally identical to a leased circuit tail), and which can be combined with another dedicated link somewhere else in Singapore to provide an end-to-end leased circuit.

<sup>15</sup> Based on Singtel’s published List Prices for MetroEthernet, IP-VPN and LLC services.

<sup>16</sup> [https://static1.squarespace.com/static/524d7f52e4b061d170a9b22e/t/57ebcb8e725e25b5bb179d7e/1475070866505/1110\\_Greg+Bryan\\_TELEGEOGRAPHY.pdf](https://static1.squarespace.com/static/524d7f52e4b061d170a9b22e/t/57ebcb8e725e25b5bb179d7e/1475070866505/1110_Greg+Bryan_TELEGEOGRAPHY.pdf)

fall in prices for services in both the LLC market and LMDS market, such as technological improvements which reduces the cost of providing connectivity services. For some customers who do not require a dedicated link, it is possible to substitute a leased line with high-speed broadband. However, in the majority of cases, high-speed broadband is not seen as a direct substitute for leased line, and is not classified as a competitive alternative.

- 2.26. In the international business connectivity markets (International Private Leased Circuits (“**IPLC**”) market and International Managed Data Service (“**IMDS**”) market) where IMDA had already deemed to be competitive, competition in the relevant markets appears to be increasing. IMDA notes the number of submarine cable systems landing in Singapore has increased from 15 in 2012 to 21 in 2018, with total potential cable capacity rising from 114Tbps to more than 488Tbps over the same period.<sup>17</sup> As such, the current regulatory approach whereby *ex ante* Dominant Licensee obligations are not applied in these markets, can be maintained.
- 2.27. Non-terrestrial capacity services include very small aperture terminal (“**VSAT**”), leased satellite bandwidth, satellite IPLC, satellite TV downlink, satellite TV uplink and digital video broadcasting-IP (“**DVB-IP**”) services. These markets continue to be competitive and there are no licensees deemed to be dominant.

### Pay TV

- 2.28. Against a backdrop of an increase in competition posed by OTT services, IMDA has observed a gradual decline in Pay TV subscription. IMDA notes that the number of StarHub and SingNet Pte Ltd (“**SingNet**”) subscribers have been declining from its peak of 962,000 subscribers in December 2014 to 790,000 subscribers in December 2018<sup>18</sup>. On the other hand, subscriptions to OTT services have increased.
- 2.29. IMDA also notes that the nationwide Pay TV operators (i.e., StarHub and SingNet) continue to innovate their service offerings, e.g., introduction of their own OTT services and introduction of media streaming box, to better cater to the needs of consumers.
- 2.30. The growth of OTT services is likely to have at least some impact on the competitive dynamics in the Pay TV market. IMDA also notes that Pay TV operators may use the OTT platform to broadcast Qualified Content (“**QC**”) given the growth in OTT services. Notwithstanding this, the regulation of Dominant Persons remains relevant.

### **Conclusion**

- 2.31. The availability of competitively-priced services such as wholesale products on the NBN, and OTT services, has had a positive impact in some of the key markets (i.e., fixed-line broadband Internet access, residential fixed-line

---

<sup>17</sup> Based on Telegeography figures

<sup>18</sup> Source: Pay TV operators’ websites.

telephony and Pay TV) in terms of facilitating greater competition. In other markets (e.g., business telephony market, and LMDS market), effective competition has not yet taken place.

- 2.32. Based on the findings of IMDA's market studies, IMDA views that the current regulatory approach remains largely relevant for the six key markets in review. However, IMDA is cognisant of the fundamental shift in competitive dynamics in the next few years brought about by the macro trends that are affecting the telecommunication and media industries, and seeks to prepare for the shift by introducing refinements and simplifications to the regulatory regime to bring about greater flexibility to deregulate specific markets as competition improves, and to regulate new markets if required; and to reflect the obsolescence of some of the technologies and hence some of the interconnection-related services, for example. Details of IMDA's proposals are described in Parts III to XI of the consultation document.

*Question 2:1: IMDA invites views and comments on the observed trends and developments in the telecommunication and media industries, as set out in Part II of the consultation document:*

## PART III: REGULATORY PRINCIPLES

- 3.1. This part of the consultation document concerns the regulatory principles governing the TCC and the MMCC. Specifically, Section 1.5 of the TCC and Section 1.6 of the MMCC provide the foundation of the respective codes and guide the implementation of both codes. The regulatory principles in both codes are as follows:

<b>Table 3.1: Regulatory Principles in TCC and MMCC</b>	
<b>TCC (Sub-sections 1.5.1 to 1.5.9)</b>	<b>MMCC (Sub-sections 1.6.1 to 1.6.8)</b>
Reliance on Market Forces	Reliance on Private Negotiations and Industry Self-Regulation
Promotion of Effective and Sustainable Competition	Basis for Regulatory Intervention
Promotion of Facilities-based Competition	(no equivalent in the MMCC)
Proportionate Regulation	Proportionality
Technology Neutrality	Technological Neutrality
Transparent and Reasoned Decision Making	Open and Reasoned Decision- Making
Avoidance of Unnecessary Delay	Avoidance of Unnecessary Delay
Non-discrimination	Non-Discrimination
Consultation with Other Regulatory Authorities	Consultation with Other Regulatory Authorities

- 3.2. IMDA notes that the regulatory principles in the TCC and the MMCC are largely similar and remains relevant in a converged environment ([Table 3.1](#)). The only exception is Sub-section 1.5.3 of the TCC on the “Promotion of Facilities-based Competition”, which is specific to the telecommunication market. Hence, IMDA proposes to harmonise the regulatory principles of the TCC and the MMCC by merging the following provisions given that they are substantively similar in effect (please refer to **Annex B** for the proposed drafting of the regulatory principles.).

### Reliance on Market Forces, Private Negotiations and Industry Self-Regulation

- 3.3. IMDA proposes to merge Sub-section 1.5.1 of the TCC and Sub-section 1.6.1 of the MMCC. IMDA remains of the view that competitive markets are most likely to bring about benefits to consumers and the market, such as lower prices and wider variety of services. Hence, IMDA will continue to rely on market forces, private negotiations and industry self-regulation, to the extent possible, before exercising IMDA’s regulatory powers in instances of market failures.

### Promotion of Effective and Sustainable Competition

- 3.4. Sub-section 1.5.2 of the TCC on Promotion of Effective and Sustainable Competition is largely similar in substance to Sub-section 1.6.2 of the MMCC on Basis for Regulatory Intervention. For example, both codes seek to eliminate anti-competitive behaviour and unfair methods of competition by industry participants, with the recognition that market forces are still more effective in bringing about consumer welfare. In harmonising these provisions, IMDA will adopt Sub-section 1.5.2 of the TCC, with adjustments to clarify that

IMDA will also intervene where necessary to ensure that public interest is safeguarded.

### Proportionate Regulation

- 3.5. IMDA proposes to merge Sub-section 1.5.4 of the TCC and Sub-section 1.6.3 of the MMCC to reflect that IMDA will continue to ensure that its regulations are not crafted such that it is broader than necessary to achieve its stated goals.

### Technology Neutrality

- 3.6. IMDA proposes to merge Sub-section 1.5.5 of the TCC and Sub-section 1.6.8 of the MMCC. IMDA will continue to ensure that the principle of Technology Neutrality is maintained in IMDA's policy reviews / developments, where possible. That said, as the phenomenon of convergence continues to evolve, with different platforms subject to differing degrees of competition, the application of this principle may result initially in the imposition of different regulatory obligations on service providers that use different platforms.

### Open, Transparent and Reasoned Decision Making

- 3.7. IMDA proposes to merge Sub-section 1.5.6 of the TCC and Sub-section 1.6.4 of the MMCC. IMDA will continue to be open, transparent and reasoned in the decisions that IMDA makes, to the extent possible.

### Avoidance of Unnecessary Delay

- 3.8. IMDA proposes to merge Sub-section 1.5.7 of the TCC and Sub-section 1.6.7 of the MMCC. IMDA will continue to make all decisions and issue directions within the timeframes specified in the Converged Code.

### Non-discrimination

- 3.9. IMDA proposes to merge Sub-section 1.5.8 of the TCC and Sub-section 1.6.5 of the MMCC. IMDA will continue to treat similarly situated licensees and persons on an equivalent basis. Where there needs to be differences in the regulatory treatment, IMDA's decisions / directions will explain the relevant differences.

### Consultation with Other Regulatory Authorities

- 3.10. IMDA proposes to merge Sub-section 1.5.9 of the TCC and Sub-section 1.6.6 of the MMCC. IMDA will continue to consult other regulatory authorities, where feasible and appropriate, in order to facilitate the development of a consistent regulatory policy that promotes fair and effective competition, and serves the public interest.

## Promotion of Facilities-based Competition in the Telecommunication Industry

3.11. IMDA proposes to retain this regulatory principle for the telecommunication market only, given that it is not relevant to the media market.

*Question 3:1: IMDA invites views and comments on the following proposals:*

- (a) *to merge the common regulatory principles of the TCC and MMCC; and*
- (b) *to retain the regulatory principle on Promotion of Facilities-based Competition for the telecommunication market only.*

## PART IV: DOMINANCE CLASSIFICATION AND DUTIES OF DOMINANT ENTITIES

- 4.1 Under the TCC and the MMCC, licensed entities who (a) operate facilities used for the provision of telecommunication services that are sufficiently costly or difficult to replicate, or (b) who have significant market power, are classified as “**Dominant Licensees**”, or “**Dominant Persons**”, in the TCC and the MMCC respectively. These entities are subject to a greater degree of *ex ante* and *ex post* regulation to ensure that they do not abuse their dominant positions in a market to the detriment of competition and consequently, End Users. For the purposes of this Consultation Document, the term “**Dominant Entities**” shall be used to refer to both “Dominant Licensees” as defined in the TCC and “Dominant Persons” as defined in the MMCC.
- 4.2 The *ex ante* requirements for Dominant Entities are currently set out in Section 4 of the TCC and Section 6 of the MMCC. Additionally, IMDA may require Dominant Licensees to provide services to facilitate interconnection with other telecommunication licensees (such as Interconnection Related Services and Mandated Wholesale Services, as specified by IMDA), under Section 6 of the TCC.

### **Dominance Classification**

#### Criteria used for Dominance Classification

- 4.3 In designating a Dominant Entity, IMDA will assess whether the entity fulfils the relevant criteria as set out under Sub-section 2.2.1 of the TCC, and Sub-section 5.3 of the MMCC.
- 4.4 Specifically, under the TCC, Dominant Licensees are entities that either:
  - (a) operate facilities used for the provision of telecommunication services that are sufficiently costly or difficult to replicate such that requiring new entrants to do so would create a significant barrier to rapid and successful entry into the telecommunication market in Singapore by an efficient competitor; or
  - (b) have the ability to exercise Significant Market Power (“**SMP**”) in any market in which it provides services pursuant to its telecommunication licence.
- 4.5 Under the MMCC, Dominant Persons are Regulated Persons that have SMP in any relevant media market.
- 4.6 IMDA proposes that the same standards for dominance classification, as captured in paragraph 4.4 above, be applied to both the telecommunication and media markets. This is in consideration that, similar to a

telecommunication licensee, a media licensee may also operate facilities which are used for the provision of licensed media services (i.e., broadcast services licensed under the Broadcasting Act and printing, publishing, selling and/or distributing of newspaper under the permit pursuant to Newspaper and Printing Presses Act) that are sufficiently costly or difficult to replicate, such that requiring new entrants to do so would create a significant barrier to rapid and successful entry into the media market by an efficient competitor. IMDA would like to clarify that at this juncture, based on the current market conditions, IMDA does not anticipate any of the existing media licensees to meet the standards specified in paragraph 4.4(a). Notwithstanding this, IMDA reserves the right to review, and apply the standards specified in paragraph 4.4(a) to any media licensees (if necessary), should there be any changes to the market. In the event that IMDA intends to classify any media licensee as dominant under paragraph 4.4(a), IMDA will consult the industry, as well as provide an opportunity to the media licensee concerned to make representations.

IMDA therefore proposes that, in the Converged Code, the standards for dominance classification would be amended as follows:

*Dominant Entities are entities that either:*

- (a) *operate facilities used for provision of telecommunication and/or media services that are sufficiently costly or difficult to replicate such that requiring new entrants to do so would create a significant barrier to rapid and successful entry into the telecommunication and/or media market in Singapore by an efficient competitor; or*
- (b) *have the ability to exercise SMP in any market in which it provides services pursuant to its telecommunication or media licence.*

*Question 4:1: IMDA invites views and comments on the proposed standards for dominance classification under the Converged Code.*

#### Threshold to be Used for Initial Presumption of SMP

- 4.7 In the assessment of an entity's ability to exercise SMP in any telecommunication or media market, IMDA takes into account a range of factors, including market share, entry barriers and countervailing buyer power. IMDA had previously explained that, all things being equal, a larger market share indicates a greater potential ability to act anti-competitively. Hence, a large market share is used as an initial presumption of SMP. However, IMDA had also explained that this presumption may be overcome by evidence that demonstrates that the entity, in fact, is subject to effective competition.

- 4.8 Currently, both the media and telecommunication regulatory regimes provide for a rebuttable presumption that an entity has SMP if its market share<sup>19</sup> for the relevant market is in excess of a certain percentage (“**SMP Presumption Threshold**”). The SMP Presumption Threshold for the media industry is set at 60%, while the SMP Presumption Threshold for the telecommunication industry is set at 40%.<sup>20</sup>
- 4.9 IMDA considers that there is merit in adopting a common SMP Presumption Threshold across both industries under the Converged Code. In the telecommunication industry, IMDA had adopted a lower SMP Presumption Threshold as the telecommunication industry was still evolving from a monopolistic one to an effectively competitive one, and adopting a higher presumption threshold might relieve the Dominant Entity from dominance classification even though the market might in fact not be effectively competitive. Nonetheless, IMDA notes that competition has since developed in many key retail telecommunication markets (such as broadband, mobile, and business services). Setting the SMP Presumption Threshold at 40% for the telecommunication industry may now be too low, and may unnecessarily trigger a presumption of SMP, when the market is in fact competitive.
- 4.10 IMDA has also considered the level of competition in the key media markets such as subscription television, radio and newspaper publishing services. IMDA is of the view that there is also scope to reconsider the SMP Presumption Threshold given the smaller number of players in the relevant media market, and a market share of 50% or more is likely to be indicative of SMP.
- 4.11 In considering the appropriate new presumption threshold percentage to adopt, IMDA notes that internationally, there is no ‘standard’ percentage market share figure for such presumption thresholds. For example, the SMP Presumption Threshold adopted by competition regulatory agencies such as the European Commission (“EU”) and the US Federal Trade Commission, is 50%, while the Competition and Consumer Commission of Singapore (“CCCS”) considers a market share above 60% as *indicative* of an entity being dominant in that market. While there are also other jurisdictions which do not set any SMP Presumption Threshold<sup>21</sup>, IMDA considers that the SMP Presumption Threshold remains relevant as it provides guidance to the telecommunication and media markets, and IMDA is considering 50% as a possible common threshold for both markets, given the observations above.

---

<sup>19</sup> In determining the market share, IMDA will seek to use the unit of measurement that best reflects the characteristics of the market. In doing so, IMDA may look at, for instance, revenues, unit sales, capacity or other relevant units of measurement.

<sup>20</sup> Refer to Advisory Guidelines Governing Petitions for Reclassification and Requests for Exemption Under Sub-Sections 2.3 and 2.5 of the Code of Practice for Competition in the Provision of Telecommunication Services 2012.

<sup>21</sup> Such as Hong Kong and New Zealand, for example.

- 4.12 Nonetheless, IMDA would like to highlight again that the SMP Presumption Threshold will only be used as an initial presumption, and will not be the only factor considered for assessing market power and dominance. This presumption may be overcome by evidence that demonstrates that the entity, in fact, is subject to effective competition. IMDA would highlight that conversely, an entity with market share below the SMP Presumption Threshold may also be found to be dominant if there is sufficient evidence to support such a finding, for example, after taking into consideration other factors such as high barriers to entry into that market and the absence of countervailing buyer power. With this in mind, IMDA also considers that it would be more appropriate to set out the SMP Presumption Threshold in the guidelines for the Converged Code<sup>22</sup>, together with other factors considered in the assessment of SMP.

*Question 4.2: IMDA invites views and comments on the appropriate level for the SMP Presumption Threshold.*

**“Market-by-Market” versus “Licensed Entity” Approach to Dominance Classification**

- 4.13 Under the MMCC, a licensee is classified as a Dominant Person if it is found to have SMP in specific media markets (“**Market-by-Market**” approach). Under the TCC, a Dominant Licensee is assumed to be dominant in all telecommunication markets it participates in (“**Licensed Entity**” approach), unless proven otherwise.<sup>23</sup>
- 4.14 As the telecommunication market in Singapore was still transiting from a monopolistic to a competitive one since full market liberalisation in 2000, IMDA had adopted the Licensed Entity approach as it believed that a Market-by-Market approach was likely to arrive at the same conclusion of dominance by the specific Dominant Licensees. In any case, Dominant Licensees could be exempted from Dominant Licensee obligations on a market-by-market basis once the respective markets become effectively competitive. Over the last 15 years, in response to Singtel’s four requests for exemption, IMDA has already defined and studied numerous telecommunication markets<sup>24</sup>. Through these proceedings, IMDA has relieved Singtel of Dominant Licensee obligations in numerous markets where IMDA has determined that Singtel no longer has

---

<sup>22</sup> This will follow the current TCC approach where the SMP Threshold is set out in the Reclassification and Exemption Guidelines.

<sup>23</sup> A Dominant Licensee can seek IMDA’s approval to be exempted from Dominant Licensee obligations in certain markets which the Dominant Licensee views it is not dominant in.

<sup>24</sup> For example, in 2003, then-IDA reviewed the wholesale and retail International Telephone Services markets. Then-IDA conducted another review of the retail International Telephone Services market in 2006 and 2007. In 2004 and 2005, then-IDA studied the competitiveness of 10 additional markets, specifically: Backhaul, Terrestrial IPLC, IMDS, International IP Transit, Leased Satellite Bandwidth, VSAT Service, DVB -IP, Satellite TV Uplink, Satellite TV Downlink and Satellite IPLC. Then-IDA again reviewed three of these markets - Backhaul, Terrestrial IPLC and IMDS – in 2008 and 2009. During that review, then-IDA also assessed the level of competition in the Business Local Telephony Service, LLC and LMDS markets.

SMP<sup>25</sup>, and the obligations are no longer necessary to protect consumers and to preserve effective competition amongst Licensees. IMDA's approach has reduced the need for IMDA and the industry to engage in costly and time-consuming market review exercises in every market. In IMDA's view, the Licensed Entity approach is a prudent one during the initial stages of market liberalisation, and has served the Singapore telecommunication industry well.

- 4.15 Nonetheless, it is timely to review the continued application of such an approach in view of the level of competition that has developed over the years, and the convergence and the emergence of new markets. In particular, with the NBN lowering entry barriers for new entrants, and the emergence of new markets and services such as OTT applications and Internet of Things, it may no longer be reasonable to presume that a Dominant Licensee would automatically be dominant in these new markets, unless proven otherwise.
- 4.16 Hence, IMDA proposes to adopt a "Market-by-Market" approach for telecommunication licensees moving forward, whereby a telecommunication licensee will be classified as a Dominant Licensee based on specific market(s) or facility(ies). This will be aligned with the approach adopted under the MMCC.
- 4.17 Moving forward, designated Dominant Entities will not be presumed to be dominant for new services offered in *new* markets. This will provide greater flexibility and certainty for Dominant Entities entering new markets and incentivise Dominant Entities to innovate and offer new services, potentially bringing about greater benefits for consumers. Dominant Licensees will nonetheless be required to demonstrate to IMDA that the new services do not fall within any existing markets in which the Dominant Licensees are currently participating in and in which they are classified as dominant. This would be similar to the existing process whereby IMDA would assess whether new services introduced by an existing Dominant Licensee would be exempted from Dominant Licensee obligations.
- 4.18 Notwithstanding that the MMCC currently takes a Market-by-Market approach for dominant classification, IMDA notes that the Dominant Person is not required to prove that the new service it introduces does not fall within the existing market where it has SMP. To adopt a consistent approach and reduce confusion for the industry, in particular for existing Dominant Entities who operate in both the telecommunication and media markets, IMDA proposes that the same process be applied to the media markets, i.e., existing Dominant Persons would be required to demonstrate to IMDA that the services they introduce are new and do not fall within any existing markets they currently operate in and in which they are classified as dominant.
- 4.19 With the above proposal, existing Dominant Entities will continue to be classified as dominant for *existing* services and facilities that they operate, and

---

<sup>25</sup> These are International Telephone Services, Backhaul, Terrestrial IPLC, IMDS, International IP Transit, Leased Satellite Bandwidth, VSAT, DVB-IP, Satellite TV Uplink, Satellite TV Downlink and Satellite IPLC markets

subject to *ex ante* regulation, where applicable.<sup>26</sup> As provided under the current telecommunication and media regulatory regimes, the Dominant Entity may file a request for exemption with IMDA if the Dominant Entity considers that it is no longer dominant in an existing market. IMDA considers that this is a reasonable approach as many of the existing telecommunication service markets have been reviewed, arising from requests for Dominant Licensee exemption, over the years. For those markets which are found to be effectively competitive, IMDA has already relieved the relevant Dominant Licensee of Dominant Licensee obligations, while those markets that IMDA has not granted relief are those that IMDA has found the Dominant Licensee to continue to be dominant in. It will be reasonable to require the Dominant Licensee to demonstrate that it is no longer dominant in any existing market before it is relieved of its Dominant Licensee obligations.

- 4.20 IMDA also proposes to apply Sub-section 2.4 of the TCC, which requires the Dominant Licensees to seek IMDA's prior approval for the transfer of facilities and business, to the media industry. In terms of facilities, only facilities owned by the Dominant Person which are used for the provision of licensed media services (i.e., services licensed under the Broadcasting Act and printing, publishing, selling and/or distributing of newspaper under the permit pursuant to Newspaper and Printing Presses Act) shall apply. This is to ensure that the Dominant Person does not circumvent its obligations by transferring the assets and/or part of the business from the Dominant Person to a non-Dominant Person.
- 4.21 In addition, as mentioned in Part II of the consultation document, Singtel and StarHub have announced the cessation of the legacy DSL network and coaxial cable network respectively. The Dominant Licensee obligations associated with the DSL and coaxial cable network, including the obligation to provide wholesale DSL and cable coaxial broadband service to other operators, will be removed when all services provided under these networks have ceased.

*Question 4:3: IMDA invites views and comments on the proposed changes to the dominance regime for the telecommunication and media industries, specifically;*

- (i) *to adopt the Market-by-Market approach for the dominance classification of a telecommunication licensee in new markets; and*
- (ii) *to require Dominant Persons to demonstrate whether the new service(s) they introduce fall within the market(s) in which they are dominant.*

### **Duties of a Dominant Entity**

- 4.22 As Dominant Entities are not subject to effective competitive market forces, they will be subject to additional regulatory requirements, including specific duties imposed on an *ex ante* basis. Such *ex ante* regulation seeks to ensure that a Dominant Entity does not behave anti-competitively, such as exploiting

---

<sup>26</sup> This would mean all markets that the Dominant Entity operates in, except those markets where an exemption from the Dominant Entity obligations has previously been granted by IMDA.

the Dominant Entity's market power by refusing to provide services to consumers and other licensees on just, reasonable and non-discriminatory basis. Where there is effective competition, *ex post* prohibitions (such as prohibition on abuse of dominant position) may be sufficient to guard against anti-competitive market conduct of the licensees. As such, *ex ante* regulation and *ex post* prohibitions serve as complementary instruments in achieving IMDA's policy objectives in ensuring effective competition in the telecommunication and media industries.

- 4.23 *Ex ante* duties are currently set out under both the TCC and the MMCC for the provision of services to either End Users or other licensees. Section 4 of the TCC sets out the duties of Dominant Licensees in the provision of both retail and wholesale services. Section 6 of the MMCC sets out both the duties of the Dominant Person and prohibitions on the abuse of dominant position by the Dominant Person. The latter are similar to the *ex post* regulations on the abuse of dominant position found under Section 8 of the TCC.
- 4.24 Under the Converged Code, the provisions in Sections 4 and 8 of the TCC and Section 6 of the MMCC will be harmonised into two sections covering duties and obligations of Dominant Entities – one focusing on the *ex ante* duties of Dominant Entities and the other on general prohibitions against the abuse of dominant position. The proposals for the latter are set out in Part V of this Consultation Document.

#### Duties to be applied to Dominant Entities in both telecommunication and media industries

- 4.25 Currently, under the TCC and the MMCC, Dominant Entities are subject to the following general duties<sup>27</sup>:
- (a) Duty to provide service at just and reasonable prices, terms and conditions (in the TCC only);
  - (b) Duty to provide service on a non-discriminatory basis;
  - (c) Duty to provide unbundled services; and
  - (d) Duty to provide service on reasonable request.
- 4.26 IMDA proposes to continue applying the above duties in (b) to (d) to all Dominant Entities under the Converged Code. These specific *ex ante* duties have been effective in ensuring that Dominant Entities do not abuse their dominance in the respective telecommunication or media market(s), to the detriment of the industry and End Users.
- 4.27 Further, IMDA notes that Sub-section 4.2.1.1 of the TCC requires Dominant Licensees to provide services at *just and reasonable* prices, terms and

---

<sup>27</sup> IMDA notes that while discrimination and mandatory bundling are listed as "prohibitions" under Sub-section 6.4 of the MMCC, for consistency, IMDA will describe these as "duties" under the Converged Code, such that *ex ante* provisions are "duties" and *ex post* abuse of dominance provisions are "prohibitions".

conditions, while Sub-section 6.4.2.4 of the MMCC requires Dominant Persons to provide services on terms that are not *abusive or over-reaching*. IMDA notes that the intent of both Sub-sections is to ensure that customers of Dominant Entities (both End Users and other operators) are able to procure services from Dominant Entities on fair terms and conditions, albeit with a difference in the description of the standards applied (as shown in italics above). For the purpose of alignment, IMDA proposes to apply a common standard across both industries where the Dominant Entities have the general duty to provide services at *fair and reasonable prices, terms and conditions*. We note that this is in line with the terminology used in European competition cases and also by the CCCS.

#### Duties specific to each industry

- 4.28 While IMDA strives to harmonise the duties imposed on all Dominant Entities, we recognise that there are certain duties that are unique to either the telecommunication or media industries, and are not relevant, or cannot apply to, the other industry. We set out the details below.

#### Media Industry Specific Duties

- 4.29 Sub-sections 6.3.2 and 6.3.3 of the MMCC require the Dominant Persons to provide fair access to programme lists and to provide advertising capacity to other media licensees respectively. IMDA notes that these duties are media industry specific and not relevant to the telecommunication industry. As such, IMDA proposes that these duties remain applicable to only Dominant Persons in the media industry.

#### Telecommunication Industry Specific Duties

- 4.30 Similarly, IMDA notes that there are specific duties in the TCC that are not found in the MMCC, namely:
- (a) duty to allow resale of End User services (Sub-section 4.2.2.2 of the TCC);
  - (b) duty to allow sale agency (Sub-section 4.2.2.3 of the TCC);
  - (c) duty for wholesale services (Sub-section 4.3 of the TCC); and
  - (d) duties in relation to tariffing (Sub-sections 4.4 to 4.7 of the TCC).
- 4.31 IMDA notes that (a) to (c) above regulate the sale/resale of service involving a Dominant Licensee and another telecommunication licensee. Such an arrangement may not be relevant to the media industry, given that most content is acquired and broadcasted to the End Users directly by the same entity, with resale or wholesale of content in the media industry occurring on a less frequent basis at the present time. By contrast, IMDA notes that telecommunication licensees often require telecommunication services from other telecommunication licensees (usually Dominant Licensees) as an input for onward sales to End Users. IMDA therefore proposes not to apply the duties in paragraphs 4.29(a) to (c) to the media industry at this time.

- 4.32 For duties in relation to tariffing, IMDA notes that Sub-sections 4.4 to 4.7 of the TCC outline the procedures and criteria for the filing and review of tariffs. IMDA notes that media broadcast services provided by Dominant Persons are currently not required to file tariffs. This is because IMDA had previously noted that a significant proportion of cost involved in the provision of media broadcast service in Singapore is driven by the content acquisition cost. Given that Singapore is generally a price taker for content and prices of content are highly dependent on the negotiation between content owners and Dominant Persons, IMDA is of the view that there is no need for Dominant Persons to seek IMDA's prior approval on the tariffs of media broadcast services. Since there is no tariff filing requirement, it follows that the duties relating to tariffing should not apply to the media industry.
- 4.33 In summary, IMDA proposes that duties mention in paragraphs 4.29(a) to (d) will remain applicable to only Dominant Licensees in the telecommunication industry.
- 4.34 The table below sets out the duties that will apply to the respective Dominant Entities.

<b><u>Table 4.1: Duties Applicable to Dominant Entities</u></b>		
<b>Description of Duties</b>	<b>Telecommunication</b>	<b>Media</b>
Duty to provide service at just and reasonable prices, terms and conditions	✓	
Non-discrimination	✓	
Service Unbundling	✓	
Duty to provide service on reasonable request	✓	
Duty to allow resale of End User services	✓	X
Duty to allow sales agency	✓	X
Duty for Wholesale Services	✓	X
Duties in relation to tariff	✓	X
Duty to provide fair access to programme lists	X	✓
Duty to provide access to advertising capacity	X	✓

*Question 4:4: IMDA invites views and comments on the application of the ex ante Dominant Entity duties across both telecommunication and media industries.*

#### Specific proposals for tariff filing for telecommunication services

- 4.35 As noted above, Dominant Licensees in the telecommunication industry are subject to the tariff filing, review and publication obligations for markets which they are found to be dominant in. Sub-section 4.4 of the TCC requires a Dominant Licensee to file a tariff with IMDA and obtain IMDA's written approval prior to offering (or modifying):
- (a) End User services, including standard residential and business services, services customised for specific customers, and promotional services;

- (b) resale services;
  - (c) wholesale services; and
  - (d) other services that IMDA directs the Dominant Licensee to offer.
- 4.36 The existing tariff regime has served the Singapore telecommunication industry well. IMDA notes that there have been few competition concerns raised with respect to the existing Dominant Licensees' service offerings at the retail level, compared to the early days of market liberalisation. For instance, IMDA has not received any feedback from competing licensees regarding the approved tariffs, which the Dominant Licensees are required to publish on their websites. With the nationwide rollout of the NBN, and more than 25 licensees offering retail broadband services to End Users over the NBN infrastructure, there appears to be healthy competition at the retail level. These market developments appear to suggest that it is no longer necessary for IMDA to continue to scrutinise every retail tariff offered by Dominant Licensees.
- 4.37 IMDA therefore proposes to modify the current tariff-filing review regime imposed on Dominant Licensees, to focus more on wholesale and resale tariffs offered to other telecommunication licensees, and less on retail tariffs offered to End Users. Specifically, IMDA proposes that Dominant Licensees no longer need to file for approval tariffs for retail services, including modifications made to tariffs of existing retail services, and the offering of promotions or customised schemes involving these services. Instead, IMDA proposes that a Dominant Licensee need only to:
- (a) **notify** IMDA on new retail tariffs offered to End Users, modifications to approved tariffs of existing retail services, and on offerings of customised or promotional schemes on these services ("Info-tariffs");
  - (b) publish the Info-tariffs; and
  - (c) seek IMDA's approval to withdraw any of the existing retail tariffs.
- 4.38 IMDA will continue to require certain telecommunication services, which the public may view as basic services, to continue to be submitted to IMDA for tariff approval. This is to ensure that such services are provided on fair, reasonable and non-discriminatory basis. At this juncture, IMDA considers these services to include fixed-line telephone and payphone services. IMDA will issue a notice on the list of these services following the issuance of the Converged Code. IMDA will reserve the right to review, amend, reduce or add to the list of services to be included, and would notify the affected Dominant Licensees, including the reason for such.
- 4.39 The proposed notification and publication requirements are prudent measures to ensure that both IMDA and the industry can continue to monitor for any potential anti-competitive issues that may arise. The *ex ante* duties (including duties to provide services on non-discriminatory basis, at fair and reasonable prices, terms and conditions) will continue to apply to the Info-tariffs. IMDA reserves the right to investigate such Info-tariffs and take appropriate enforcement measures, including directing the Dominant Licensees to submit

tariffs for IMDA's prior written approval for specific telecommunication services as remedial action for contraventions, if necessary.

- 4.40 The obligation on Dominant Licensees to seek IMDA's approval to withdraw any such tariffs is to ensure that such withdrawals will not have adverse impact on the retail End Users and/or wholesale customers, and no one will be left without access to telecommunication services due to the withdrawal of the tariffs.
- 4.41 As regards the introduction of new retail services which have not been offered by the Dominant Licensees before, but still fall within existing markets that the Dominant Licensee is currently participating in and remains in a position of dominance, IMDA proposes that Dominant Licensees shall seek IMDA's views on whether such new retail services are to be classified as a service that is subject to IMDA's approval. Otherwise, it would be considered as Info-tariffs. As mentioned in paragraph 4.17, Dominant Licensee would not be assumed dominant in new telecommunication markets it is entering into and therefore Dominant Licensee obligations (including tariff-filing) will not apply to services which falls into those new telecommunication markets.
- 4.42 IMDA considers that there continues to be a need to monitor the wholesale and resale tariffs provided by Dominant Licensees as they operate facilities that are sufficiently costly or difficult to replicate which other licensees may rely on to provide downstream services. The filing of wholesale and resale tariffs will help ensure that Dominant Licensees do not discriminate in favour of their downstream entities.
- 4.43 IMDA's proposals as regards tariff-filing are as summarised in the following table:

<b>Table 4.2: Summary of Changes to Tariff Filing Regime</b>			
<b>Description</b>		<b>Existing Requirement</b>	<b>Proposed Requirement</b>
Retail services for End Users	<b>Modifications to Existing Tariff</b>	For approval	Notify IMDA and publish tariff
	<b>New Tariff</b>	For approval	Notify IMDA and publish tariff (subject to IMDA's confirmation that they qualify as Info-tariffs)
	<b>Withdrawal of Existing Tariff</b>	For approval	For approval
Designated retail services for End Users that require IMDA's approval (at this juncture, only)	<b>Modifications to Existing Tariff</b>	For approval	
	<b>New Tariff</b>		
	<b>Withdrawal of Existing Tariff</b>		

fixed-line telephone and payphone services)		
Resale services	<b>Modifications to Existing Tariff</b>	For approval
	<b>New Tariff</b>	
	<b>Withdrawal of Existing Tariff</b>	
Wholesale services	<b>Modifications to Existing Tariff</b>	For approval
	<b>New Tariff</b>	
	<b>Withdrawal of Existing Tariff</b>	

Note: "Existing Services" covers approval/publication of customised service agreements, service revisions, short term promotions, etc. "New Services" refers to the approval/publication of newly introduced services which falls within any existing markets that the Dominant Licensee is currently participating in and remains in a position of dominance.

*Question 4:5: IMDA invites views and comments on the proposal to shift to a notification and publication regime for most retail tariffs (other than for withdrawal of such tariffs), while retaining the approval regime for wholesale, resale and certain retail tariffs.*

## PART V: ANTI-COMPETITIVE CONDUCT

- 5.1. This part of the Consultation Document concerns the competition provisions contained in the TCC and the MMCC. Specifically, Sections 8 and 9 of the TCC as well as Sections 4, 6 and 7 of the MMCC (collectively, the “**Competition Provisions**”) contain provisions governing abuse of a dominant position, unfair methods of competition, and agreements involving Licensees that unreasonably restrict competition in the telecommunication and media industries respectively, and provide the basis for IMDA to take enforcement action where necessary.
- 5.2. IMDA intends to harmonise the TCC and the MMCC by merging provisions that are substantively similar in effect and drafting, and make amendments to the TCC or the MMCC provisions (e.g., substantive editorial changes, extension of application of provisions to the other industry,<sup>28</sup> removal of provision, etc.) only where necessary.
- 5.3. In harmonising the Competition Provisions of the TCC and the MMCC, IMDA has taken reference from their empowering legislations, Singapore’s general competition law, and international best practices in competition law where appropriate and justified.

### Abuse of a Dominant Position

- 5.4. Sub-section 8.2 of the TCC and Sub-section 6.4 of the MMCC cover conduct that amounts to an abuse of a dominant position in the telecommunication and media industries respectively. While the former applies to all telecommunication licensees, the latter only applies to Regulated Persons (“**RP**”) that have been classified as Dominant Person<sup>29</sup>.
- 5.5. IMDA notes that the TCC’s abuse of dominant provision was revised following the second triennial review in 2009 to apply to any telecommunication licensee that is found, following any enforcement investigation, to possess SMP, instead of confining it to apply to only licensees that have been classified as dominant. The TCC’s abuse of dominant provision is also aligned with practices internationally (e.g., European Union (“**EU**”), United Kingdom (“**UK**”), Canada, Australia) and Singapore’s general competition law, which prohibits *any* entity with SMP from abusing its dominant position. Should an entity have SMP and engage in conduct that constitutes an abuse of that market power, the competition authority could take appropriate enforcement action. Therefore, for the purpose of the Converged Code, IMDA intends to adopt the same standard on abuse of a dominant position across both the telecommunication and media industries, i.e., the abuse of dominant provision can apply to any telecommunication licensees and RPs without the need for the entity to have been pre-classified as dominant.

---

<sup>28</sup> Essentially, the application of a current TCC provision to the media markets, or application of a current MMCC provision to the telecommunication markets.

<sup>29</sup> In accordance with Section 5 of the MMCC, IMDA may classify a RP to be a dominant person if it is considered to have a dominant position in any media market.

- 5.6. Furthermore, IMDA notes that Sub-section 6.4 of the MMCC contains two provisions, namely Mandatory Bundling and Imposition of Abusive or Over-reaching Contract Terms, which are similar to the *ex ante* provisions found in the TCC<sup>30</sup> which apply to dominant telecommunication licensees only. Our proposals for these provisions are set out above in Part IV of the Consultation Document, to align the standards and terminology that apply to the two industries.

General prohibition on abuse of a dominant position

- 5.7. Sub-section 8.2 of the TCC and Sub-section 6.4.1 of the MMCC relate to the general prohibition against the abuse of a dominant position by a licensee. Specifically, Sub-section 8.2 of the TCC provides that,

*"a licensee that has Significant Market Power in any telecommunication market in Singapore must not use its dominant position in that market in a manner that unreasonably restricts, or is likely to unreasonably restrict, competition in any telecommunication market in Singapore",*

while Sub-section 6.4.1 of the MMCC states that,

*"a Dominant Person must not use its position in any media market in a manner that unreasonably restricts competition in, or has the object or effect of preventing, restricting or distorting competition in, or in any part of, a media market or Ancillary Media Services market".*

IMDA further notes that Section 63(1) of the IMDA Act spells out that,

*"any conduct on the part of one or more regulated persons that (a) amounts to an abuse of dominant position in any market (or any part of it) connected to the provision of media services in Singapore; and (b) may, as a result affect the media industry in Singapore, is prohibited".*

- 5.8. While the TCC and the MMCC provisions serve the same intent of prohibiting an abuse of a dominant position, the differences in the drafting affect the application of the respective provisions. The TCC adopts the test of "unreasonable restriction of competition". The MMCC, on the other hand, uses the test of "*object or effect*". In this regard, IMDA notes that the test of "unreasonable restriction of competition" is generally utilised as a test for abuse of a dominant position by the European Commission ("EC") and under Singapore's general competition law. Conversely, the test of "*object or effect*" is typically adopted by competition authorities globally for the assessment of anti-competitive agreements. Therefore, to be consistent with international best practices, IMDA intends to adopt the TCC test of "unreasonable restriction of competition" as the test for abuse of a dominant position.

---

<sup>30</sup> Duty to Provide Unbundled Services (Sub-section 4.2.1.3 of the TCC) and Duty to Provide Service at Just and Reasonable Prices, Terms and Conditions (Sub-section 4.2.1.1 of the TCC) respectively.

- 5.9. While the general prohibition envisages an abuse of a dominant position by a single party, IMDA notes that it is possible for one or more parties to leverage their collective market power to conduct an abuse.
- 5.10. The concept of joint dominance is not unique to Singapore or the telecommunication and media industries. The EU<sup>31</sup> and Singapore's general competition law<sup>32</sup> already cover the abuse of joint dominance under their respective competition regime. For example, in the EU, a collective dominant position may be established when undertakings have substantially the same position as a single dominant company vis-à-vis their customers and competitors, provided that no effective competition exists between them. In Singapore, the general competition law adopts that a collective dominant position may be held when two or more legally independent undertakings present themselves or act together on a particular market as a collective entity. IMDA is also empowered under Section 63(1) of the IMDA Act to take enforcement action against such abuses in the media industry<sup>33</sup>.
- 5.11. Then-IDA had also, as part of the first triennial review of the TCC, considered the suggestion from industry players to assess joint dominance and noted that this issue would be addressed by the provisions on unfair competition. Notwithstanding this assessment, to allow better alignment with general competition laws, IMDA views that there is merit to provide clarity to industry players on the treatment of the abuse of joint dominance.
- 5.12. On the basis of the foregoing, IMDA assessed that it would be reasonable and relevant to include provisions that specifically prevent the abuse of a dominant position by one or more entities in the Converged Code. Specific details of the criteria for enforcing joint dominance will be provided through IMDA's advisory guidelines. Preliminary, IMDA intends to reference international practices (e.g., aspects of the "*significant impediment to effective competition*" ("SIEC") test proposed by the Body of European Regulators for Electronic Communications) and the approach adopted by Singapore's general competition law<sup>34</sup>. These will be consulted in a separate consultation.

### Discrimination

- 5.13. Sub-section 8.2.2.1 of the TCC and Sub-section 6.4.2.1 of the MMCC each relates to the discrimination of access to infrastructure, systems, services, equipment or information (as the case may be). A discrimination of access to

---

<sup>31</sup> Article 102 of the Treaty of the Functioning of the European Union states that "[a]ny abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States".

<sup>32</sup> Section 47 of the Competition Act.

<sup>33</sup> Section 63(1) of the IMDA Act provides that "[a]ny conduct on the part of one or more regulated persons that ... amounts to an abuse of dominant position ... is prohibited."

<sup>34</sup> Paragraph 3.17 of the CCCS Guidelines on the Section 47 Prohibition 2016 states that it is necessary to consider the following factors to analyse the abuse of collective dominance: (i) whether the relevant parties constitute a collective entity, (ii) whether the collective entity is dominant in a relevant market, either in Singapore or elsewhere; and (ii) whether there is/ has been an abuse of that dominant position in a market in Singapore.

any of the above inputs happens when a licensee with SMP provides access to these inputs to its downstream Affiliate on discriminatory prices, terms and conditions without any objective justification. Notwithstanding the similar intent of the clauses on discrimination in the TCC and the MMCC, the TCC adopts a higher threshold to establish the presence of any discrimination by requiring evidence which demonstrates the effect of the discrimination (i.e., the discrimination has led to a restriction or impediment of other licensees' ability to compete), vis-à-vis the MMCC which only requires evidence of discriminatory prices, terms and conditions to provide the presence of discrimination. IMDA also notes that the TCC provision applies specifically to the discrimination of services to Affiliates and non-Affiliates while the MMCC provision applies to End Users or persons who use the service as an input, with the former constituting an element of *ex ante* obligation not to discriminate.

- 5.14. To adopt a consistent approach for the assessment of discrimination by licensees in the Converged Code, IMDA proposes to adopt the approach provided under the TCC as this would allow IMDA to address all possible discrimination cases regardless of whether the downstream entity uses the access as an input, and subsume the portion of the MMCC provision with an element of *ex ante* obligation not to discriminate under the *ex ante* obligation not to unreasonably restrict competition, as mentioned in paragraph 5.7 above.

*Question 5:1: IMDA invites views and comments on the proposal to adopt the effects-based test of the TCC for the ex post provision on discrimination of service under the Converged Code.*

#### Price squeezes

- 5.15. Price squeezes occur when a Dominant Licensee, whether a designated telecommunication licensee or a dominant RP, sets the price of an input so high that other downstream equally efficient competing licensees that require the input to provide their service or equipment are unable to profitably sell their service or equipment.
- 5.16. Price squeezes are currently provided as an abuse of a dominant position under Sub-section 8.2.1.2 of the TCC and Sub-section 6.4.2.2 of the MMCC. While the provisions are similar and accordingly will be merged under the Converged Code, the benchmarks used in assessing price squeezes are different.
- 5.17. Specifically, the TCC considers whether the input price affects the ability of a Dominant Licensee's downstream affiliate or equally efficient competitor to obtain a commercially reasonable profit for their end service and/or product (i.e., equally efficient operator ("EEO") test); whereas the MMCC considers whether the input price affects the ability of an efficient non-affiliated competitor to profitably provide such media services or Ancillary Media Services to their Consumers (i.e., reasonably efficient operator ("REO") test).

- 5.18. IMDA notes that the TCC's EEO test is consistent with that adopted by Singapore's general competition law<sup>35</sup>. It is an objective and reasonable benchmark as it is based on the Dominant Licensee's prices and costs. On the other hand, while the MMCC's REO test facilitates a "broader" level of competition as it enables an REO to compete with the Dominant Licensee using the input provided by the latter (including situations where the parties are in a greenfield market), it can also result in uncertainty to the industry (especially for dominant firms) as there are no specifics provided on the prices and costs that IMDA will use to determine price squeeze. Hence, IMDA proposes to adopt the TCC's EEO test for assessing price squeezes under the Converged Code and to provide IMDA with the flexibility to make reasonable adjustments to the test where appropriate and justified. IMDA will provide more details in the advisory guidelines.
- 5.19. Additionally, it is noted that Sub-section 8.2.1.2 of the TCC provides for a "pass-on" criterion which requires IMDA to consider the full pass through of the input price to the downstream services. However, IMDA is of the view that the "pass-on" criterion is not necessary as the emphasis of any assessment of price squeezes should be on the margin between the cost of the input and price of the downstream services which is required to determine the impact of the price of the input on the profitability of the downstream operator's operations, rather than on the level of price an upstream operator charges for an upstream input and the extent of pass through. Such an approach is consistent with that adopted by the EC and Singapore's general competition law. IMDA therefore proposes not to include the "pass-on" criterion in the Converged Code.

*Question 5:2: IMDA invites views and comments in relation to the EEO test benchmark to be adopted for price squeezes and the proposal not to include a "pass-on" criterion.*

#### Predatory pricing

- 5.20. Predatory pricing refers to the situation where a Dominant Licensee prices its services or products below the cost of providing or producing them over a period of time. While both the TCC and the MMCC contain provisions relating to predatory pricing (i.e., Sub-section 8.2.1.1 of the TCC and Sub-section 4.5 of the MMCC), the MMCC does not categorise predatory pricing as an abuse of a dominant position currently. Accordingly, the MMCC prohibits predatory pricing by all RPs, including those who are not Dominant Persons.
- 5.21. IMDA notes that predatory pricing is generally considered an abuse of a dominant position internationally and in Singapore's general competition law. Concerns in respect of predatory pricing apply to both the telecommunication and media industries, as an entity with SMP engaging in predatory pricing for a sustained period of time would be in a position to unreasonably restrict competition by driving efficient rivals out of a market in both the telecommunication and media industries. IMDA is of the view that an entity with no SMP is unlikely to have such effect on the market. Hence, IMDA

---

<sup>35</sup> CCCS Guidelines on the Section 47 Prohibition 2016.

proposes to limit the application of the provision prohibiting predatory pricing only to telecommunication licensees and RPs who have SMP.

- 5.22. However, IMDA notes that the above proposal may exclude the application of predatory pricing provision to situations in which a non-dominant RP, who is dominant or has a dominant affiliate in the non-media markets, engages in predatory pricing. Such practices may raise competition concerns, especially if there is cross-subsidisation. IMDA notes, however, that such situations can be addressed by the provisions on anti-competitive preferences/ anti-competitive leveraging and cross-subsidisation (discussed in subsequent paragraphs below), similar to that for the telecommunication market.
- 5.23. One of the criteria in establishing predatory pricing is to determine whether an entity with SMP is selling its services or products below cost. IMDA notes that different standards or a combination of standards have been adopted by competition authorities globally. For example, CCCS considers the Average Variable Cost (“AVC”)<sup>36</sup> and Average Total Cost (“ATC”)<sup>37</sup> standards, the EC recommends Average Avoidable Cost (“AAC”)<sup>38</sup> and Long Run Average Incremental Cost (“LRAIC”)<sup>39</sup> for the telecommunication industry and Ofcom (i.e., the UK telecommunication and media regulator) prefers the Long Run Incremental Cost (“LRIC”) standard<sup>40</sup>. As evident in the foregoing, there is no default or generally preferred standard for establishing predatory pricing. The standard adopted typically depends on the circumstances of the case, e.g., the type of services and inputs involved. In this regard, the TCC adopted the Average Incremental Cost (“AIC”) standard<sup>41</sup> for the telecommunication industry in 2005, after migrating from a marginal cost approach. Telecommunication operators typically have significant common costs and a long run marginal cost approach may result in too stringent a “cost floor” that would allow competitive price cutting indirectly. The AIC would thus be a more appropriate standard to prohibit anti-competitive conduct while allowing for competitive price innovation. On the other hand, the MMCC adopts a marginal cost approach and uses the AVC standard to estimate the cost.
- 5.24. IMDA proposes to adopt the AIC standard for the Converged Code for both telecommunication and media industries considering that most media services are expected to be provided over a telecommunication network or service in a converged environment. That said, IMDA retains the flexibility to consider other cost standards if the circumstance of the case justifies the use of it.

---

<sup>36</sup> The AVC is the total variable cost divided by the number of units produced, where variable costs are those that vary with output.

<sup>37</sup> The ATC is the total cost divided by the number of units produced.

<sup>38</sup> The AAC is the costs that could have been avoided if a certain number of units had not been produced or a certain action had not been undertaken.

<sup>39</sup> The LRAIC is the average of the total (variable and fixed) costs that an entity incurs to produce a particular product from a long-term perspective, including sunk costs.

<sup>40</sup> The LRIC is the total (variable and fixed) costs that an entity incurs to produce a particular product from a long-term perspective, including sunk costs.

<sup>41</sup> The AIC refers to the incremental cost associated with a change in output divided by the number of units produced.

*Question 5:3: IMDA invites views and comments on the proposed cost standard/standards for the telecommunication and media markets and the application of the predatory pricing provision to Dominant Entities.*

#### Cross-subsidisation

- 5.25. Cross-subsidisation generally refers to a situation where a company uses the profit it generated from a market in which it has SMP, to subsidise the services, facilities or equipment that it provides in markets that are subject to a greater degree of competition. Such conduct may harm End Users and/or other company's ability to compete.
- 5.26. IMDA notes that there is currently no specific provision relating to cross-subsidisation for the media industry, although it is arguable that such abuses would have been implicitly covered by the provision on general prohibition of abuse of a dominant position. Therefore, there is merit to extending the TCC provision on cross-subsidisation (i.e., Sub-section 8.2.1.3 of the TCC) to the media industry to provide clarity that the leveraging of a licensee's SMP in one market to cross-subsidise its operations in another market with greater competition may constitute an abuse of a dominant position where it leads to foreclosure of any media market to the Dominant Entity's competitors. While the provision on cross-subsidisation would be industry specific, IMDA would rely on the provisions on anti-competitive leveraging/ anti-competition preferences (discussed below) to ensure that scenarios in which a licensee with SMP in one or more of the telecommunication markets abuses its position to cross-subsidise its operations in the media industry, and vice versa, would be covered.

*Question 5:4: IMDA invites views and comments on the extension of the cross-subsidisation provision to the media industry.*

#### Predatory network alteration

- 5.27. Telecommunication licensees generally interconnect their networks with one another to ensure that End Users of a telecommunication network would be able to access the telecommunication network and services of other telecommunication operators. Sub-section 8.2.2.2 of the TCC on predatory network alteration addresses concerns whereby a licensee with SMP alters its network interface in a manner that has the primary effect of imposing costs on other licensees and/ or impeding other licensees' ability to interconnect and interoperate. There is no equivalent provision for the media industry as, historically, minimal network interconnection is required for the provision of media services. Nonetheless, IMDA does not consider there to be any disadvantage or concern with extending the prohibition on predatory network alteration to the media industry to cater to any future issues that may arise in this context. IMDA therefore proposes to extend the TCC provision on predatory network alteration to the media industry.

*Question 5:5: IMDA invites views and comments on the extension of the predatory network alteration provision to the media industry.*

## Bundling

- 5.28. Bundling typically refers to a scenario where different products, e.g., A and B, are combined and offered as a single package such as triple- and quadruple-play packages. An example of triple-play package is the provision of fixed-line telephony, broadband and Pay TV services through a single package. As highlighted in Part II, IMDA notes that such practices are relatively common today, and expects them to continue in a converged environment.
- 5.29. While bundling does not typically result in anti-competitive effects, it may give rise to competition concerns in certain situations when implemented by an entity with SMP and may be considered as an abuse of a dominant position where it forecloses a Dominant Entity's competitors from markets. Globally, competition authorities have sought to address such concerns through either *ex ante* or *ex post* regulatory measures. In Singapore, IMDA can take enforcement action against any bundling that constitutes an abuse of a dominant position via the TCC and the MMCC, although the TCC has not specifically highlighted (certain types of) bundling as potentially an abuse of a dominant position.
- 5.30. As mentioned in Part IV, the mandatory bundling provision under Sub-section 6.4.2.3 of the MMCC will be classified as an *ex ante* duty that applies only to Dominant Entities. To address bundling which constitutes an abuse of a dominant position on an *ex post* basis and for clarity, IMDA proposes to expressly provide, in the Converged Code, that unreasonable bundling<sup>42</sup> is a practice that constitutes an abuse of a dominant position prohibited under the Converged Code and applicable to all telecommunication licensees and RPs with SMP.

*Question 5:6: IMDA invites views and comments on the inclusion of unreasonable bundling as an example of an abuse of a dominant position in the Converged Code.*

- 5.31. In summary, the following abuse of dominance provisions will apply to all telecommunication and media licensees under the Converged Code:
- (a) general prohibition on abuse of a dominant position;
  - (b) discrimination;
  - (c) price squeezes;
  - (d) predatory pricing;
  - (e) cross-subsidisation;
  - (f) predatory network alteration; and
  - (g) unreasonable bundling.

---

<sup>42</sup> IMDA considers “unreasonable bundling” as the tying or bundling of two or more products and services for sale which results in, or is likely to result in, the anti-competitive foreclosure of market(s) to competitors and which cannot be objectively justified.

## **Anti-competitive Leveraging/ Anti-competitive Preferences**

- 5.32. Anti-competitive leveraging and anti-competitive preferences broadly involve the use of an entity's SMP or its Affiliate's SMP in a market to unreasonably restrict competition in another market. Sub-section 8.3 of the TCC and Sub-section 4.6 of the MMCC contain provisions relating to anti-competitive preferences and anti-competitive leveraging respectively. These apply to all telecommunication licensees and RPs. While there are subtle differences in the headings and drafting of the provisions, the effect of the general prohibition of such practices is broadly similar. For the purpose of the Converged Code, IMDA thus proposes to merge the above into a provision on prohibition on anti-competitive leveraging/ preferences.
- 5.33. On a related matter, IMDA notes that the specific practices of anti-competitive preferences under Sub-section 8.3(b) of the TCC are broadly similar to Sub-section 4.7 of the MMCC on Special Provision for Ancillary Media Service Providers ("AMSP"), save that Sub-section 8.3(b)(ii) of the TCC includes a specific provision on the prohibition of cross-subsidisation which enables the telecommunication licensee to engage in predatory pricing for the telecommunication industry. Hence, IMDA proposes to merge the aforementioned provisions, and extend the provision prohibiting cross-subsidisation which enables the telecommunication licensee to engage in predatory pricing, to the media industry.

*Question 5:7: IMDA invites views and comments on the proposed standalone subsection for the provision for anti-competitive leveraging, including the specific practices on anti-competitive leveraging.*

## **Anti-Competitive Agreements**

- 5.34. Anti-competitive agreements broadly refer to arrangements (e.g., written, verbal, formal or informal) between two independent economic entities to coordinate their market conduct with the objective or effect of restricting competition.
- 5.35. Section 9 of the TCC and Section 7 of the MMCC contain provisions regarding agreements that restrict competition. In particular, the TCC provisions apply to all telecommunication licensees and provide different considerations of horizontal and non-horizontal agreements. This difference was incorporated into the TCC during the first triennial review in 2003 as then-IDA recognised that agreements between two competing licensees (horizontal agreements) are more likely to restrict competition than agreements between non-competing licensees (non-horizontal agreements). As a result, while all anti-competitive agreements will be assessed based on their likely effect on competition, certain specified horizontal agreements are outright prohibited. The MMCC provisions, on the other hand, apply to RPs who are party to any agreement that has the object or effect of preventing, restricting or distorting competition in the media industry. The provisions do not differentiate between horizontal and non-horizontal agreements.

- 5.36. Given that the aforementioned approaches remain relevant in a converged telecommunication and media industry, IMDA proposes to continue applying the section on prohibition against anti-competitive agreements in the Converged Code to (i) telecommunication licensees and RPs, and (ii) extend the differential treatment of horizontal and non-horizontal agreements to the media industry so as to safeguard against more egregious horizontal agreements. Beyond these, IMDA also proposes to make amendments to the other provisions contained in the TCC and the MMCC provisions with the objective of harmonising the provisions. The proposed amendments are set out in detail below.

#### General prohibition on anti-competitive agreements

- 5.37. While the TCC and the MMCC each contain provisions relating to the general prohibition on anti-competitive agreements, and their application in practice is similar, IMDA notes that the provisions are phrased differently. In particular, Sub-sections 9.3.1 and 9.5.1 of the TCC prohibit horizontal or non-horizontal agreements respectively, that “*unreasonably restrict competition*”. Sub-section 7.3 of the MMCC, on the other hand, prohibits agreements that have the “*object or effect of preventing, restricting or distorting competition*”.
- 5.38. In relation to the above difference highlighted in italics, IMDA clarified during the last review of the TCC advisory guidelines<sup>43</sup> that despite the TCC provision not using the term “object”, the application of the respective provisions under the TCC and the MMCC is similar in practice, and that the specific prohibited agreements set out under Sub-sections 9.3.2 of the TCC are similar to those listed in the MMCC. IMDA notes that the test of “object or effect” is widely adopted for the assessment of anti-competitive agreements by competition authorities globally (e.g., EU, UK, Australia, Hong Kong). The IMDA Act<sup>44</sup> and Singapore’s general competition law<sup>45</sup> also set out the same test for anti-competitive agreements. Therefore, for purposes of the Converged Code, there is merit in adopting a drafting that reflects its application and is aligned with international best practices to provide clarity to industry players. In this regard, IMDA proposes to adopt the test of “object or effect” for anti-competitive agreements in the Converged Code, e.g., object or effect of preventing, restricting or distorting competition.

---

<sup>43</sup> IMDA, *Issuance of advisory guidelines governing (i) petitions for reclassification and requests for exemption; and (ii) abuse of dominant position, unfair methods of competition and agreements involving licensees that unreasonably restrict competition*, 11 April 2014.

<sup>44</sup> Section 62(2) of the IMDA Act states that “[a] regulated person must not execute or engage in any agreement, decision or concerted practice – (a) that is of a nature specified by the Authority in a code of practice; and (b) that has, as its object or effect, the prevention, restriction or distortion of competition in any market (or any part of it) connected to the provision of media services in Singapore”.

<sup>45</sup> Section 34(1) of the Competition Act provides that “[s]ubject to section 35, agreements between undertakings, decisions by associations of undertakings or concerted practices which have as their object or effect the prevention, restriction or distortion of competition within Singapore are prohibited unless they are exempt in accordance with the provisions of this Part”.

## Treatment of anti-competitive agreements

- 5.39. IMDA recognises that certain horizontal agreements are almost always likely to substantially lessen competition and are presumed to substantially restrict competition without requiring further individualised assessment of their actual or likely effect on competition. These include, but are not limited to, bid rigging and price fixing. Such agreements are thus outright prohibited (i.e., “**Per Se Prohibitions**”)<sup>46</sup> and are specifically set out under Sub-section 9.3.2 of the TCC and Sub-section 7.5 of the MMCC. However, the Per Se Prohibitions are allowed under Sub-section 9.3.3 of the TCC and Sub-section 7.5.7 of the MMCC if they are necessary for the efficiency enhancing integration of economic activity.
- 5.40. With the exception of the Per Se Prohibitions, IMDA will assess other anti-competitive agreements, regardless of whether they involve a telecommunication licensee or an RP, on their actual or likely effect on competition. As part of the assessment, IMDA would also take into consideration whether the agreements would result in efficiencies that would likely be passed on to the consumers (“**Efficiency Defence**”).<sup>47</sup> Should such efficiencies be determined to outweigh the potential anti-competitive effects of an agreement, the agreement would thus not be considered a prohibited anti-competitive agreement. On the other hand, if the Efficiency Defence is assessed to be invalid, the agreement would be considered an anti-competitive agreement in contravention of the respective codes.
- 5.41. IMDA is of the view that the abovementioned treatment of anti-competitive agreements is broadly similar in intent and effect with approaches adopted internationally (e.g., EU, UK, Canada) and with Singapore’s general competition law<sup>48</sup>. The approach prohibits specific agreements that have as their object the restriction of competition without requiring further analysis of the effect on competition. The approach also allows IMDA to assess the likely effect on competition for other agreements, such as considering the potential efficiency enhancing effects of agreements. In this regard, considering that IMDA has proposed to adopt the “object or effect” test for anti-competitive agreements going forward, there is merit to adopt a consistent nomenclature for the list of Per Se Prohibitions. IMDA will revise the list of Per Se Prohibitions as ‘by object’ agreements. IMDA also will retain the existing considerations of efficiencies set out in the TCC and MCC as they remain fit-for-purpose given that there had been no adverse feedback regarding them.
- 5.42. In summary, the Converged Code would generally prohibit anti-competitive agreements based on its object or effect of restricting competition in the telecommunication and media industries. It would also distinguish between horizontal and non-horizontal agreements, and prohibit Per Se Prohibitions (which will be renamed as “by object” agreements). Finally, this section on

---

<sup>46</sup> Examples include price fixing, output restrictions, bid rigging, group boycott.

<sup>47</sup> Existing Sub-section 9.4.3 of the TCC and Sub-section 7.6.3 of the MMCC.

<sup>48</sup> Section 34 of the Competition Act on restrictive agreements.

anti-competitive agreements in the Converged Code would apply to telecommunication licensees and RPs.

### Other administrative amendments

5.43. Aside from the above-mentioned alignment with Singapore's general competition law framework, IMDA proposes to merge provisions on anti-competitive agreements that are substantively similar and make the following specific amendments to the list of anti-competitive agreements under the TCC and the MMCC:

- (a) Group boycott agreements. These agreements are currently prohibited by the TCC and the MMCC (i.e., Sub-section 9.3.2.4 of the TCC and Sub-section 7.5.4 of the MMCC). However, IMDA notes that the MMCC provision on group boycott agreements includes a caveat that excludes all "*lawful or other legally sanctioned agreements*", which was originally incorporated to provide for such legal documents such as the Advertising Standards Authority of Singapore ("ASAS") Code<sup>49</sup>. As part of the ongoing review, IMDA is concerned that the aforesaid caveat may be overly broad and could include agreements beyond the specific area of concern. Therefore, IMDA proposes to adopt the drafting of the TCC provision and instead, to provide exemptions for telecommunication licensees/ RPs who are also required to comply with other codes that authorise group boycotts (e.g., ASAS Code).
- (b) Foreclosure of access. Agreements between a RP and AMSP that substantially foreclose access to an input that would prevent, restrict or distort competition in any media market are currently prohibited under Sub-section 7.5.6 of the MMCC. There is no equivalent for the telecommunication industry. Given that the delivery of telecommunication and media services require an input, IMDA is of the view that there is merit to extend this provision to the telecommunication industry.
- (c) Vertical market allocation. As provided under Sub-section 9.5.2.2 of the TCC, these agreements may raise competition concerns and will be assessed based on their likely effect on competition. There is no equivalent for the media industry. Given that such competition concerns may also arise in the media industry, there is merit to extend this provision to the media industry to provide oversight over any vertical market allocation in the industry.
- (d) Exclusive dealing. These agreements will be assessed based on their likely effect on competition under Sub-section 9.5.2.3 of the TCC. There is no equivalent for the media industry. Notwithstanding the above, IMDA notes that exclusive dealings may constitute an abuse of dominant position where they foreclose markets to competitors under

---

<sup>49</sup> In accordance with the ASAS Code, the ASAS has the powers to require its members to sanction parties that violate the ASAS Code.

Singapore's general competition law framework. Therefore, IMDA proposes to shift the provision on exclusive dealing to the abuse of dominant position section and to extend its applicability to the media industry<sup>50</sup> to provide a consistent approach in the treatment of such agreements in a converged environment going forward.

- 5.44. Additionally, IMDA proposes to remove Sub-section 7.7 of the MMCC which covers the effect of agreements that prevent, restrict or distort competition in the media industry. This provision provides that such agreements would be void in their entirety and such powers are similarly provided under Section 62(3) of the IMDA Act. In contrast, Sub-section 9.1.2 of the TCC allows IMDA to direct the licensee to remove the contravening terms of the provision or to terminate the agreement. Additionally, under Singapore's general competition law<sup>51</sup>, only the provision relating to the uncompetitive behaviour, instead of the entire agreement, will be void. On balance, IMDA is of the view that the approach adopted under the TCC and Singapore's general competition law is more practical and reasonable as the voidance of the offending provision in an agreement minimises the overall impact to the agreement and the parties involved. Accordingly, IMDA proposes to adapt the drafting of the provision in the TCC and make amendments to the IMDA Act during the next IMDA Act review to clarify that only the relevant provision in the agreement will be void.

*Question 5:8: IMDA invites views and comments on the proposal to adopt the “object or effect” approach for the general prohibition of anti-competitive agreements.*

*Question 5:9: IMDA invites views and comments on the proposed revisions to the anti-competitive agreements, namely:*

- (a) *rename the list of prohibited anti-competitive agreements as “by object” agreements; and*
- (b) *respective amendments to the specific anti-competitive agreements.*

## **Unfair Methods of Competition**

- 5.45. Sub-section 8.4 of the TCC and Section 4 of the MMCC set forth rules prohibiting conduct that constitutes an unfair method of competition. These provisions are applicable to all telecommunication licensees and RPs. IMDA will retain the general prohibition of unfair methods of competition and is proposing changes to the specific methods of unfair competition below.

- 5.46. There are two specific practices common to the TCC and the MMCC:

---

<sup>50</sup> IMDA is cognisant that there may be implications with the extension of the exclusive dealing provision to the media industry where certain exclusive dealings are allowed on grounds of public interest, e.g., as provided under the anti-siphoning provisions. Therefore, IMDA will assess the effect of exclusive dealings on competition in the relevant market, including considering the applicability of the provisions/chapters on Cross-Carriage, anti-siphoning and anti-hoarding.

<sup>51</sup> Section 34(3) of the Competition Act provides that “[a]ny provision of any agreement or any decision which is prohibited by subsection (1) shall be void on or after 1<sup>st</sup> January 2016 to the extent that it infringes that subsection.”

- (a) degradation of service availability or quality (Sub-section 8.4.2.1 of the TCC and Sub-section 4.4.2 of the MMCC); and
  - (b) provision of false or misleading information to competitors (Sub-section 8.4.2.2 of the TCC and Sub-section 4.4.3 of the MMCC).
- 5.47. In addition, the following provisions are specific to each industry:
- (a) improper use of information regarding competing licensee's customers (in the telecommunication industry) (Sub-section 8.4.2.3 of the TCC);
  - (b) use of media services to disseminate false or misleading claims in the media industry (Sub-section 4.4.1 of the MMCC); and
  - (c) interference with relationships involving consumers, advertisers, AMSPs, in the media industry (Sub-section 4.4.4 of the MMCC).
- 5.48. To ensure a consistent treatment across the telecommunication and media industries to the greatest extent possible following the implementation of the Converged Code, IMDA proposes to:
- (a) Extend Sub-section 8.4.2.3 of the TCC on the prohibition of the improper use of information regarding a competing licensee's customers to the media industry. While IMDA does not currently have any competition concerns about the improper use of information regarding a competing licensee's customers for the media industry, IMDA does not consider there would be disadvantages or concerns with extending such a prohibition to the media industry.
  - (b) Remove Sub-section 4.4.1 of the MMCC on the prohibition of the use of media services to disseminate false or misleading claims and Sub-section 4.4.4 of the MMCC on the prohibition of the interference with relationships involving consumers, advertisers or ancillary media service providers. IMDA notes that similar provisions in the TCC were removed following the 1<sup>st</sup> triennial review of the TCC in 2003 as then-IDA assessed that such cases would be better resolved in accordance with the Fair Trading Act, through consumer and trade associations, reviewed together with ASAS or for the parties involved to seek legal redress through the Courts. IMDA has reviewed the aforementioned MMCC provisions and proposes to adopt the same position as then-IDA in 2003 in the interest of harmonising the two Codes.
- 5.49. In summary, IMDA proposes to prohibit the following specific types of unfair methods of competition under the Converged Code:
- (a) degradation of service availability or quality;
  - (b) provision of false or misleading information to competitors; and
  - (c) improper use of information regarding competing licensee's customers.

*Question 5:10: IMDA invites views and comments on the proposed changes to the rules governing unfair methods of competition.*

## PART VI: CONSUMER PROTECTION

- 6.1. This part of the consultation document concerns Sections 3 of the TCC and the MMCC (“**Consumer Protection Provisions**”), which set out the duties of Licensees<sup>52</sup> and Regulated Persons to End Users and Consumers for the provision of telecommunication and media services respectively. The key intent of the Consumer Protection Provisions is to ensure that Licensees and Regulated Persons provide services to End Users and Consumers on fair, reasonable, and non-discriminatory terms.
- 6.2. The sections below set out IMDA’s proposed approach to align the Consumer Protection Provisions of the two codes, structured as follows:
  - (a) Application of Consumer Protection Provisions;
  - (b) Common provisions to be merged;
  - (c) Provisions to be extended from one market to the other;
  - (d) Provisions to be retained or introduced to a specific market; and
  - (e) Provisions to be removed.

### **Application of Consumer Protection Provisions**

- 6.3. Sections 3 of the TCC and the MMCC are similar in their intent to protect residential or business End Users and Consumers (collectively “**End Users**” in this Part VI) who have access to or subscribe to telecommunication and media services directly from Licensees or Regulated Persons. The MMCC also goes further to protect business users who purchase goods, services or access as inputs for their production, resale or provision of any media service (“**Resellers**”).
- 6.4. IMDA notes that Resellers are generally able to negotiate the terms of their service with the Licensees or Regulated Persons, and are more likely able to protect their interests through such customised agreements. In view of the similar intent of both Codes, as a general principle, IMDA proposes to apply the Consumer Protection Provisions in the Converged Code to only business and/or residential<sup>53</sup> End Users of telecommunication and media services, i.e., excluding Resellers<sup>54</sup>.
- 6.5. IMDA further notes from the information circular issued by then-MDA on 29 April 2016 that Regulated Persons were exempted from the obligations under Sub-sections 3.2A to 3.2F, 3.5A and 3.5B of the MMCC for business End Users (see Table 6.1 below for brief explanation of sub-sections). The

---

<sup>52</sup> For the avoidance of doubt, Section 3 of the TCC refers to “Licensee” as a “Facilities-based Licensee” or a “Services-based Licensee”. Accordingly, “Licensee” shall refer to the same for this part of the consultation document.

<sup>53</sup> “Residential End User” refers to a residential or individual subscriber of any telecommunication or media service in Singapore.

<sup>54</sup> For clarity, hoteliers and/or dealers who purchase telecommunication and media services from Licensees and/or Regulated Persons for resale to End Users will be excluded as they would also be considered as falling within the category of Resellers.

exemption was issued in response to submissions from Regulated Persons that business End Users are generally larger and more sophisticated than residential End Users, and can avail themselves to packages at different pricing, terms and conditions from residential End Users. In contrast, all the provisions under Section 3 of the TCC generally protects both the residential and business End Users.

- 6.6. Apart from the provisions in the MMCC that were intended to protect residential End Users against specific practices by Regulated Persons in their provision of Pay TV services, namely Sub-sections 3.2B, 3.2C 3.2E, 3.5A and 3.5B (see Table 6.1 below for brief explanation of sub-sections), IMDA proposes to apply the other provisions in Section 3 of the MMCC to both residential and business End Users in the Converged Code (see Table 6.1 below). Therefore, IMDA proposes to withdraw the exemption of Regulated Persons from the obligations under Sub-sections 3.2A, 3.2D(a) and 3.2F of the MMCC for business End Users in the Converged Code. While then-MDA had granted the exemptions from these three provisions in 2016 on the basis that business End Users are better able to negotiate fair terms on their own when contracting with Regulated Persons, IMDA considers that some small and medium sized businesses that purchase standard and non-negotiable corporate packages, will benefit from such user safeguards. Moreover, IMDA believes that the current standard business practices for Regulated Persons are likely to already be in compliance with these provisions in view that some of the Regulated Persons, who are also Licensees in the telecommunication markets, are already meeting these obligations for business End Users in their provision of telecommunication services. Hence, the application of these MMCC provisions to business End Users would be consistent with the intent and application of the equivalent provisions in the TCC.

Sub-section in MMCC	Current Application in MMCC		Proposed Application in Converged Code	
	Residential	Business	Residential	Business
3.2A Publication of Information on Subscription Service	✓	Exempted	✓	✓
3.2B Duty to Offer Option of Short Term Agreements - To empower End Users to make trade-offs between promotional price benefits and the risks of being bound in a long-term Pay TV contract following a channel cessation	✓	Exempted	✓	x
3.2C Duty not to Act Unreasonably in Contracting - Prohibit Pay TV service providers from leveraging an End User's Pay TV contract to impose changes on a non-Pay TV contract that the End User has from the same service provider	✓	Exempted	✓	x

3.2D (a) Duty to Inform Subscriber of Certain Matters Before Contracting	✓	Exempted	✓	✓
3.2D (b) Provision of Critical Information Summary ("CIS") <sup>55</sup>	✓	Exempted	✓	x
3.2E Records of Marketing Materials, Agreement etc. - For assessment of materiality of channels/ sports content in the absence under 3.8 of MMCC of viewership data, and enforcement of CIS requirement under 3.2D	✓	Exempted	✓	x
3.2F Express Agreement Required for Continued Provision of Services Provided on Free Trial Basis or Complimentary Basis	✓	Exempted	✓	✓
3.5A Prohibition on Early Termination Charges ("ETC") in Certain Cases: - Increase in subscription fees - Removal of material channel or material sports content or - Removal of at least 20 per cent of total number of channels in Subscription Service	✓	Exempted	✓	x
3.5B Prohibition on Excessive Charges in Certain Cases - To ensure End Users are not discouraged from terminating their Pay TV service pursuant to 3.5A, the subscription fee payable for the remaining service(s) in the bundle must not exceed the initial subscription fee of the bundle inclusive of the Pay TV service	✓	Exempted	✓	x

6.7. Notwithstanding, IMDA proposes to include in the Converged Code the requirement for Regulated Persons to provide residential End Users with a CIS to facilitate their understanding of the legal terms in their contracts, which is currently subsumed under Sub-section 3.2D(b) of the MMCC and required of Licensees via a Direction in the telecommunication markets, and to continue applying it only to residential End Users given that business End Users typically are more savvy and able to negotiate the terms and conditions of their contractual agreements.

---

<sup>55</sup> Key information of the contract which includes the subscription fee payable, specifications of discounts (if any), specifications of service provided on a continuous basis and/or promotional basis, and the Early Termination Charges etc.

- 6.8. The Consumer Protection Provisions will also not be applicable for OTT TV or content services provided by all OTT TV or content service providers, as is the case today. As the OTT media landscape in Singapore is highly fragmented as compared to linear Pay TV services that are more pervasive and mainstream, IMDA views that OTT TV or content service providers will benefit from having greater flexibility to innovate and compete. Moreover, IMDA also considers that it would be in the interests of OTT TV or content service providers to provide high quality service standards to win over End Users. Hence, at this time, IMDA proposes to retain its light-touch approach to the OTT media landscape.
- 6.9. Notwithstanding, IMDA will continue to monitor the developments in the OTT media landscape, the adoption of OTT services, and consumer feedback, to review the need for regulatory intervention to protect consumer interests.

*Question 6:1: IMDA seeks views and comments on the:*

- (a) *proposed exclusion of Resellers from being protected by the Consumer Protection Provisions in the Converged Code;*
- (b) *proposed application of all the Consumer Protection Provisions in the Converged Code to both residential and business End Users, except for the Pay TV market-specific provisions (i.e., Sub-sections 3.2B, 3.2C 3.2E, 3.5A and 3.5B), and the CIS requirement, which will only be applied to residential End Users; and*
- (c) *proposal to continue to not apply the Consumer Protection Provisions in the Converged Code to OTT TV or content services.*

### **Common Provisions to be Merged**

- 6.10. IMDA is proposing to merge the following Sub-sections of the TCC and the MMCC as the intent of the provisions are largely similar for both markets, and will consult on the detailed drafting of the provisions at the second public consultation:

- (a) Duty to Disclose and Publish Information on Subscription Service (Sub-sections 3.2.2 of the TCC and 3.2A of the MMCC);
- (b) Prohibition on Disproportionate ETC (Sub-sections 3.2.3 of the TCC and 3.5 of the MMCC);

IMDA notes that the possibility of entering into an agreement with an End User to commit to a minimum revenue commitment as stated in Sub-section 3.2.3 of the TCC can be similarly applicable to the media markets under the Converged Code.

- (c) Duty to Provide Accurate, Timely and Clear Statements of Charges (Sub-sections 3.3.2 of the TCC and 3.4.1 of the MMCC);
- (d) Prohibition on Charging for Unsolicited Services (Sub-sections 3.2.8 and 3.3.3. of the TCC and 3.4.2 of the MMCC); and

- (e) Prohibition on Charging for Services Supplied on Free Trial Basis (Sub-sections 3.2.9 of the TCC and 3.2F of the MMCC).

IMDA notes that the requirement to expressly notify the End User of the date on which the free trial period will end as stated in Sub-section 3.2.9 of the TCC, can be similarly applicable to the media markets under the Converged Code.

6.11. The following Sub-sections of the TCC and the MMCC will be merged with some changes to align the differences, which are elaborated in detail in the subsequent paragraphs:

- (a) Duty to Comply with Quality of Service (“**QoS**”) Standards (Sub-sections 3.2.1 of the TCC and 3.3 of the MMCC);
- (b) Restrictions on Service Termination or Suspension (Sub-sections 3.2.4 of the TCC and 3.4.4 of the MMCC);
- (c) Duty to Prevent Unauthorised Use of EUSI (Sub-sections 3.2.6 of the TCC and 3.6 of the MMCC); and
- (d) Disclosure Requirements including CIS (Sub-sections 3.2.2 of the TCC and 3.2D of the MMCC).

#### Duty to Comply with QoS Standards

6.12. Sub-sections 3.2.1 of the TCC and 3.3 of the MMCC provide that Licensees and Regulated Persons must comply with the minimum QoS standards set by IMDA. However, the TCC allows agreement between the End User and Licensee for lower QoS than IMDA’s standards. The intent was to provide Licensees with greater flexibility to provide services catered to End Users’ needs at lower prices.

6.13. IMDA views that this flexibility would be beneficial for business End Users who may wish to negotiate for services to be provided at service standards that are catered to their business needs, notwithstanding that the QoS is lower than IMDA’s standards. Given the similar intent, IMDA proposes to merge the two requirements and extend the TCC’s flexibility for lower QoS standards to the media markets. Nevertheless, IMDA would emphasise that Licensees and Regulated Persons must clearly inform End Users of the service level that they will provide, and the fact that the service level does not comply with IMDA’s minimum QoS standards.

*Question 6:2: IMDA seeks views and comments on the proposal to:*

- (a) *merge the requirement on QoS standard; and*
- (b) *extend the flexibility for Licensees to agree to a lower QoS with End Users to the media markets.*

## Restrictions on Service Termination or Suspension

- 6.14. To ensure that Licensees and Regulated Persons provide advance notice and a reasonable opportunity to resolve disputes before terminating or suspending the provision of service to any End User, Sub-sections 3.2.4 of the TCC and 3.4.4 of the MMCC provide the procedures that Licensees and Regulated Persons are required to follow before terminating or suspending the provision of service. The TCC also provides additional clarity on the various restrictions on service termination and suspension, and the specific circumstances in which Licensees may terminate or suspend the provision of service to an End User without providing prior notice.
- 6.15. Given the similar intent, IMDA proposes to merge the two requirements and adopt the current termination procedures under the TCC.

*Question 6:3: IMDA seeks views and comments on the proposal to merge the requirements and adopt the procedures under the TCC for service terminations or suspensions for both markets.*

## Duty to Prevent Unauthorised Use of End User EUSI

- 6.16. Sub-sections 3.2.6 of the TCC and 3.6 of the MMCC currently provide that Licensees and Regulated Persons must take reasonable measures to prevent the unauthorised use of EUSI or Subscriber Service Information (“SSI”) of both residential and business End Users. The EUSI and SSI include but is not limited to information regarding the End User’s usage patterns, services and equipment used, telephone number and network configuration, location information, and billing name, address and credit history.
- 6.17. After the Personal Data Protection Act 2012 (No. 26 of 2012) (“PDPA”) came into force in July 2014, the TCC was reviewed in 2014 to streamline the data protection provisions to reduce overlap with the PDPA, and to provide clarity on the requirements that apply to the telecommunication markets. As part of this review, then-IDA removed the requirement for Licensees to obtain residential End Users’ consent to collect, use or disclose their EUSI for three specific purposes<sup>56</sup>, as they were already covered under the PDPA. The purposes for which Licensees do not need to obtain business End User’s consent to collect, use or disclose their EUSI remained unchanged as business EUSI may not fall clearly within the PDPA framework.
- 6.18. IMDA proposes to merge the existing provisions governing the duty to protect against unauthorised use of EUSI/SSI in the TCC and the MMCC. In addition, to avoid any overlap with the PDPA for the media markets, IMDA proposes to adopt the TCC’s approach to streamline the purposes for which EUSI can be collected, used or disclosed without obtaining consent of business or residential End Users. IMDA also proposes to extend to the

---

<sup>56</sup> The three specific purposes are: (i) providing assistance to law enforcement, judicial or other government agencies; (ii) managing bad debt and preventing fraud related to the provision of telecommunication services; and (iii) complying with any regulatory requirements imposed by then-IDA.

telecommunication markets the current requirement under the MMCC for Regulated Persons to develop and inform End Users of easy-to-use procedures by which they can subsequently grant or withdraw consent to the use of their SSI. Currently the Licensees and Regulated Persons already offer End Users several methods to manage their consent (e.g., through online portal, mobile applications or hotline). IMDA believes that extending this requirement to telecommunication markets will provide End Users with greater control over the use of their EUSI.

*Question 6:4: IMDA seeks views and comments on the proposal to:*

- (a) *merge and adopt the TCC's approach for data protection provisions for both telecommunication and media markets; and*
- (b) *extend the MMCC requirement to the telecommunication markets to require Licensees to develop and inform End Users of easy-to-use procedures by which they can subsequently grant or withdraw consent to the use of their EUSI.*

#### Disclosure Requirements including CIS

6.19. Sub-sections 3.2.2 of the TCC and 3.2D of the MMCC require Licensees and Regulated Persons to disclose to End Users the prices, terms and conditions prior to providing the service. To facilitate End Users' understanding of the terms and conditions in their contracts which are usually long and drafted in legal language that may be hard to understand, Sub-section 3.2D of the MMCC requires Regulated Persons to draw the End User's attention to a summary of the key terms and conditions ("CIS") at the point of subscription, retain confirmation of the End User's understanding, and provide End Users with a copy of the CIS and contract within 14 days of contracting<sup>57</sup>. The following Licensees, are also subject to similar obligations via a Direction issued by then-IDA in 2015:

- (a) M1 Limited;
- (b) M1 Net Ltd;
- (c) Singtel;
- (d) Singtel Mobile Singapore Pte Ltd;
- (e) SingNet;
- (f) StarHub;
- (g) StarHub Mobile Pte Ltd;
- (h) StarHub Online Pte Ltd; and
- (i) StarHub Internet Pte Ltd

(collectively "**Key Telecommunication Licensees**").

6.20. The differences between the required key terms and conditions to be included in the CIS for Regulated Persons of the MMCC and the Key Telecommunication Licensees are broadly summarised in Table 6.2 below.

---

<sup>57</sup> This requirement was introduced on 16 March 2016, and took effect on 30 May 2017.

<b><u>Table 6.2: Differences between required information in CIS</u></b>	
<b>Specific to the Key Telecommunication Licensees</b>	<b>Specific to RPs of MMCC</b>
<ul style="list-style-type: none"> <li>• Key service features &amp; their limitations</li> <li>• Frequency of billing and form in which the bills will be sent</li> <li>• How disclosure of terms and conditions and confirmation of End Users' understanding should be done for various modes of sales</li> <li>• Key Telecommunication Licensee's consumer hotline must be able to answer queries about CIS</li> </ul>	<ul style="list-style-type: none"> <li>• Payment date</li> <li>• Channels provided</li> <li>• Contract terms that may be unilaterally varied by Regulated Persons</li> <li>• Fee payable for remaining services in bundle in event of exit of Pay TV service due to material change</li> <li>• Circumstances in which the End User is deemed to have elected for the continued provision of the service upon expiry of minimum service period</li> <li>• To give End User a written copy of full contract &amp; CIS within 14 days of signing</li> </ul>

- 6.21. Given the similar intent to enhance transparency and understanding of the terms and conditions to End Users at the point of subscription, IMDA proposes to merge the disclosure requirements in both codes, and extend the CIS requirement to all Licensees, beyond the Key Telecommunication Licensees that are currently subject to the obligations via the then-IDA's Direction.
- 6.22. IMDA also proposes to retain the media-specific information to be included in the CIS, such as the channels provided and the fees payable for remaining services in a bundle in event of an exit of Pay TV service without ETC.
- 6.23. Since it is already an industry practice for Regulated Persons to provide End Users with the contracts immediately, IMDA proposes to reduce the timeframe from 14 days to 5 working days for Regulated Persons to send either a physical or electronic copy of the CIS and contract to the End User after contracting, and to extend this modified requirement to the telecommunication markets to enhance consumer awareness of the terms and conditions in their contracts.
- 6.24. To be clear, the CIS requirement would only apply to fixed term contracts that are longer than one-month, such as 12-months and 24-months contracts, as End Users who sign up for longer contracts would need to pay ETC to terminate their contracts before the expiry of the minimum service period, so they ought to be adequately informed of the terms and conditions before entering the contract.

*Question 6:5: IMDA seeks views and comments on the proposal to:*

- (a) *merge the disclosure requirements and extend the CIS requirement to all Licensees; and*
- (b) *reduce the timeframe from 14 days to 5 working days for Regulated Persons to provide End Users with the CIS and contracts, and extend this requirement to the telecommunication markets.*

## **Provisions to be Extended from One Market to the Other**

6.25. IMDA proposes to extend the following provisions from one market to the other:

- (a) Mandatory Contract Provisions (Sub-sections 3.3, 3.3.1, 3.3.4 and 3.3.5 of the TCC); and
- (b) Duty to Notify of Certain Events (Sub-section 3.5C of the MMCC).

### Mandatory Contract Provisions

6.26. Sub-section 3.3 of the TCC currently provides that Licensees must include certain provisions in their contracts, including:

- (a) Billing period;
- (b) Prices, terms and conditions on which service will be provided;
- (c) No charges for unsolicited services;
- (d) Procedures to contest charges;
- (e) Procedures for private dispute resolution;
- (f) Bases and procedures for termination or suspension of service by Licensee; and
- (g) Purposes for which EUSI may be used, and the means of granting and withdrawing consent.

6.27. The intent is to enhance transparency, commit the Licensees to the contractual obligations, and enable End Users to enforce the contractual obligations should the Licensees fail to fulfil them. There is currently no such requirement for the media markets in the MMCC.

6.28. IMDA views that it would be beneficial for End Users to be made aware of these contractual obligations and be able to enforce them when Licensees or Regulated Persons fail to fulfil them, hence IMDA proposes to extend this TCC requirement to the media markets.

*Question 6.6: IMDA seeks views and comments on the proposal to extend the requirement for mandatory contract provisions to the media markets.*

### Billing Period

6.29. Sub-sections 3.3.1 of the TCC and 3.4.1 of the MMCC provide that Licensees and Regulated Persons must provide clear and accurate bills. However, the TCC further requires Licensees to specify such a commitment and the frequency of the bills in their End User Service Agreement (“EUSA”), whereas the MMCC does not have such a requirement. IMDA views that it is in both the End Users’ as well as the service providers’ interests for such pertinent information to be spelt out clearly in the EUSA. As such, as stated in the preceding section, IMDA proposes to extend the current TCC requirement for mandatory contract provisions on billing period to the media markets.

- 6.30. IMDA notes that it is generally left to the Licensees and Regulated Persons to decide the amount and level of details in the bill provided to End Users, and the current industry practice is for Licensees and Regulated Persons to provide aggregated bills, broken down into the charges for each type of service. IMDA has received feedback from End Users that the current amount and level of details in the bill is insufficient and lacks transparency, especially in relation to mobile data services which has led to billing disputes between the Licensees and End Users.
- 6.31. To increase transparency and facilitate the resolution of billing disputes, IMDA proposes to introduce a new requirement for both telecommunication and media markets to include the following minimum billing information in their bills:
- (a) the services subscribed;
  - (b) the respective value-added services and ad-hoc services and their charges, and third party charges (e.g., roaming charges, international calls charges, global SMS/MMS charges, Premium Rate Service (“PRS”) charges, billing-on-behalf charges, excess usage charges etc.);
  - (c) the billing period;
  - (d) indications where services are provided on a free trial or complimentary basis; and
  - (e) the expiry date of the trial or complimentary service.

*Question 6:7: IMDA seeks views and comments on the proposal to introduce the list of minimum billing information to be included in End Users’ bills for both markets.*

#### Procedures to Contest Charges and for Private Dispute Resolution

- 6.32. Sub-sections 3.3.4 and 3.3.5 of the TCC and 3.4.3 of the MMCC similarly require Licensees and Regulated Persons to provide procedures for End Users to dispute any charge for any subscription service (and associated equipment for MMCC) that they believe to be incorrect. The TCC additionally requires the inclusion of these procedures in the EUSA, and specifies the circumstances in which the End User may withhold payment of the disputed amount, the timeframe of one year for charges to be contested, and the requirement for Licensees to complete the review within 30 days and set reasonable rates for any interests that they may wish to recover from the End User for the disputed amount.
- 6.33. Given that a large proportion of consumer complaints relate to billing disputes, and with the upcoming introduction of an Alternative Dispute Resolution (“ADR”) scheme, IMDA views that End Users should be made aware of the available avenues to contest errant charges and resolve disputes. As such, IMDA proposes to extend the TCC’s requirement for the inclusion of procedures to contest charges and dispute resolution in the EUSA to the media markets.

*Question 6:8: IMDA seeks views and comments on the proposal to extend the requirement for mandatory contract provisions on procedures to contest charges and dispute resolution to the media markets, including the circumstances in which End*

*User may withhold payment, timeframe for contesting the disputed charges, and setting of the interest rates or methodology for establishing the interest rates.*

#### Duty to Notify of Certain Events – Advance Notice for Service Changes

- 6.34. Sub-sections 3.5C.1(a) and 3.5C.2 of the MMCC currently provide that Regulated Persons must give at least one-month advance notice in writing to End Users for any increase in subscription fees, or cessation of any channel or material sports content. In view that these changes are likely detrimental to End Users and may affect their decision of whether to continue the subscription, the notification period was intended to give End Users time to make changes to their subscription and/ or look for alternatives, where possible. The TCC has no equivalent notification requirements as the Key Telecommunication Licensees are currently prohibited from making any detrimental mid-contract changes to the prices, terms and conditions of any fixed term contract during the contract term. In view of the different nature of the service offerings in the telecommunication and media markets, IMDA will retain the prohibition of detrimental mid-contract changes for the telecommunication markets and the requirement to provide at least one-month advance notice for the three specific instances of changes to service (i.e., increase in subscription fees, and cessation of any channels or material sports content) in the media markets.
- 6.35. Currently there is no requirement for the Licensees and Regulated Persons to provide any advance notice for advantageous changes to their telecommunication and media services. There have been instances where the Licensees unilaterally made changes that they perceived to be advantageous to End Users without informing them in advance. While the definition of advantageous is subjective, IMDA has received feedback from End Users who have expressed dissatisfaction that they were not informed before the changes were made, or given an option to accept or reject the changes.
- 6.36. IMDA is of the view that it is in the End Users' interest to be notified in advance of any other changes to their service that may affect their decision to continue their subscription. Therefore, IMDA proposes to require Licensees and Regulated Persons to provide advance notice in writing to End Users for any advantageous change to their telecommunication and media services, especially if it relates to a change in key service features, and the prices, terms and conditions on which the service would be provided. An example of such a change to service would be the migration of End Users from legacy content packs to new content packs at no additional costs, which may result in a change in key service features and terms of service, such as the reversion of promotional prices to non-promotional prices following the expiry of the minimum service period.
- 6.37. While IMDA is of the view that it is in the Licensees' and Regulated Persons' interests to provide ample advance notice to affected End Users for advantageous changes, this may vary for the different services and offerings provided in the telecommunication and media markets. As such, IMDA will not specify an advance notification timeframe for this requirement at this juncture.

- 6.38. IMDA would also clarify that the advance notice requirement need not apply to changes that have limited or short-term impact, such as the provision of a free trial service or channel for a specified period of time, beyond which there are no changes to the key service features or terms and condition of service. This is to avoid reducing the flexibility for Licensees and Regulated Persons to introduce beneficial promotions or services to End Users. However, where feasible, IMDA encourages the provision of advance notice for such changes of limited or short-term impact.

*Question 6:9: IMDA seeks views and comments on the proposal to:*

- (a) *retain the prohibition of detrimental mid-contract changes for the telecommunication markets and the requirement to provide at least one-month advance notice for detrimental changes in the media markets; and*
- (b) *introduce an advance notice requirement for any advantageous change that may have a long-term impact on the End User's service for both markets.*

Duty to Notify of Certain Events - Advance Notice for Cessation of Service or Operations

- 6.39. Sub-section 3.5C.1(b) of the MMCC provides that Regulated Persons must provide at least six-months' notice in writing to End Users of their intention to cease operations or provision of any broadcasting service. The TCC has no equivalent requirement, but Licensees, under their respective telecommunication licence conditions, are required to seek IMDA's approval in advance of the termination of their operations or services. The advance notice period under the MMCC is intended to give End Users sufficient time to find alternative services, where possible, in view that the cessation of a broadcasting service such as a Free-to-Air ("FTA") TV/ Radio channel or Pay TV service is likely to affect a large segment of End Users, some of which may rely on these services as an important source of news, information and entertainment. Aside from the End Users who are already subscribed to the subscription broadcasting services, the intent is also for all End Users, including prospective subscribers, to be notified that the subscription service would be ceased soon, so that they can make an informed decision before subscribing to the service. As the intent is still relevant and the provision is beneficial for End Users, IMDA will retain the advance notification requirement for cessation of service or operations for the media markets. In view of the current market environment where there is a myriad of service providers and service offerings in active competition for subscribers, IMDA proposes a general baseline notice period for both the telecommunication and media markets of at least three months for subscribers to seek alternative service providers.
- 6.40. However, IMDA is cognisant that there may be cessation of operations or termination of telecommunication and media services by Licensees could also affect a large segment of End Users, difficult-to-reach consumer segments or

SMEs that require more time migration time. Hence, it would also be in the End Users' interests to be informed in advance of a Licensee's termination of operations or services. To cater for such circumstances, IMDA reserves the right to require the Regulated Persons and Licensees to provide more than the proposed three-month notice period to allow adequate time for affected End Users to migrate.

*Question 6:10: IMDA seeks views and comments on the proposal to:*

- (a) *extend the requirement to provide advance notice to End Users for termination of operations or services, to the telecommunication markets; and*
- (b) *provide a three-months' advance notice in writing for cessation of operations or provision of any telecommunication and media services, while allowing IMDA to right to require this period to be extended to better protect End Users' interest under certain circumstances.*

### **Provisions to be Retained or Included for a Specific Market**

6.41. IMDA proposes to retain or include the following requirements in the Converged Code for a specific market:

- (a) Retain Prohibition on "Slamming" for the telecommunication markets (Sub-Section 3.2.5 of the TCC);
- (b) Retain market-specific measures against unilateral contract variations:
  - (a) Include Prohibition against mid-contract detrimental changes for the telecommunication markets;
  - (b) Retain Prohibition on ETC in certain cases for the media markets (Sub-Sections 3.5A, 3.5B, 3.2E and 3.8 of the MMCC); and
  - (c) Retain Duty to offer short term agreements for the media markets (Sub-Sections 3.2B of the MMCC); and
- (c) Retain Duty Not to Act Unreasonably in Contracting for the media markets (Sub-Section 3.2C of the MMCC).

#### Prohibition on "Slamming"

6.42. Sub-section 3.2.5 of the TCC currently prohibits Licensees from switching an End User from one Licensee's service to another Licensee's service without the prior consent of the End User. The Licensees are also prohibited from collecting or retaining any payment from the End User for any telecommunication service that the End User did not request in advance. In the event that such a switch without consent occurs, the Licensee responsible for the switch should bear any cost necessary to switch the End User back to the original telecommunication service provider. There is no equivalent prohibition for the media markets as such a practice is not relevant to the media markets. The prohibition also does not appear to be adopted by the media market regulators in other overseas jurisdiction.

- 6.43. IMDA notes that we have not taken any enforcement action against any Licensee for the breach of this provision in the past and, on this basis, considers that there could be scope for this provision to be removed. At the same time, IMDA also notes that as competition in the telecommunication markets intensifies, telecommunication service providers have been offering more innovative service plans to facilitate the switching of End Users from one service provider to another, such as through free trial services that can migrate End Users from their existing service provider to another at the end of the free trial period. As such, IMDA views that it is increasingly important for Licensees to be reminded of their obligation to inform End Users' of the terms and conditions on which the service would be provided, and obtain the End Users' explicit consent before switching them from one service provider to another.
- 6.44. Given that the practice of "slamming" may still be relevant in the telecommunication markets, IMDA proposes to retain this prohibition to protect End Users against such unfair practices. IMDA, however, will not extend this to the media industry. To clarify, the End User's consent to sign up for the free trial service should not be construed as an implicit consent to switch from one Licensee's service to another Licensee's service, and Licensees are expected to obtain the End User's explicit consent to switch service providers at the end of the free trial period.

*Question 6:11: IMDA seeks views and comments for the proposal to retain the prohibition on "slamming" for the telecommunication markets in the Converged Code.*

#### Market-specific Measures against Unilateral Contract Variations

- 6.45. Contracts between Licensees and/or Regulated Persons and End Users may contain unilateral variation terms that allow Licensees or Regulated Persons to make changes to the terms and conditions while the contracts are still in-force, without the consent of the End Users. While some changes may be beneficial for End Users, there are also changes which are detrimental to them. Due to the differences in the nature of telecommunication and Pay TV services, IMDA currently takes a different approach to address such detrimental unilateral contract variations to End Users for each market.

#### Prohibition of Detrimental or Disadvantageous Mid-contract Changes for the Telecommunication Markets

- 6.46. The Key Telecommunication Licenses are currently prohibited from making any changes to the prices, terms and conditions of any fixed term service contract that are disadvantageous or detrimental to the End User during the contract term. This requirement was imposed on them by way of a Direction issued by then-IDA in 2015. This prohibition is intended to protect End Users against unilateral contract variations that are detrimental to them, in view that End Users typically do not have the power to reject such changes, and are liable to pay ETCs if they opt to terminate their contracts before the expiry of the minimum service period.

- 6.47. IMDA would highlight that this prohibition applies only to post-paid End Users on fixed term contracts and not pre-paid End Users due to the absence of ongoing contractual relationships between the pre-paid End User and Licensees. For clarity, Licensees will still have the flexibility to offer innovative service packages, including promotional offers and implement such changes during the fixed term, so long as the full details of such changes are made known upfront in clear and definite terms, and agreed to by the End User. For example, a 24-month mobile plan that has a promotional subscription rate for the first 12 months that would revert to a non-promotional rate for the remaining 12 months is not a case of unilateral change in price, if the details such as the period during which the promotional rate would apply, and the non-promotional rate that would apply thereafter are made known and agreed upon by the End User at the point of subscription.
- 6.48. To enhance the protection of End Users against such unfair practices, IMDA proposes to include this requirement in the Converged Code and extend its application to all Licensees, beyond the Key Telecommunication Licensees currently subject to this obligation.

*Question 6:12: IMDA seeks views and comments on the proposal to include the existing prohibition of mid-contract detrimental changes in the Converged Code and extend its application to all Licensees beyond the Key Telecommunication Licensees.*

#### Prohibition on ETC in Certain Cases for the Media Markets

- 6.49. For Pay TV services, IMDA understands that changes to content and channel line-ups are inevitable as Pay TV service providers typically do not have full control over the outcome of their negotiations with content owners for the continued provision of content or channels. Therefore, IMDA would refrain from an absolute prohibition of unilateral mid-contract changes in the Pay TV market.
- 6.50. Nevertheless, to address the impact of detrimental changes on End Users, Sub-section 3.5A of the MMCC requires Pay TV service providers to give End Users the option to exit their Pay TV service contracts without ETCs in the event of:
- (a) an increase in subscription fee;
  - (b) a removal of any material channel or material sports content; and/or
  - (c) net removal of at least 20 percent of the total number of channels in the End User's Pay TV service since the point of subscription<sup>58</sup>.
- 6.51. Sub-section 3.8 of the MMCC stipulates the factors<sup>59</sup> to be used to determine materiality of channel or sports content, and Sub-section 3.2E of the MMCC

---

<sup>58</sup> In determining the 20 percent removal threshold, channels removed are net against new channels added. This provision also does not apply if the availability period of the material sports content is stated upfront to consumers at the point of subscription (e.g., if the TV bundle states upfront that it only includes access to the 2017 season of the English Premier League, and not subsequent seasons).

<sup>59</sup> IMDA would use the following factors to determine materiality of channel or sports content:

- (i) viewership of channel or sports content;

requires the retention of records of marketing materials and contracts for the purpose of assessing materiality of channels and sports content in the absence of viewership data. To ensure that End Users are not discouraged from exercising this option, Sub-section 3.5B of the MMCC further requires that, following an exit of the Pay TV service pursuant to Sub-section 3.5A of the MMCC, the subscription fee payable for the remaining service(s) in the bundle or package of services must not exceed the initial subscription fee of the bundle or package inclusive of the Pay TV service.

- 6.52. IMDA proposes to retain Sub-sections 3.5A, 3.5B, 3.2E and 3.8 of the MMCC for the Pay TV market as these are specifically targeted at addressing detrimental unilateral contract variation for End Users of Pay TV services.

*Question 6:13: IMDA seeks views and comments on the proposal to retain the requirement for Pay TV service providers to allow End Users to exit their fixed term contracts without ETC for the specific instances, and the enabling provisions (Sub-sections 3.2E, 3.5B and 3.8 of the MMCC) for this requirement.*

#### Duty to Offer Option of Short Term Agreements

- 6.53. IMDA notes that there may be instances where an End User may not qualify to exit his Pay TV contract without ETC as the ceased channel or sports content is not “material” based on IMDA’s assessment. To address the concerns of such an End User being bound in an unduly long contract that does not offer the channel or content that he/she desires, Sub-section 3.2B of the MMCC provides that Pay TV service providers are required to provide options of shorter term contracts of not more than 12 months for all Pay TV service packages. This is to ensure that End Users are empowered to make trade-offs between promotional price benefits and the risks of being bound in a long-term contract following a channel cessation.
- 6.54. IMDA proposes to retain Sub-section 3.2B of the MMCC for the Pay TV market, without extending it to the telecommunication markets as short-term contracts for telecommunication services are already available in the markets, and mid-contract detrimental changes are prohibited for telecommunication services.

*Question 6:14: IMDA seeks views and comments on the proposal to retain the requirement to offer short term agreements for the Pay TV market only.*

#### Duty Not to Act Unreasonably in Contracting

- 6.55. It is common practice for service providers to bundle their Pay TV services with telecommunication services, such as fixed-line and broadband services, at promotional monthly subscription fees. However, there have been instances

- 
- (ii) level of consumer interest in channel or sports content;
  - (iii) actual or potential value of the channel or sports content; and
  - (iv) degree to which the channel or sports content has been marketed.

Of these, viewership will be the primary determining factor. However, where viewership data is unavailable or limited, the other factors would be used and considered in totality.

in which End Users were made to upgrade their telecommunication services in order to purchase additional Pay TV services. For example, an End User of a bundled service package who wishes to purchase an additional ala carte sports content pack on top of his existing Pay TV subscription is required to upgrade his broadband contract, although such an upgrade is not a technical requirement for the delivery of the content and the broadband contract is still in-force.

- 6.56. Sub-section 3.2C of the MMCC currently prohibits Pay TV service providers from leveraging an End User's Pay TV contract to impose changes on a non-Pay TV contract that the End User has from the same service provider, if it is not a technical requirement for the provision of the Pay TV service. For the avoidance of doubt, this provision would not apply if:
- (a) it is a technical requirement for the delivery of the Pay TV content; **or**
  - (b) the change is initiated by the End User **and** it alters the basic construct of the Pay TV package that was purchased at the point of contracting.

- 6.57. IMDA proposes to retain this prohibition for the Pay TV market to prevent such unfair practice against End Users, but would not extend it to the telecommunication markets as the provision prohibiting detrimental mid-contract changes should cover such cases.

*Question 6:15: IMDA seeks views and comments on the proposal to retain the prohibition against the leveraging of a Pay TV service to impose changes on the non-Pay TV service in a bundle by service providers.*

### **Provisions to be Removed**

- 6.58. IMDA proposes to remove the following requirements in the Converged Code:
- (a) Service Quality Information Disclosure Requirements (Sub-Section 3.2.7 of the TCC); and
  - (b) Anti-avoidance of Obligations (Sub-Section 3.7 of the MMCC)

### Service Quality Information Disclosure Requirements

- 6.59. Sub-section 3.2.7 of the TCC provides that Licensees must publish reports indicating the number and types of complaints that the Licensee has received from its End Users and a statement of the extent to which the Licensee has met all applicable QoS standards issued by IMDA. There is no equivalent requirement under the MMCC.
- 6.60. IMDA proposes to remove the TCC service quality information disclosure requirements as IMDA is already consolidating and publishing such complaints statistics and QoS data on its website.

*Question 6:16: IMDA seeks views and comments on the proposal to remove the current TCC service quality information disclosure requirements.*

### Anti-avoidance of Obligations

6.61. Sub-section 3.7 of the MMCC currently prohibits any arrangement by Regulated Persons to avoid the application of regulatory requirements under the Consumer Protection Provisions. The TCC has no equivalent prohibition. IMDA views that Regulated Persons should be aware of their regulatory obligations for consumer protection and legally, the Regulated Persons cannot avoid their licensing and regulatory obligations. Therefore, IMDA proposes to remove the anti-avoidance provisions for media markets as IMDA has the necessary regulatory powers to take enforcement actions against such behaviours.

*Question 6:17: IMDA seeks views and comments on the proposal to remove the anti-avoidance provision for the media markets.*

## PART VII: MERGERS AND ACQUISITIONS

- 7.1. This part of the Consultation Document concerns the provisions governing acquisitions and consolidations contained in the TCC and MMCC. Specifically, Sections 10 and 8 of the TCC and MMCC respectively set out the procedures regarding changes in ownership and/or consolidations involving specified licensees (known as mergers and acquisitions, and collectively, the “**M&A Provisions**”).
- 7.2. The primary objective of the M&A Provisions is to ensure that any acquisition or consolidation involving telecommunication or media licensees does not substantially lessen competition in the telecommunication or media markets respectively. It broadly covers the applicability of the provisions and transactions that require IMDA’s approval, and the relevant administrative procedures.

### **Applicability of Consolidation Provisions**

#### Licensees subject to M&A Provisions

- 7.3. Currently, Section 10 of the TCC applies to telecommunication licensees, Business Trusts and trusts that have been declared by IMDA to be Designated Telecommunication Licensees, Designated Business Trusts and Designated Trusts respectively (collectively, the “**Designated Licensees**”). Section 8 of the MMCC, on the other hand, applies to all RPs and AMSPs. IMDA will retain the aforementioned terms and their existing definitions, and continue to apply the M&A Provisions to these entities under the Converged Code. Notwithstanding, IMDA proposes to provide better clarity on IMDA’s jurisdiction over acquisitions and consolidations in the telecommunication industry; as well as changes to harmonise the TCC and MMCC M&A Provisions to apply a consistent framework across the telecommunication and media industries.
- 7.4. IMDA notes that Section 10 of the TCC does not expressly spell out the requirements for transactions involving telecommunication licensees that are not Designated Licensees for purposes of Section 10 (i.e. non-Designated Licensees). The lack of clarity may result in confusion as to whether transactions involving non-Designated Licensees fall under IMDA’s sectoral purview or that of the CCCS<sup>60</sup>. IMDA hereby clarifies that all transactions involving telecommunication licensees in the telecommunication industry fall under the regulatory jurisdiction of IMDA, but only transactions involving Designated Licensees are required to abide by the notification and/or approval process as stipulated in Section 10 of the TCC. Where section 10 of the TCC has not been specified to be applicable, telecommunication licensees will generally have to abide by the requirements set out in their licence conditions relating to either approval or notification to IMDA. This framework will remain the same under the Converged Code. Related to this, should there be any

---

<sup>60</sup> It is provided in the Third and Fourth Schedule of the Singapore Competition Act (Cap. 50B) that a transaction will not be considered by the CCCS where the transaction falls within the jurisdiction of any sectoral competition regulator.

transactions that do not fall clearly within IMDA's or CCCS' purview, IMDA will engage CCCS to coordinate the assessment of such cases.

#### Transactions subject to IMDA's scrutiny

7.5. Transactions that are currently subject to the M&A Provisions are provided in the following table:

<b>Table 7.1: Transactions subject to the M&amp;A Provisions</b>	
<b>Telecommunication industry</b>	<b>Media industry</b>
<ul style="list-style-type: none"><li>• Any persons acquiring ownership interest in a Designated Licensee</li><li>• A Designated Licensee acquiring ownership interest in another Designated Licensee</li></ul>	<ul style="list-style-type: none"><li>• An RP acquiring ownership interest in an RP or AMSP</li><li>• An AMSP acquiring ownership interest in an RP</li></ul>

7.6. As shown in Table 7.1, under the TCC, transactions in which ownership interests in a Designated Licensee are acquired by *any person* (regardless of whether that person is a telecommunication licensee or not) are subject to IMDA's review. On the other hand, under the MMCC, only transactions in which ownership interests in an RP are acquired by an RP or AMSP are subject to IMDA's review. IMDA is of the view that transactions where an RP is acquired by a non-RP or non-AMSP may potentially also raise competition concerns, especially in a converged environment whereby the acquiring party may be a Dominant Entity in one or more of the telecommunication markets. Therefore, IMDA proposes to adopt the same approach in the TCC for the media industry, and subject transactions, in which ownership interests in an RP are acquired by any person, to IMDA's review.

#### Notification/ Approval Requirements

7.7. Presently, under the TCC, a Designated Licensee is required to notify IMDA if there is a transaction that result in an acquiring party acquiring 5% or more of the voting shares or voting power in the Designated Licensee. The Designated Licensee and the acquiring party are both required to seek IMDA's prior written approval if there is a transaction that results in an acquiring party acquiring 12% or more of the voting shares or voting power in the Designated Licensee. Finally, both the Designated Licensee and the acquiring party are required to seek IMDA's prior written approval if there is a transaction that results in an acquiring party becoming a 30% Controller of the Designated Licensee, or obtaining the ability to exercise Effective Control over the Designated Licensee, or acquiring the business of the Designated Licensee as a going concern. Additionally, although the TCC, read with the Telecommunication (Prescribed Transactions) Order 2012, exempts Designated Licensees from seeking IMDA's prior written approval for transactions that results in a *pro forma* change, Designated Licensees are still required to notify IMDA of such transactions. Further, the written notice must include a brief description of the transaction and the basis in which the Designated Licensee believes the transaction constitutes a *pro forma* change.

- 7.8. Under the MMCC, an RP is required to obtain IMDA's prior written approval only for consolidations (transactions that result in an acquiring party acquiring at least 30% direct or indirect ownership interest) with another RP or with any AMSP. On the other hand, the Minister's prior approval is required for any acquisition of ownership interest in a broadcasting company (who may be an RP) that crosses the 5% and 12% thresholds in accordance with the Broadcasting Act (Cap. 28) ("BA"). The same is provided for an RP who is a newspaper company under the Newspaper and Printing Presses Act (Cap. 206) ("NPPA"). The existing notification/ approval requirements for the respective industries are provided in the table below.

<b>Table 7.2: Existing notification/ approval requirements under TCC/ MMCC</b>		
<b>Level of ownership interest in relevant licensee</b>	<b>TCC Requirement for transactions involving Designated Licensees</b>	<b>MMCC Requirement for transactions involving RPs</b>
<5%	N.A	
≥5% and <12%	Notification	N.A
≥12% and <30%		
≥30% or effective control	Approval	Approval
<i>Pro forma</i> change	Notification	N.A

- 7.9. As mentioned above, IMDA will not be proposing changes to the thresholds for transactions requiring notification or approval. IMDA is of the view that the current thresholds remain appropriate in allowing IMDA to review acquisitions or consolidations that may give rise to competition concerns, while at the same time providing commercial flexibility for such market transactions.
- 7.10. To harmonise the M&A Provisions, IMDA proposes to extend the requirement to notify IMDA of any *pro forma* change, to all RPs. The extension of the *pro forma* change notification requirement to all RPs provides a consistent procedure across both industries that eases the regulatory burden of seeking approval for acquisition/ consolidation transactions involving companies within the same group, that do not give rise to competition concerns.
- 7.11. To implement the above proposals, especially those under paragraph 7.6, IMDA will be proposing amendments to the IMDA Act to provide clarity on IMDA's powers to regulate such transactions. These amendments will be consulted at a later stage.

*Question 7:1: IMDA invites views and comments on the following proposals:*

- (a) *subjecting transactions in which a non-RP or non-AMSP acquires ownership interest in an RP to the requirements of the M&A Provisions; and*
- (b) *extending the pro forma change notification requirement to all RPs.*

## Other amendments to M&A Provisions

### Standard for approval or denial

- 7.12. The TCC and the MMCC expressly provide for the standards in which IMDA will approve or deny a consolidation application. As these standards are already broadly aligned today, IMDA will merge and align the drafting for purposes of the Converged Code.

### Short form and long form consolidation application

- 7.13. The TCC and the MMCC currently sets out a “two-track” procedure to be adopted for transactions in which an application must be filed with IMDA for approval (see Table 7.3 below). Specifically, this entails either a short form or long form application form (“**Short Form**” or “**Long Form**” respectively). In general, applicants should adopt the Long Form unless they are eligible to use the Short Form, which is a streamlined application process for transactions in which IMDA believes are less likely to raise competition concerns.

<b>Table 7.3: Criteria for adopting a Short Form or Long Form</b>	
<b>TCC</b>	<b>MMCC</b>
A Short Form may be used when the consolidation is: <ul style="list-style-type: none"><li>• a horizontal consolidation that will not result in the post-consolidation entity having more than a 15% share in any telecommunication market in Singapore; or</li><li>• a non-horizontal consolidation in which none of the applicants have more than a 25% share of any telecommunication market, whether in Singapore or elsewhere, in which it participates.</li></ul>	A Short Form may be used when the consolidation is unlikely to result in the post-consolidation entity having: <ul style="list-style-type: none"><li>• a market share of 40% or more of any media market in Singapore; or</li><li>• a market share of between 20% to 40% of any media market in Singapore and post-consolidation, the combined market share of the largest 3 RPs or AMSPs, or a combination thereof, is 70% or more of any media market in Singapore.</li></ul>
A Long Form may be used if the consolidation does not fall into any of the above scenarios.	

- 7.14. IMDA notes that a harmonised approach in determining whether a consolidation uses a Short Form or Long Form process will be beneficial to industry players. This will minimise confusion as licensees will only need to be concerned with one set of rules going forward.
- 7.15. To harmonise the criteria for the use of Short Form, IMDA proposes to adopt a unified threshold of 30% market share, instead of the current 15% and 40% for the telecommunication and media industries respectively, regardless of whether a consolidation is horizontal or non-horizontal. IMDA will also retain the second limb of the criteria for Short Form under the MMCC, but revise the threshold from “between 20% to 40%” to “between 20% to 30%” to be consistent with the unified threshold of 30% and minimise any overlaps between the two. Based on IMDA’s experience with the telecommunication and media industries, a consolidation that results in the post-consolidation entity having a market share of 30% or less is unlikely to raise competition concerns and should be subject to less stringent application requirements.

7.16. In summary, IMDA proposes to adopt the following criteria for determining whether a consolidation application uses a Short Form or Long Form:

- (a) a Short Form may be used when none of the applicants have, and/or the post-consolidation entity will not have, a share of:
  - (i) 30% or more of any telecommunication or media market in Singapore or elsewhere; or
  - (ii) between 20% to 30% when the combined market share of the largest 3 RPs or AMSP, or a combination thereof, is 70% or more of any telecommunication or media market in Singapore; or
- (b) a Long Form may be used if the consolidation does not fall into the scenarios provided in (a) above.

*Question 7:2: IMDA invites views and comments on the proposed criteria for the Short Form and Long Form application.*

#### Consolidation review period

7.17. The TCC and the MMCC currently sets out, among other things, the timeline in which IMDA will respond to a consolidation application after it has satisfied the minimum information requirements. The timelines for the respective industries are set out in the table below. IMDA believes that there is merit to have a consistent consolidation review period for the Converged Code and will adopt the consolidation review timeline provided under the TCC. The TCC has a shorter review period that will minimise the waiting duration for consolidation applicants and thus provide greater regulatory certainty to industry players, especially given the fast paced telecommunication and media industries.

<b>Table 7.4: Consolidation review period</b>	
<b>Consolidation application pursuant to TCC</b>	<b>Consolidation application pursuant to MMCC</b>
<ul style="list-style-type: none"><li>▪ Ordinarily complete consolidation review within 30 days after the start of the consolidation review period</li><li>▪ If a consolidation application is deemed to raise novel or complex issues, IMDA will extend the review period by up to 90 days, to a maximum of 120 days</li></ul>	<ul style="list-style-type: none"><li>▪ Ordinarily complete consolidation review within 30 working days after the start of the consolidation review period</li><li>▪ If a consolidation application is deemed to raise novel or complex issues, IMDA will extend the review period by 60 working days and will seek to provide notification by the 110<sup>th</sup> day</li></ul>

*Question 7:3: IMDA invites views and comments on the proposed consolidation review timeline.*

## PART VIII: RESOURCE SHARING

- 8.1. Telecommunication licensees and media licensees are generally expected to produce, acquire, lease or build resources (including infrastructure) that they require for the provision of telecommunication and/or media services. However, IMDA recognises that, in some cases, there may be a need for certain resources to be shared.
- 8.2. The provisions facilitating sharing amongst licensees are currently set out in Section 7 of the TCC and Section 9 of the MMCC. Either at the request of the licensees, or of its own initiative, IMDA will determine a resource which requires sharing as "**Critical Support Infrastructure**" (under the TCC) or "**Essential Resource**" (under the MMCC).<sup>61</sup> Telecommunication licensees and media licensees can request for the sharing of the Critical Support Infrastructure and Essential Resource respectively.
- 8.3. IMDA notes that the intent of both Sections are aligned, with the aim to facilitate the sharing of resources (including infrastructure) amongst media licensees and telecommunication licensees, where necessary. The key differences arise from the application of the Sections. As such, under the Converged Code, IMDA seeks to harmonise the provisions to the extent possible. Details of IMDA's proposal for this section ("**Resource Sharing Provisions**") are explained below.

### Applicability

#### Types of Resources Applicable

- 8.4. IMDA notes that Section 7 of the TCC can apply to any infrastructure, while Section 9 of the MMCC can apply to any apparatus, accessory, system, service, information or such other resource of any kind required to provide media service(s) ("**Media Resource**").
- 8.5. For the Converged Code, IMDA proposes that the definition of Media Resource be limited to only infrastructure, akin to Section 7 of the TCC, as IMDA foresees that only infrastructure is likely to be a potential resource that a media licensee cannot produce or lease within the foreseeable future in order to provide a media service.
- 8.6. IMDA will also retain the terms of **Critical Support Infrastructure** to be applied for the telecommunication markets, and **Essential Resource** to be applied for the media markets, given that they are distinct terms already defined under the respective Acts. Given the proposal to limit the definition of Media Resource to infrastructure, this also means that **Essential Resource** will only cover infrastructure used to provide media service(s).

---

<sup>61</sup> In certain cases, IMDA may also determine that it is in the public interest to require sharing of resources even if such resources do not constitute a Critical Support Infrastructure or Essential Resource.

- 8.7. For the avoidance of doubt, IMDA would like to clarify that resources required for the effective sharing of the infrastructure may be included in the scope of the provision.

*Question 8:1: IMDA invites views and comments on the proposal to limit Media Resource to only infrastructure (akin to Section 7 of the TCC) for the purposes of sharing amongst media licensees.*

Licensees for which the Resource Sharing Provisions Apply

- 8.8. IMDA notes that Section 9 of the MMCC applies to any person (including Regulated Person) who owns or controls any Media Resource in connection with the provision of media services. IMDA notes that a person who owns or controls a Media Resource is likely to be either a media licensee or a telecommunication licensee. Hence, to provide certainty to the industry on who will be subject to the Resource Sharing Provisions under Section 9 of the MMCC provisions, IMDA proposes to limit the application of the provisions to infrastructure owned by media licensees and telecommunication licensees. This means that a media licensee can request for the use of a Media Resource owned by media licensees and/or telecommunication licensees, for the provision or delivery of any media service.
- 8.9. Sub-section 7.1.1 of the TCC states that all provisions in Section 7 under infrastructure sharing, apply only to Facilities-Based Operations (“FBO”) licensees. This policy was introduced in the early days of market liberalisation when it was envisaged that only FBOs would deploy infrastructure. However, there have been recent cases where Services-Based Operations (“SBO”) licensees had rolled out infrastructure in a localised area/establishment e.g., cabling inside a building or facility, where an FBO licence is not required. Even though the said infrastructure fulfilled the criteria of a Critical Support Infrastructure as set out in Sub-section 7.3.1 of the TCC, IMDA was unable to declare it a Critical Support Infrastructure as it was not owned by an FBO licensee.
- 8.10. IMDA is of the view that restricting the infrastructure sharing obligation to FBOs only no longer meet present day needs and should be removed, because as the above example shows, the sharing of infrastructure by SBOs may also be essential for public interest. Therefore, IMDA proposes to extend the Resource Sharing Provisions applicable to telecommunication licensees to include all FBO and SBO licensees under the Converged Code. This would give IMDA the ability to declare any infrastructure, owned by an FBO or SBO licensee, a Critical Support Infrastructure and should be shared with other licensees, as long as the said infrastructure fulfils the criteria for the designation of Critical Support Infrastructure.

*Question 8:2: IMDA invites views and comments on the proposed licensees for which the Resource Sharing Provisions apply.*

## **Criteria for Designation**

- 8.11. As mentioned, for the designation of Essential Resource or Critical Support Infrastructure, IMDA will determine whether such Media Resource or infrastructure satisfy the criteria as set out under Sub-section 9.3.1.5 of the MMCC and Sub-section 7.3.1 of the TCC respectively.
- 8.12. IMDA notes that the criteria are largely similar. Under the Converged Code, IMDA proposes to use the same set of criteria for the determination of both Essential Resource and Critical Support Infrastructure, to provide consistency in application. The proposed criteria are set out below:
  - (a) the infrastructure/ Media Resource is required to provide the telecommunication / media services;
  - (b) an efficient new entrant would neither be able to replicate or create the infrastructure / Media Resource in the foreseeable future, nor obtain the infrastructure / Media Resource from a third party at costs that would allow market entry;
  - (c) the infrastructure / Media Resource is not fully and efficiently utilised; and
  - (d) owners of the infrastructure / Media Resource have no legitimate justification to refuse sharing.
- 8.13. IMDA may also require the sharing of both infrastructure (for telecommunication licensees) and/or Media Resource (for media licensees) if it is in the public interest to do so.

*Question 8:3: IMDA invites views and comments on the proposed criteria in the determination of both Essential Resource and Critical Support Infrastructure.*

- 8.14. Under both the TCC and the MMCC, once IMDA has designated a specific infrastructure or Media Resource to be shared, the entity controlling the infrastructure or Media Resource must, when requested by any licensee, negotiate a sharing agreement in good faith. Should the parties involved be unable to reach a mutually acceptable sharing agreement, they may request for IMDA to resolve the dispute in accordance with the Dispute Resolution Procedure specified under the TCC and the MMCC, and IMDA may establish a cost-based rate for compensation for the sharing of infrastructure or Media Resource. The dispute resolution procedures are similar for both the TCC and the MMCC, and IMDA will merge the provisions and apply a single, consistent procedure for both telecommunication and media markets under the Converged Code. The pricing principle will be discussed with Telecommunication Interconnection under Part X of the consultation document.

## PART IX: PUBLIC INTEREST OBLIGATIONS

- 9.1. This part of the consultation document concerns Section 2 of the MMCC which sets out the Public Interest Obligations to be observed by specific RPs. As mentioned in Part I of this consultation document, IMDA proposes to harmonise the provisions under the TCC and the MMCC where possible. Having said that, IMDA recognises that there remain some inherent differences between the telecommunication and the media markets, and as a result, there will be some unique market-specific regulatory conditions that are relevant to, and should apply only to, one market. One key difference is the role media plays in nation building, which necessitates the need to impose certain obligations on specific RPs. Hence IMDA will retain the Public Interest Obligations specific to the media markets only. The rest of this part will discuss IMDA's review of the following: (i) Sub-section 2.7 on the Cross-Carriage Measure; (ii) Sub-section 2.6 on the Anti-Siphoning Scheme; and (iii) Sub-section 2.5 on the Obligation to Make Specified Materials Reasonably Available.

### **The Cross-Carriage Measure (“CCM”)**

- 9.2. In 2010, then-MDA introduced the CCM to discourage Subscription Television Licensees from pursuing an exclusive content-centric strategy. Such a strategy had resulted in a high degree of content fragmentation and inconvenience to consumers, as well as diverted resources away from other aspects of competition such as content and service innovation. Hence, the CCM sought to encourage Pay TV operators to focus competition through other means such as service differentiation, competitive packaging and pricing.
- 9.3. Since the introduction of the CCM, IMDA observed that content fragmentation has abated. The number of common channels that can be found on the current Pay TV platforms increased from seven to more than 100. IMDA further notes that there is greater service differentiation and innovation in the Pay TV markets and consumers now have wider content choices as part of their Pay TV subscriptions. Hence, IMDA is of the view that the CCM remains relevant.

#### Restricting the CCM by Content Genre

- 9.4. IMDA notes that the CCM has only been imposed on certain key sports content thus far<sup>62</sup>, and as part of this review, has considered whether the CCM should be limited to sports content only. In a Pay TV survey conducted by IMDA in 2016, respondents were asked which content genres were most important to their household when subscribing to a Pay TV service. The three most important genres, ranked in order of importance, were dramas, movies and sports (see Table 9.1).

---

<sup>62</sup> Since the introduction of the CCM, the content that has been cross-carried to date are: (a) UEFA Euro 2012; (b) English Premier League Seasons 2013 to 2016, and Seasons 2016 to 2019; and (c) FIFA World Cup 2014.

<b>Table 9.1: Ranking of Content Genres in 2016</b>	
<b>Most important content genre to Pay TV subscription (% of total responses received)</b>	
1.	Drama (39%) <sup>63</sup>
2.	Movies (37%)
3.	Sports (26%)
4.	Documentaries/Education (21%)
5.	News (18%)

- 9.5. The results of the survey indicate that, while sports is an important genre in Pay TV subscriptions, other genres such as drama and movies are just as important to Pay TV subscribers. Furthermore, IMDA notes that the relative ranking of the genres may change over time. Hence, IMDA views that there is no strong basis to limit the CCM to sports content or to any specific content genre. In this regard, IMDA proposes for the CCM to be applicable to Pay TV content of any genre, where the relevant conditions for applying the CCM are met.

*Question 9:1: IMDA invites views and comments on continuing to apply the CCM to content of all genres.*

#### Offering OTT Services that Contain Qualified Content<sup>64</sup> (“QC”) on a Standalone Basis

- 9.6. Under Sub-section 2.7 of the MMCC, the CCM is only applicable to QC transmitted on the Relevant Platforms, specifically on hybrid fibre-coaxial, optical fibre, and the Asymmetric Digital Subscriber Line. IMDA observed that some Pay TV operators require their customers to subscribe to their Pay TV services first before they are allowed to sign up for the Pay TV operators’ OTT content services. IMDA has received feedback from the public that certain parts of a QC were being shown on the Supplying Qualified Licensee’s (“SQL”) OTT platform, and cross-carried subscribers on the Receiving Qualified Licensee’s (“RQL”) platform were not able to access the QC<sup>65</sup>.
- 9.7. While IMDA generally does not intervene in how Pay TV operators bundle their service offerings, IMDA is concerned that if QC is offered on an OTT platform that is restricted to only the SQL’s own subscribers, the cross-carried

---

<sup>63</sup> The total percentage adds up to more than 100% as each respondent is able to choose up to three genres.

<sup>64</sup> Qualified Content refers to channels and programming content, acquired by a Regulated Person under an arrangement, whether explicit or implicit, which prevents or restricts another Regulated Person from acquiring the channels or programming content for transmission on any of the Relevant Platforms.

<sup>65</sup> The SQL refers to any Regulated Person who is licensed to provide any Subscription Television Service and produces or commissions, or acquires or otherwise obtains, Qualified Content. The RQL is required to allow the SQL’s Qualified Content to be made available through its set-top boxes. IMDA may designate any Regulated Person to be a RQL if the Regulated Person is licensed to provide a nationwide Subscription Television Service on any Relevant Platform and has or had at any point in time 10,000 or more subscribers on any of its Relevant Platform.

subscribers on the RQL's platform may be forced to sign up for a Pay TV subscription in order to access the same QC. IMDA reiterates its policy intent to ensure that the subscribers on both the SQL and RQL platforms are treated in a non-discriminatory manner. Hence, if the SQL chooses to offer part of the QC on its Relevant Platform and the remaining part of the QC on its OTT platform, IMDA would require the SQL to offer the cross-carried subscribers access to the QC on the SQL's OTT platform on the same price and terms as those offered to the SQL's customers. This is to prevent Pay TV operators from using their OTT platform as a means to circumvent the CCM.

*Question 9:2: IMDA invites views and comments on the proposal to require the SQL to offer the cross-carried subscribers access to the QC on its OTT platform, if part of the QC is on the Relevant Platform, on non-discriminatory basis i.e., on the same price and terms offered to the SQL's customers.*

### **Anti-Siphoning Scheme (“Scheme”)**

- 9.8. Under Sub-section 2.6 of the MMCC, Pay TV operators are restricted from acquiring certain exclusive broadcast rights for programmes listed in the anti-siphoning list to increase the opportunities for viewers in Singapore to access programmes of public interest and national significance on FTA TV.
- 9.9. The programmes on the anti-siphoning list are determined by the criteria set out in Sub-section 2.6.1.3 of the MMCC, and are reviewed on a regular basis. Programmes on the anti-siphoning list are classified into two categories<sup>66</sup>:
  - (a) Category A programmes: Pay TV operators cannot acquire both the exclusive “live” and “delayed” rights to broadcast all or part of the programme; and
  - (b) Category B programmes: Pay TV operators can acquire exclusive “live” rights, but not exclusive “delayed” rights to broadcast all or part of the programme.
- 9.10. Then-MDA received feedback during the previous consultation on the Scheme in 2013 that the Scheme did not provide adequate guarantee of programme coverage on FTA TV, and that more measures to address hoarding by FTA TV operators could be considered. IMDA agrees that there can be greater clarity in determining unused rights under the existing anti-hoarding provisions. At the same time, IMDA also notes that the current Scheme lacks coverage requirements to ensure timely broadcast of the listed programmes by FTA TV operators who have acquired exclusive rights to the listed programmes.
- 9.11. IMDA proposes to introduce coverage obligations to complement the existing anti-hoarding provisions set out in Sub-section 2.6.2 of the MMCC. The proposed amendments will require FTA TV licensees with exclusive rights to

---

<sup>66</sup> Examples of Category A programmes are Southeast Asian Games and Summer Olympic Games. Examples of Category B programmes are ASEAN Football Federation Suzuki Cup and Summer Youth Olympic Games.

Category A programmes to broadcast the entire event live. Delayed broadcast would only be allowed if there are simulcast events or conflicts with regular news bulletins. For Category B programmes, the entire event would have to be broadcast within 48 hours by FTA TV licensees.<sup>67</sup>

*Question 9:3: IMDA invites views and comments on the proposal to introduce coverage obligations to complement the existing anti-hoarding provisions.*

### **Designated Video and Newspaper Archive Operators**

- 9.12. Sub-section 2.5 of the MMCC sets out the obligations of designated video and newspaper archive operators (“**Archival Provisions**”). The intent of the Archival Provisions is to prevent anti-competitive behaviour by ensuring that archives of significant public interest are made available to other players in the media industry.
- 9.13. IMDA notes that the National Library Board (“**NLB**”) and the National Archives of Singapore (“**NAS**”) (collectively known as “**NLB/NAS**”) perform the national archive management role pursuant to the National Library Board Act (Cap. 197), which provides NLB/NAS with the power to require deposit of newspaper and video, and provide the public and the media industry with access to these archives. In this regard, IMDA notes that, effective from 21 September 2016, IMDA has cancelled the notification that gazetted MediaCorp Pte Ltd and MediaCorp TV Singapore Pte Ltd (collectively known as “**MediaCorp**”) as the Designated Video Archive Operators (“**DVAO**”).
- 9.14. In view of the above, IMDA proposes to remove Sub-section 2.5 on the Archival Provisions given that the national archive management role rest solely with NLB/NAS now. Accordingly, Sub-section 10.4(b) in which a DVAO may request for IMDA to provide conciliation services will also be removed.
- 9.15. With the proposed deletion of the Archival Provisions, IMDA will rely on general competition provisions within the Converged Code to regulate anti-competitive behaviour with regard to the licensing of archived material to other media licensees for broadcast.

*Question 9:4: IMDA invites views and comments on the removal of Sub-sections 2.5 and 10.4(b) of the MMCC in the Converged Code.*

---

<sup>67</sup> The delay for Category B programmes is to ensure the commercial viability of the “live” broadcast rights for Subscription TV Licensees and “delayed broadcast” rights for FTA licensees, provide flexibility to the Subscription TV Licensees to accommodate the different time zones that the “live” event may be held, and also to provide flexibility for programme scheduling to avoid causing significant disruption to regular programming.

## PART X: TELECOMMUNICATION INTERCONNECTION

- 10.1. This part of the consultation document concerns Sections 5 and 6 of the TCC. Section 5 sets out, amongst other duties, telecommunication licensees' duty to interconnect with each other, while Section 6, along with Appendices 1 and 2 of the TCC, governs interconnection with Dominant Licensees and related matters. IMDA has reviewed these Sections as elaborated in the following paragraphs. Given that these interconnection frameworks remain relevant for the telecommunication markets, but are not required for the media markets, IMDA will only apply these frameworks to the telecommunication markets in the Converged Code.
- 10.2. One significant development since the second triennial review of the TCC in 2009 has been the deployment and widespread take-up of services on the NBN. This development has contributed to the ongoing migration of services and End Users from the traditional copper and hybrid fibre-coaxial-based networks to the IP-based NBN. New entrants are now more likely to enter the markets using fibre, in particular over the NBN, rather than using legacy networks. The deployment of the NBN has also seen a shift from facilities-based to services-based competition in certain segments of the telecommunication markets.
- 10.3. In line with these developments, IMDA is proposing the following changes to the interconnection regime, namely:
  - (a) removal of certain services from the Schedule of Interconnection Related Services ("IRS") and Mandated Wholesale Services ("MWS");
  - (b) harmonisation of the voice termination regime to "Bill-and-Keep" ("BAK") and change of the interconnection charging regime for fixed call termination from "Calling Party Pays" ("CPP") to BAK; and
  - (c) update of the principles governing the pricing of IRS, Critical Support Infrastructure and Essential Resource.

These proposals are set out in the following sub-sections. In addition, IMDA would like to seek the industry's views and comments on the relevance of the IRS regulated under the TCC (or the Converged Code, moving forward) and whether a Dominant Licensee should continue to be required to offer these IRS in its reference interconnection offer. IMDA would also like to review whether it is appropriate to extend the validity period of the Dominant Licensee's reference interconnection offer to five years, instead of the current three years.

- 10.4. IMDA proposes in the earlier part of this consultation paper, to adopt a "Market-by-Market" approach for telecommunication licensees moving forward, whereby a telecommunication licensee will be classified as a Dominant Licensee based on specific market(s) or facility/facilities. Notwithstanding this, existing Dominant Entities will continue to be classified as dominant for existing services and facilities that they operate, and subject to ex ante regulation, where applicable. As such, the interconnection

obligations of existing Dominant Licensees, including the IRS to be offered by Dominant Licensees, continue to be required, unless exempted or removed from regulation via this Converged Code review.

## **Removal of Services from the Schedule of IRS and MWS**

- 10.5. Pursuant to Sub-section 6.3.2 of the TCC, IMDA has gazetted a Schedule of IRS and MWS that sets out the terms and conditions in which a Dominant Licensee must provide IRS and MWS to other telecommunication licensees under its reference interconnection offer.
- 10.6. The IRS and MWS were developed some years ago, and therefore primarily concern the provision of copper-based and other legacy services. However, these are becoming less critical as telecommunication licensees now prefer to deliver services mostly over fibre. In addition, IMDA notes that even when copper was the primary network, only a small number, or in some cases none, of these services had been taken up.
- 10.7. IMDA hence proposes to remove the following services from the Schedule of IRS and MWS:
  - (a) unbundled network elements, namely local loops, sub-loops, line sharing, distribution frame access and internal wiring<sup>68</sup>;
  - (b) unbundled network service, namely tail local leased circuits<sup>69</sup>; and
  - (c) support facilities, namely co-location at roof sites<sup>70</sup>,(collectively, the “**Services With No Take-up**”).
- 10.8. For both (a) unbundled network elements, and (b) unbundled network service, there has been zero take-up over the past five years. New entrants are now more likely to enter the markets using the NBN, rather than take up copper connections. For example, fixed-line calls are now being offered over fibre broadband Internet connections as part of bundled packages, leading to lower take-up of copper-based telephony services. The copper network elements and network service may no longer be as critical.
- 10.9. The intent to require (c) co-location at roof sites as part of the IRS is to provide telecommunication licensees with alternatives to laying underground cables in order to access exchanges and submarine cable landing stations of the Dominant Licensee, Singtel, for the purpose of connection to local loops, sub-loops, shared line, tail local leased circuits and/or access to co-location space at the submarine cable landing stations. IMDA notes that there has been no

---

<sup>68</sup> Specific to Singtel’s Reference Interconnection Offer (“RIO”) only, the relevant schedules that would be removed are: Schedule 3A – Licensing of Local loop/Sub-loop, Schedule 3B – Line Sharing, Schedule 3C – Sale of Internal Wiring, Schedule 3D – Licensing of Building MDF Distribution Frame and Schedule 3E – Licensing of Outdoor Cabinet Distribution Frame.

<sup>69</sup> Specific to Singtel’s RIO only, the relevant schedule that would be removed is Schedule 4C – IRS Tail Circuit Service.

<sup>70</sup> Specific to Singtel’s RIO only, the relevant schedule that would be removed is Schedule 5C – Licensing of Roof Space and Co-location Space at Roof Sites.

take-up of the service of co-location at roof sites since October 2007. This lack of take-up may be attributable to the inherent constraints of alternative wireless technologies, such as distance- and capacity-related limitations, to achieve carrier class reliability and for gaining access to the IRS. Hence, co-location at roof sites may no longer be a relevant service required under the list of IRS.

*Question 10:1: IMDA invites views and comments on the proposal to remove the Services With No Take-up from the Schedule of IRS and MWS.*

### **Relevance of Interconnection Related Services Regulated under the Converged Code**

- 10.10. Apart from the proposed removal of the Services With No Take-up, a Dominant Licensee will continue to be required to provide the following IRS under the Converged Code in its reference interconnection offer:
- (a) Physical and Logical Interconnection;
  - (b) Origination, Transit and Termination;
  - (c) Essential Support Facilities; and
  - (d) Unbundled Network Services,
- (collectively, the “**Regulated Services**”).

Given the general shift in the telecommunication landscape described in the preceding paragraphs, IMDA is reviewing whether these Regulated Services are still relevant for today’s market players.

#### Physical and Logical Interconnection

- 10.11. Under the TCC, a Dominant Licensee must offer to allow FBO and SBO licensees to physically and logically interconnect their respective networks with the Dominant Licensee’s network for the purpose of exchanging telecommunication traffic. At a minimum, the Dominant Licensee must offer to allow interconnection to occur at the following Points of Interconnection (“**POI**”):
- (a) interconnect gateway switches (“**IGS**”); and
  - (b) local switches (line side and trunk side).
- 10.12. In order to ensure the deployment of an integrated “network of networks” that provides seamless any-to-any communications throughout Singapore, such interconnection requirements are imposed on Dominant Licensees. In addition, regulations require all other telecommunication licensees to interconnect with other telecommunication licensees, be it direct or indirect interconnection.
- 10.13. Notwithstanding the progressive change from copper to fibre networks, IMDA remains of the view that mandating a Dominant Licensee to offer physical and logical interconnection continues to be critical for the purpose of any-to-any

connectivity (including enabling origination and termination of voice traffic) as well as for gaining access to the essential support facilities and unbundled network services that the Dominant Licensee is required to offer under its reference interconnection offer. For the avoidance of doubt, data-related traffic such as IP-based Internet traffic and managed data, will continue to be excluded from the IRS imposed on a Dominant Licensee.

#### Origination, Transit and Termination (“O/T/T”)

- 10.14. Fixed voice call O/T/T services involve the switching, routing and/or transmission of telecommunication traffic between telecommunication licensees. O/T/T services allow traffic originating from one telecommunication licensee’s network to terminate on, or transit through, another telecommunication licensee’s network.
- 10.15. Call origination is the conveyance of calls, originated on-net but not billed to the originating end user by its access network operator, to a POI where they are handed over to the destination operator, who compensates the first operator for originating the call. Call origination service enables the originating end user to use a service offered by the destination operator’s system or provided by a value added service provider connected to the destination operator’s system.
- 10.16. Call transit service allows indirect interconnection for the conveyance of calls. For smaller-sized operators, direct interconnection may be difficult to justify cost-wise and such operators will have to consider the cost of transit relative to the cost of direct interconnection.
- 10.17. Call termination is the conveyance of calls originated off-net to an end user purchasing access to the destination operator’s network. Call termination service enables customers of one network to call customers of another network.
- 10.18. A Dominant Licensee must offer to provide O/T/T services to FBO and SBO Licensees. The Dominant Licensee’s reference interconnection offer must specify the prices, terms and conditions by which the Dominant Licensee and its Requesting Licensees will compensate each other for such services on a reciprocal basis (including situations where the Dominant Licensee procures the O/T/T services from the Requesting Licensees).
- 10.19. The Dominant Licensee only needs to offer to provide transit services between telecommunication licensees interconnected to the Dominant Licensee’s IGS. The Dominant Licensee does not need to offer to route transit traffic between the IGS and a local switch. At a minimum, the Dominant Licensee must provide the following O/T/T services:
  - (a) line side (local exchange) origination and termination;
  - (b) trunk side (local exchange) origination and termination; and
  - (c) IGS origination, termination, and transit.

- 10.20. Given the above nature of O/T/T services to facilitate the transmission of fixed voice telecommunication traffic, IMDA has conducted market studies<sup>71</sup> to understand the level of competition in the domestic fixed-line telephony market in Singapore and found that Singtel remains dominant in the residential domestic fixed-line telephony market in Singapore, for both the wholesale and retail segments, as competitors focus on other markets such as broadband Internet access services and mobile services.
- 10.21. Due to the bundling of VoBB with broadband Internet access at low or zero incremental cost, consumers are also progressively shifting from the traditional DEL to VoBB for voice services. In time, this is expected to result in most households being able to use a VoBB product over their fixed-line broadband Internet access connection, in replacement of a traditional PSTN line. The reduction in PSTN connections may indicate that VoBB services are starting to have some impact on traditional PSTN-based telephony.
- 10.22. Notwithstanding this, as discussed in Part II, a segment of the residential market (the lower socio-economic categories and older age groups) is likely to remain voice-centric, and they will likely continue to rely on standalone PSTN-based voice services.
- 10.23. In the business domestic fixed-line telephony market, both the retail and wholesale segments remain dominated by Singtel. IMDA's market studies further noted that while the rate of take up of VoBB has been encouraging, there remain significant competitive constraints due to the nature of telecommunication services required by businesses. Hence, traditional DEL and ISDN services remain the main services procured in the business domestic fixed-line telephony market at this time.
- 10.24. Considering the low level of competition in the domestic fixed-line telephony market, for both residential and business segments, IMDA remains of the view that regulation of the O/T/T services is still necessary, including price regulation on the Dominant Licensee through its reference interconnection offer, to ensure a level playing field for new entrants and smaller-sized operators.

#### Essential Support Facilities (“ESF”)

- 10.25. ESF are passive support structures, for which no practical or viable alternatives exist, that enable the deployment of telecommunication infrastructure. A Dominant Licensee must offer to provide ESF to FBO Licensees. The Dominant Licensee's reference interconnection offer must contain the prices, terms and conditions by which the Dominant Licensee will provide the ESF below:
  - (a) co-location; and
  - (b) lead-in ducts and lead-in manholes.

---

<sup>71</sup> Refer to Part II of the consultation document

### *Co-Location*

- 10.26. The Dominant Licensee must offer to allow FBO licensees to physically co-locate and access their equipment at any technically feasible location within the Dominant Licensee's network. In particular, the Dominant Licensee must allow co-location at the following facilities (when controlled by the Dominant Licensee):
  - (a) exchange buildings housing local, interconnection and international switches and facilities; and
  - (b) submarine cable landing stations.
- 10.27. Co-location at exchange buildings is essential to support operators' network deployments in areas relating to interconnecting with a Dominant Licensee's network to achieve any-to-any communication, in particular to access O/T/T services, and/or providing local connectivity services to other licensees for the purpose of interconnection.
- 10.28. In the same vein, co-location at submarine cable landing station is essential to facilitate operators' access and connection to the submarine cable capacities at these facilities. This includes cases where FBO licensees who wish to build local connectivity infrastructure to access submarine cable capacities at the landing stations, are able to do so by co-locating their equipment at the landing stations. While IMDA notes that there are commercially available options for FBO licensees to land submarine cables other than in the Dominant Licensee's landing stations, IMDA is of the view that requiring the provision of co-location at Dominant Licensee's submarine cable landing stations under the RIO is necessary to continue to support fair and reasonable access to submarine capacities landed at these stations, and to facilitate the deployment of international connectivity infrastructure in a land-scarce Singapore.

### *Lead-in Ducts and Lead-in Manholes*

- 10.29. Lead-in ducts and lead-in manholes are ESF that house the telecommunication transmission cables (e.g., copper, coaxial and/or fibre cables) that connect to buildings. A Dominant Licensee must offer to lease the lead-in ducts and lead-in manholes to FBO licensees for the purpose of placing the latters' own telecommunication transmission cables.
- 10.30. Access to lead-in facilities is important to ensure fair and efficient competition amongst licensees, particularly for some locations where the lead-in facilities are "bottleneck" infrastructure and cannot be replicated or built. Given the limited number of pre-installed lead-in facilities by developers/building owners as required under the Code of Practice for Info-communication Facilities in Buildings ("COPIF"), a Dominant Licensee should allow access to their lead-in facilities which are connected to the pre-installed lead-in facilities of the buildings. To minimise disruption to building owners, tenants and the public, such lead-in facilities should first be shared amongst operators on cost-based basis before operators consider building new lead-in facilities, unless the lead-

in facilities are fully utilised, reserved for Dominant Licensee's future expansion as allowed by IMDA, or are not usable.

- 10.31. IMDA is thus of the view that a Dominant Licensee should continue to offer ESF in its reference interconnection offer to facilitate entry and competition by entrants whilst encouraging infrastructure investment.

#### Unbundled Network Services (“UNS”)

- 10.32. UNS are telecommunication network services that FBO and SBO licensees need to have cost-based access to in order to provide a competing service. Telecommunication network services are UNS if the services:

- (a) are technically or operationally required to provide a competing service; and
- (b) cannot be self-provisioned, or obtained from a source other than the Dominant Licensee, at commercially reasonable rates.

- 10.33. A Dominant Licensee must offer to provide the following UNS:

- (a) connection services at submarine cable landing stations to FBO licensees; and
- (b) emergency services to both FBO and SBO licensees.

#### *Connection Services*

- 10.34. Connection services are services that the Dominant Licensee must offer to FBO licensees at the submarine cable landing stations in order for them to connect and access capacity on any submarine cable system that lands at those stations.

- 10.35. IMDA’s designation of connection services as UNS, at submarine cable landing stations controlled by a Dominant Licensee, has been in the interest of facilitating competitive entry in the international facilities market, in particular the provision of backhaul facilities in Singapore. IMDA’s market studies indicated that terrestrial international business capacity services such as IPLC and IMDS continue to be competitive, with a large number of international operators serving this market, and increases in submarine capacity further supporting competition. IMDA’s market studies further noted that while demand for additional capacity on backhaul links is likely to grow, increased competition and self-supply by vertically integrated telecommunication service providers continue to put competitive pressure on backhaul revenues. IMDA is thus of the view that requiring the Dominant Licensee to provide connection services as an IRS, from FBO licensees’ equipment co-located at the landing stations to the international capacities they acquired/leased in the submarine cables landed at the stations, is necessary to ensure fair and reasonable access to these facilities at these stations, and to facilitate the deployment of international connectivity infrastructure and continued competition in the international services markets.

## *Emergency Services*

10.36. Dominant Licensees must offer telecommunication licensees access to emergency services call centres and the ability to add local telephone location data to the emergency services database. IMDA considers emergency services as necessary peripheral services required by operators to provide the competing service. As noted from IMDA's market studies, Singtel remains dominant in both the residential and non-residential domestic fixed-line telephony market in Singapore, for both the wholesale and retail segments. Given this, IMDA is of the view that access to emergency services is a critical UNS required to be offered by the Dominant Licensee.

*Question 10:2: IMDA invites views and comments on whether IMDA should continue to require Dominant Licensee to offer the Regulated Services.*

## **Validity Period of Reference Interconnection Offer**

10.37. Under the TCC, the Dominant Licensee is required to offer its reference interconnection offer for a period of three years. IMDA notes that the passive civil infrastructure and the technology required to provide the regulated copper-based services, ESF, and UNS under the Dominant Licensee's reference interconnection offer, are unlikely to change significantly and rapidly within short periods of time, and that the related infrastructure also has a long asset life, i.e., depreciates over a longer period. Given this, IMDA proposes to extend the validity of the Dominant Licensee's reference interconnection offer to five years. This will also align the validity periods of the reference interconnection offers for both copper-based and fibre-based regulated offerings to be the same at five-year validity.

*Question 10:3: IMDA invites views and comments on the proposed extension of the validity period of the reference interconnection offer to five years, instead of the current three years.*

## **Harmonisation of the Voice Termination Regime to BAK and Change of Interconnection Charging Regime for Fixed Call Termination from CPP to BAK**

10.38. IMDA notes that there have been a number of important developments in the Singapore telecommunications industry in recent years which may impact the current regulation of voice-related interconnection services, such as fixed voice origination, transit and termination. In particular:

- (a) the development of access-based competition over the NBN, whereby consumers are offered bundles of services including voice services;
- (b) the transition from Time Division Multiplex ("TDM")-based voice services to IP-based voice services;
- (c) competition from new OTT-based messaging applications that use IP networks;
- (d) shift of consumer communication over to mobile networks; and
- (e) the declining importance of voice relative to data (in terms of both revenues and volumes).

- 10.39. IMDA considers that these developments provide scope to propose a change to the current interconnection charging regime for fixed call termination between operators from CPP to BAK, i.e., zero termination rate to the terminating operator. This would be in line with the current mobile interconnection charging regime already in place, as it is based on a zero mobile termination rate. This would allow for a harmonised interconnection charging framework for all domestic telephony services, which would be appropriate given that these services would eventually be provided over all-IP-based networks. Furthermore, having fixed termination rates while mobile termination rates are zero effectively results in a transfer of revenue from mobile and services-based operators to fixed network operators. This imbalance could have a distortionary effect on the development of the market and this transfer is likely to increase over time as fixed-line usage for voice calls remains relatively low and constant while mobile usage increases.
- 10.40. As the industry is moving towards an all-fibre, all-IP world, the interconnection framework and practices have changed as well. Previously, interconnection was based largely on TDM to facilitate fixed-line calls. However, in an all-IP world, interconnection will shift towards a symmetric ‘peering’ approach or an IP Transit arrangement. These approaches remove the need to determine regulated prices for POIs, as both parties would provide connectivity to a neutral point and bear their own costs for the connection, or commercially negotiate and agree on the IP Transit rates. As voice traffic is packetized and transmitted over a shared bandwidth with other data packets, unlike a traditional/PSTN network where the copper line is a dedicated resource, the transmission cost will be shared over a larger volume of data packets, likely resulting in a low to negligible termination rate per call minute.
- 10.41. A BAK approach will help to ensure competitive neutrality between the incumbent fixed-line operator and other telecommunication licensees, including those providing services over the NBN, voice and data traffic delivered over mobile networks and all-IP based networks. Furthermore, as operators will bear their own costs in a BAK regime, operators will then be incentivised towards deploying more efficient technologies to minimise their network costs in order to keep their costs low.
- 10.42. In light of the above factors, IMDA proposes to harmonise the voice termination regime and change the interconnection charging regime for fixed voice termination from CPP to BAK.
- 10.43. On a related note, as mentioned under Part II, there is a need to review the interconnection regime to take into account the ongoing migration of services and End Users from traditional copper-based networks to IP-based networks. Given the growing volume of IP-based and VoLTE calls, IMDA is of the view that it is timely to consider interconnection at the IP-level to be the new default, replacing the existing SS7 signalling.

*Question 10:4: IMDA invites views and comments on the proposal to harmonise the voice termination regime and change the interconnection charging regime for fixed*

*voice termination from “Calling-Party-Pays” to “Bill-and-Keep”. IMDA would also invite views and comments on how IP-based interconnection should be implemented, following the transition from traditional copper-based networks to IP-based networks.*

## **Update of Principles Governing the Pricing of IRS, Critical Support Infrastructure and Essential Resource**

- 10.44. Historically, in Europe and other jurisdictions, telecommunication regulation has been based on the philosophy that markets are contestable. Therefore, the focus of regulation should be to replicate, build or buy incentives and mitigate the inefficiency of past investments through Modern Equivalent Asset (“MEA”) and efficiency considerations. This has resulted in widespread use of forward looking costing methodologies, such as Forward Looking Economic Cost / Long Run Average Incremental Cost (“FLEC/LRAIC”). However, in recent years, there has been increasing recognition in many jurisdictions that parts of the network, and their associated markets, are not easily replicable and thus not contestable. This is particularly true in the context of dark fibre rollout where existing duct infrastructure with high fixed costs and lengthy construction, which is currently used for copper cables, can also be re-used for fibre cables. As such, it would not be efficient to duplicate that duct network which can be re-used for the rollout of the fibre infrastructure.
- 10.45. Similarly in Singapore, when the telecommunication industry was first liberalised in 2000, IMDA had also adopted the FLEC methodology as part of encouraging facilities-based competition, one of the competition facilitation principles. However, over the years, IMDA also recognised that some parts of the network infrastructure are difficult to replicate. This could be due to reasons such as geographical constraints, or the market not being able to support competitive build. Hence, IMDA recognised the need to facilitate services-based competition where appropriate.
- 10.46. For example, one of IMDA’s key objectives for the NBN is to encourage more services-based competition through facilitating the setting up of an open-access, structurally-separated Network Company (“NetCo”) with regulated wholesale prices. In this regard, IMDA’s policy intent for the NetCo Interconnection Offer (“ICO”) price review methodology has been that it is not necessary to encourage competitive parallel build or replicate the NetCo’s network, e.g., through applying a FLEC methodology where the cost of the applicable asset base would be revalued at the current replacement cost with the same or better functionality based on an efficient network at each price review.
- 10.47. In this review, IMDA will take a closer look at the various network elements to be shared, either for interconnection or for access, to assess if there is a need to take a differentiated approach towards them to be more aligned with our competition principles.
- 10.48. Appendix 1 of the TCC specifies the principles that a Dominant Licensee must follow in developing the prices for IRS and MWS services contained in its reference interconnection offer. The default pricing methodology currently

applies to Singtel’s RIO and NetLink Trust’s Reference Access Offer (“**RAO**”). These principles are also used in determining the compensation for infrastructure sharing in Section 7 of the TCC. Sub-section 4 of Appendix 1 of the MMCC specifies the pricing principles for Essential Resources.

- 10.49. IMDA is proposing a change to Section 2 of Appendix 1 of the TCC, which sets the charging standards for IRS. With more complex market structures today in the telecommunication industry, IMDA is of the view that having one default pricing methodology may not suffice for all instances where price determination is required. The Converged Code should set out guiding pricing principles for IMDA to determine which pricing methodology should be adopted to meet markets’ needs and IMDA’s policy objectives.
- 10.50. IMDA notes that where price determination is required, it is mainly for facilitating interconnection or access to network elements necessary to facilitate competition. Given the different nature of the network element that is required for interconnection or access, IMDA is of the view that it is important to first consider if the network element is passive civil infrastructure or active network systems where there is greater interest to mitigate inefficiency of past network or technology designs. IMDA will also consider if that market segment is contestable where build-versus-buy incentives remain, or if the network element can be easily replicated or where re-use would be encouraged. These considerations will play a part in determining the choice of pricing methodology, translating into appropriate pricing for the eventual policy outcome. Having one default methodology may not sufficiently recognise the different characteristics of different network elements. For instance, where the IRS is provided over a passive civil infrastructure, e.g., lead-in ducts and manholes, which is a bottleneck infrastructure and is not easily replicable, having a FLEC/LRAIC pricing methodology may not always be appropriate.
- 10.51. The FLEC/LRAIC methodology is therefore more suited for contestable markets, i.e., where there is a reasonable prospect of competitive entry based on an efficient network architecture, and in situations where network elements, particularly those at the active infrastructure layer, are subject to more rapid technology changes and hence, allow for more efficient network pricing. This approach effectively allows the new entrant to make a ‘buy-or-build’ decision. By contrast, the Historical Cost Accounting (“**HCA**”) and Regulated Asset Base (“**RAB**”) methodologies are focused on actual incurred costs, and are therefore more suitable for parts of the network which are not considered contestable due to higher barriers to entry, for example, as mentioned above where the infrastructure is passive and civil based with high fixed costs or is difficult to replicate.
- 10.52. While RAB has the same underlying philosophy as HCA, the main difference between these two methodologies lies in the opening valuation of the assets. While HCA values all assets based on their actual historical costs, RAB re-values the regulated assets pegged to a selected reference year, thereby forming the opening RAB value. Depreciation will start afresh from the selected reference year. Incremental capital expenditure is then added on to the opening RAB at each subsequent review period. The closing RAB value

is then carried forward to the next price review. The RAB methodology is thus commonly used where there is a need to re-value the asset base or when there is a change of pricing methodology from the previous review.

- 10.53. IMDA notes that an RAB or RAB-based approach has been, or is in the midst of being adopted by telecommunication regulators in other countries for telecommunication networks, particularly for establishing asset value that involves largely passive infrastructure that are not expected to change rapidly over time. For example, Australia and New Zealand have implemented a building block model for its RAB approach. In the UK, the regulator Ofcom defined an RAB to value civil infrastructure assets deployed prior to 1997<sup>72</sup>. More recently, the EC issued a recommendation in 2013 that advised European Union telecommunication regulators to adopt an RAB based approach to value existing assets (e.g. reusable civil assets) that are being reused for next-generation access networks.<sup>73</sup> Since the recommendation was released, the approach has been adopted in several countries.
- 10.54. In summary, IMDA is of the view that the following broad principles should apply in assessing which pricing methodology is appropriate for the determination of prices when required in the Converged Code a) the nature of the network element that is to be interconnected or accessed, i.e., passive civil infrastructure or active network elements where there is greater interest to mitigate the inefficiency of past network and technology designs; b) the contestability of the market segment where build-versus-buy incentives remain; and c) the replicability of the network element and whether re-use would be encouraged. If the network element is passive and civil-based, not easily replicable and re-use is encouraged, then a RAB/HCA methodology may be more appropriate. The FLEC methodology will suit an active network element so that it better reflects rapid technology changes and hence more efficient network pricing. If there is contestability in the market segment but requirement to interconnect or provide access, a FLEC methodology will also be appropriate.

*Question 10:5: IMDA invites views and comments on the proposed broad principles for governing the application of the appropriate pricing methodology for the purpose of price determination in the Converged Code.*

---

<sup>72</sup> <https://www.ofcom.org.uk/consultations-and-statements/category-1/copper>

<sup>73</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32013H0466>

## PART XI: ADMINISTRATIVE AND ENFORCEMENT PROCEDURES

11.1 This part of the consultation document concerns the administrative and enforcement procedures contained in Section 11 of the TCC and Section 10 of the MMCC. This section will cover IMDA's proposals to align the following provisions related to Administrative and Enforcement procedures of the Converged Code: (i) Decision and Appeal Process; (ii) Dispute Resolution; (iii) Informal Guidance Process; and (iv) Structural Separation.

### **Changes to Decision and Reconsideration Process**

- 11.2 Under Section 11.9.1 of the TCC, any person who is aggrieved by IMDA's decision or direction, may either request IMDA to reconsider its decision or direction, or appeal to the Minister directly. If the person remains aggrieved by IMDA's decision after the reconsideration process, he may submit an appeal to the Minister. In contrast, under Sub-section 10.6.2 of the MMCC, IMDA will first issue a preliminary decision, followed by draft decision, for licensees' comment before issuing its final decision. There is no process to request for reconsideration of IMDA's final decision under the MMCC. A person who is aggrieved by IMDA's final decision may appeal to the Minister directly.
- 11.3 IMDA notes that although the TCC and the MMCC differ in terms of process, the outcome is similar i.e. licensees are given opportunities to comment on IMDA's decision, or request for reconsideration, before the appeal to the Minister. With the convergence in the telecommunication and media markets, IMDA proposes to align the process by removing the requirement for IMDA to issue preliminary and draft final decisions (currently provided for under the MMCC), and introducing the reconsideration process for media-related decisions on competition and consumer protection matters. Please see Table 11.1 below. Specifically, any media licensee aggrieved by IMDA's decision on matters pertaining to competition and consumer protection issues in the media markets may request IMDA to reconsider its decision. In the event IMDA receives a reconsideration request from a media licensee under the Converged Code, and the Minister receives an appeal request on the same matter at the same time, the Minister may exercise discretion to await IMDA's decision on the reconsideration before considering the appeal. The proposed changes may entail amendments to the IMDA Act, which will be consulted at a later stage.
- 11.4 For the avoidance of doubt, there is no change in the process for IMDA's decisions on issues not pertaining to competition and consumer protection. For example, there will be no change to the process for issues related to media

content given that these fall under the Broadcasting Act, which has its own set of decision processes.

*Question 11:1: IMDA invites views and comments on the introduction of the reconsideration process to media licensees on IMDA's decisions on matters pertaining to competition and consumer protection.*

## **Dispute Resolution**

- 11.5 IMDA's dispute resolution process for telecommunication licensees is established under Sub-section 11.3 of the TCC, and further details are provided in a separate Telecom Dispute Resolution Guidelines ("DR Guidelines") document. The TCC dispute resolution process seeks to address disputes between licensees who are unable to agree on commercial terms needed to implement certain regulatory requirements:
- (a) Failure to voluntarily reach an individualised interconnection agreement with a Dominant Licensee; and
  - (b) Failure to voluntarily reach an agreement for the sharing of infrastructure that IMDA has directed or designated to be shared.
- 11.6 Similarly, under the MMCC, IMDA has the discretion to provide dispute resolution in relation to the following disputes as described in Sub-section 10.4 of the MMCC. However, unlike the TCC, the detailed procedures for requesting dispute resolution are set out within the MMCC itself.
- (a) Failure to reach an agreement regarding the prices, terms and conditions upon which the Lead Broadcaster will provide access to the "feed" of an event designated as an Event of National Significance pursuant to Sub-section 2.4 of the MMCC;
  - (b) Failure to reach an agreement regarding the prices, terms and conditions upon which a Designated Archive Operator will provide access to archived material that must be made available pursuant to Sub-section 2.5 of the MMCC;
  - (c) Any dispute arising out of the Free-To-Air Television Licensees' and Subscription Television Licensees' obligations pursuant to the "anti-siphoning" and "anti-hoarding" provisions specified in Sub-section 2.6 of the MMCC;
  - (d) Failure to reach a mutually acceptable Cross-Carriage agreement referred to in Sub-section 2.7.3 of the MMCC; and

- (e) Failure to reach an agreement regarding the prices, terms and conditions upon which an Entity Controlling Resources will provide access to an Essential Resource, when required to do so pursuant to Section 9 of the MMCC.
- 11.7 IMDA proposes to align the dispute resolution procedures for the telecommunication and media markets to the TCC approach under the Converged Code and set out the details of dispute resolution in a separate guideline document. Hence, the dispute resolution process proposed for the Converged Code will be applicable, but not limited to the scenarios listed in paragraphs 11.5 and 11.6 above. As indicated in Part IX of this consultation document, the Archival Provisions will be removed under the Converged Code. Therefore, Sub-section 10.4(b) of the MMCC (paragraph 11.6(b) above), in relation to the provision of dispute resolution involving a Designated Archive Operator will be removed correspondingly.
- 11.8 Additionally, IMDA notes that there are several areas in which the dispute resolution procedures in the TCC and the MMCC differ, such as the process to request for dispute resolution, and timeline to resolve the dispute. The proposed changes to align the dispute resolution process are summarised in Table 11.1 below.

**Table 11.1: Proposed Dispute Resolution Process under the Converged Code**

TCC and Dispute Resolution Guidelines (“TCC/DR Guidelines”)	MMCC (Sub-Section 10.5)	Proposed Changes under the Converged Code
<b>Request for Intervention</b>		
<p>A Licensee that wishes to petition IMDA to resolve a dispute (“<b>Requesting Party</b>”) must submit a written request for intervention and provide a copy of the Request for Intervention to the other Licensee (“<b>Other Party</b>”).</p> <p>The Other Party will be given five days to provide its comments on why IMDA should not intervene.</p> <p>Where IMDA decides to intervene to resolve the dispute, based on the submitted representations, the Requesting Party will be required to submit its written petition for dispute resolution.</p>	<p>While TCC/DR provides a procedure for IMDA to determine if it should intervene, the MMCC does not specify such procedure but provides IMDA with general discretion to decide whether it will provide dispute resolution services.</p>	<p>IMDA proposes to adopt the TCC approach, as this would provide Licensees with greater clarity on the approach for IMDA to intervene to resolve disputes.</p>
<b>Submission of Petition</b>		
<p>Any Licensee requesting IMDA to resolve its dispute with another Licensee must submit to IMDA a written petition for dispute resolution (“<b>Petition</b>”). The other Licensee will be given 15 days to submit its representation. IMDA may provide both parties an opportunity to submit two rounds of representation at its discretion. Each party will be given 15 days to submit its further reply.</p>	<p>Persons who fail to reach a voluntary agreement within 90 working days after the date on which a request to negotiate has been made may submit a petition for Dispute Resolution with IMDA.</p> <p>Respondent will have 15 working days from the date it receives the petition to respond.</p>	<p>The dispute resolution process under the TCC and the MMCC are largely similar, except for the following:</p> <ol style="list-style-type: none"> <li>1 The timelines in TCC/DR Guidelines are stated in terms of “days” as opposed to “working days” under the MMCC. IMDA proposes to adopt the TCC/DR Guidelines approach i.e., to use “days”. This will ensure that applicable timelines are consistent with the IMDA Act and Telecommunications Act.</li> </ol>

		<p>2 Under the MMCC, IMDA has the discretion to allow the person who made the request to submit the Petition within 90 working days after the request to negotiate. However, there is no such provision in the TCC/DR Guidelines. Under the Converged Code, IMDA will have the flexibility to expedite the submission of the Petition.</p> <p>3 Under the TCC/DR Guidelines, IMDA has the discretion to allow the petition party and the respondent the opportunity to submit a second round of representation, as well as to grant an extension of up to 7 days for both parties to submit their representations, and may extend the time by which it may issue its decision. We note that these are not provided for under the MMCC. IMDA proposes to adopt the TCC approach so that respondents will have the chance to clarify on the other party's submission, and more time to gather the information required, where necessary.</p>
<b>Settlement Conference</b>		
IMDA does not have the flexibility to set up a settlement conference.	IMDA has the flexibility of having a settlement conference for IMDA to resolve outstanding dispute.	IMDA proposes to adopt the MMCC approach, and to retain the flexibility of setting up Settlement Conference in cases where having a Settlement Conference will help to resolve the dispute.

*Question 11:2: IMDA invites views and comments on the broad changes to the dispute resolution process under the Converged Code and to set out the detailed dispute resolution procedures in a separate set of guidelines.*

### **Informal Guidance**

- 11.9 Under the MMCC, any person under the jurisdiction of IMDA may approach IMDA to request for informal guidance regarding the application of any provision of the MMCC, such as whether a particular course of action would contravene the MMCC or IMDA's likely response to an application or request made pursuant to the MMCC. IMDA will provide such informal guidance at its discretion, and the informal guidance is non-binding on IMDA. Sub-section 10.3 of the MMCC states the criteria and procedure that a person needs to adhere to when requesting for informal guidance. The person should have a genuine and substantial question regarding the application of a provision of the MMCC to its specific factual situation, and demonstrate that the person's commercial interest would be directly and immediately affected by resolution of the question. IMDA will not provide informal guidance if these conditions have not been met. While there is no corresponding procedure under the TCC, in practice, IMDA has been providing telecommunication licensees informal guidance on telecommunication regulatory matters.
- 11.10 IMDA is of the view that there is merit in extending the informal guidance provisions to the telecommunication markets. This will provide players in the telecommunication industry an opportunity to seek informal guidance if they have genuine and substantial queries on the application of the Converged Code. In this regard, IMDA intends to prescribe the criteria and procedures for requesting informal guidance under the Converged Code, to apply the requirements and procedures stated in the MMCC to telecommunication licensees as well.

*Question 11:3: IMDA invites views and comments on extending the Informal Guidance provisions to the telecommunication markets.*

### **Structural Separation**

- 11.11 Sub-section 10.6.5.5 of the MMCC empowers IMDA to require any Regulated Person to structurally separate its operations. IMDA may use such powers to prevent the affiliate of the Regulated Person, who may be dominant in adjacent markets, from leveraging their dominant position in the media markets through financial or other forms of support. Unlike the media markets, the power to impose structural separation on a telecommunication licensee is vested with the Minister, not IMDA. Section 69C of the Telecommunications Act gives the Minister the powers to impose structural or operational

separation on a vertically-integrated telecommunication licensee controlling networks or wholesale services that are important or necessary for the effective functioning of a competitive market.

- 11.12 IMDA recognises that the separation of a Regulated Person may impose significant costs, and should only be exercised in very exceptional circumstances. In this regard, IMDA proposes to remove IMDA's powers to impose structural separation on a Regulated Person under the MMCC, and to vest the powers with the Minister. The Minister will order structural separation of a Regulated Person only if he considers it necessary in the public's interest, and/or where existing and potential regulatory measures may be insufficient to enhance competition in the industry. The proposed changes will entail amendments to the IMDA Act, which will be consulted at a later stage.

*Question 11:4: IMDA invites views and comments on the proposal to align the structural separation powers in the telecommunication and media industries and give Minister the authority to issue structural separation order for both industries.*

## PART XII: COMPETITION IN A DIGITAL ECONOMY

- 12.1 In the previous parts of this consultation, IMDA has discussed the specific policy changes proposed for the Converged Code for the media and telecommunication markets in view of the increased convergence and the market trends<sup>74</sup> observed over the past few years.
- 12.2 In this part of the consultation, IMDA invites comments on the forward looking market developments in relation to the developing digital economy, and the potential impact these developments may have on competition policy and regulation in general.
- 12.3 Singapore has ambitions to become a leading digital economy. Digitalisation can help businesses be more productive and expand into other markets, thereby providing more service choices for consumers at competitive prices. At the same time, digitalisation will alter market dynamics and change business models, which will have an impact on how firms choose to compete and grow. This may in turn call for updates to competition policy to ensure that competition rules and tools remain fit for purpose in a digital economy.
- 12.4 While IMDA is not proposing any changes to the Converged Code based on these developments at this stage, it is nevertheless important for IMDA to monitor and seek feedback on how these developments may affect the telecommunication and media markets and whether our regulatory frameworks can be dynamically applied within the context of the larger economic shifts and the broader regulatory environment going forward.

### **Challenges to traditional competition rules and frameworks**

- 12.5 One trend that has been observed is the increasing concentration of profits and resources in the hands of fewer firms. A United Nations study looked at the level of surplus profit<sup>75</sup> as a proportion of total operating profit across 56 countries and found this proportion to be increasing sharply over the last 20 years. The study also found this proportion to be higher in firms earning the most surplus profit. This is indicative of the persistent and increasing ability of some firms, particularly the digital companies, to extract rent over time. Such increasing concentration in surplus profit, in particular in the hands of firms at the top indicate structural shifts in markets. The study also found an increasing concentration of revenues, assets and the workforce in the hands

---

<sup>74</sup> See Part II for further information.

<sup>75</sup> Surplus profit is calculated in the study as the level of profits firms are earning over and above that of a typical or benchmark firm.

of the top 1% of firms.<sup>76</sup> This raises the question of whether existing competition policy remains applicable and relevant to these changing business realities and whether these will remain effective in the era of the next digital frontier.

- 12.6 Taking this further, it is observed that in digital platform markets, goods and services may be offered for free or at a heavily discounted prices for long periods, with firms recovering revenues from other sources, for example, advertising. This means that price or output may not provide an informative signal on market competitiveness. By the same note, revenue shares and turnover figures may not reflect true market dynamism and any such analysis would have to consider competition dynamics across multiple-sides of a market. Strong investor confidence – either via venture capital or capital market funding may allow a firm to invest in loss-leading growth for long periods even with no or low revenue streams. This means that low profitability may not be a good yard stick for a competitive market and market concentration may well be increasing rather than decreasing in the face of declining profitability.
- 12.7 At the same time, online channels allow for rapid price changes as well as personalised pricing. This presents challenges to assessing competition issues such as predatory pricing that rely on price to costs comparisons. Price may well be zero or differentiated across users or time, making it difficult to make systematic comparisons. The relevant cost benchmark may also be less clear for an eco-system platform - it may be hard to attribute common costs to a particular market or service given much of the cost might be argued to be common to the eco-system; data as an input (for example, to train Artificial Intelligence models) is non-rivalrous, fungible and fluid, making it difficult to value and cost; and eco-systems of different platforms may overlap but are likely to be somewhat different, making it difficult to make like for like comparisons.
- 12.8 These challenges associated with assessing price relative to costs (including for profitability analysis) will also pose challenges to defining relevant markets and assessing market power. More generally, dimensions of competition may increasingly shift away from price and output to other dimensions of quality - for example in relation to the level of data privacy offered; choice and investment. Here, new tools and frameworks are likely required, for instance, the application of a Small but Significant Non-Transitory Decline in Quality (“**SSNDQ**”) test to define relevant markets where the more familiar Small but Significant Non-Transitory Increase in Price (“**SSNIP**”)) test may not provide an

---

<sup>76</sup> UNCTAD, May 2018, Policy Brief No 66, Corporate rent-seeking, market power and inequality: Time for a multilateral trust buster?

accurate market definition. Recognising the increasing need to assess competition on non-price dimensions, the OECD led a roundtable discussion in June 2018 on non-price effects of mergers including the role of data protection in merger assessments.

- 12.9 Likewise, in the case of predation, rather than price predation, a firm offering free digital services to users may engage in predatory innovation – investing in innovation that inhibits competitors' ability to compete effectively – hence not all investment may be “good” and a broader view of investment is required. Frameworks to assess dynamic as well as static effects, in particular, focusing on innovation that improves consumer welfare may be required to accurately assess competition dynamics. More specifically, the focus on consumer welfare in competition policy will need to be complemented with considerations for market competitiveness in the longer term (for example, in constructive innovation as above) or to the wider economy (potentially beyond a narrow focus on consumers). As such, giving due consideration to market structure and economic outcomes beyond a sole focus on consumer welfare may be appropriate in a digital economy.

### **Competition dynamics in a digital economy**

- 12.10 A central feature of digitalisation is the explosion of data which has in turn helped propel Artificial Intelligence (“AI”) as a key business driver. Data is likely to become a key factor of production as the use of AI become more pervasive. This may introduce ‘data network effects’ – data generated from consumption improves quality, scope and efficiency of monetisation, offering higher returns to investment, in turn attracting more users to a platform, creating a reinforcing feedback loop. This is over and above other network effects as well as scale and scope economies that may lend to larger platforms and more concentrated markets. This may have the effect of entrenching a first mover advantage in technology platform markets, making a scale advantage enjoyed by an incumbent difficult to overcome. This may mean greater emphasis on early regulatory intervention; a willingness to tolerate false positives; a more pro-active and adaptive approach to antitrust enforcement, while bearing in mind the need to continue to facilitate innovation.<sup>77</sup>
- 12.11 Use of algorithms may increase the risk of them being used to facilitate collusion – by increasing price uniformity through the application of similar

---

<sup>77</sup> The key here is about balancing speed and efficiency of the investigation process against thoroughness to match the increasing pace of digital market developments. While this may mean a wrong judgement in some cases (false positive), it would allow for broader enforcement, including early intervention which is likely to be important in digital markets characterised by strong network effects.

pricing algorithms or otherwise increasing predictability of behaviour of rivals; by making it easier to detect deviation from a collusive outcome; or by delegating selling decisions to an autonomous machine that independently achieves a tacitly collusive outcome with greater efficiency and objectivity (for example, will not deviate from collusive outcome out of temptation for short term gains or fear of enforcement). The increasing pervasiveness of AI may make colluding via algorithms more widespread. Yet, enforcement may become more challenging as detecting such collusive outcomes may be more difficult and leniency programmes may become less effective in the face of increasing use of AI. Additionally, it may be more difficult to establish the link between the use of an algorithm to the ‘intent’ or ‘agreement’ to collude – raising the burden of proof required to find against such behaviour. The Competition and Market Authority (“CMA”) in the UK has studied these issues in a research paper in October 2018 and highlighted areas of further work to better evaluate these issues.<sup>78</sup>

### **Other policy areas related to data that could complement competition policy**

- 12.12 More generally, there may be other policy considerations associated with data and AI that overlaps but extends beyond competition concerns. This could include for instance, the broader public benefit from freer data flows on innovation; rights and returns to data; and establishing a ‘Duty of Care’ when using data to train AI models. Some of these policy postures could have pro-competitive effects but others might be at tension with improving competitiveness. This implies that considerations of data and AI in updates to competition policy may well benefit from a holistic consideration on the impact of other public policy objectives. IMDA recognises the importance of these complementary policies and for a coordinated approach to policy formulation.
- 12.13 In the area of AI governance for instance, IMDA announced three initiatives in June 2018 aimed at addressing ethical issues that may arise from the use of AI and data – an Advisory Council on the Ethical Use of AI and Data; a discussion paper on a framework to foster responsible development and adoption of AI; and a research programme on the Governance of AI and Data Use.<sup>79</sup> In terms of international coordination, Singapore is exploring the scope for Digital Economic Agreements to facilitate digital trade, that could include facilitation of data flows, adoption of digital technologies and enhancing data

---

<sup>78</sup> CMA, Oct 2018, Pricing Algorithms, Economic working paper on the use of algorithms to facilitate collusion and personalised pricing, CMA94.

<sup>79</sup> See <https://www.imda.gov.sg/about/newsroom/media-releases/2018/artificial-intelligence-governance-and-ethics-initiatives>

governance internationally.<sup>80</sup> Recognising the importance of these policies, IMDA will work with other economic agencies in these areas going forward.

### **Updating competition policy frameworks for the digital economy**

- 12.14 A number of authorities have started to examine these issues more comprehensively. The Federal Trade Commission (“FTC”) in the US announced in June 2018 that it plans to hold public hearings on changes required to the role of the FTC, competition policy or antitrust law given evolving business practices motivated by technological advances. In August 2018, the UK announced a panel to look at competition in a digital economy, steering its approach to digital technology.
- 12.15 In the longer term, beyond this review of the Converged Code, IMDA will need to consider the impact of digitalisation on competition in the telecommunication and media industries to ensure that the Converged Code will remain fit for purpose as Singapore pursues its digital economy ambitions.

*Question 12:1: Do the above observations about business models and market changes resonate with your experiences in the digital economy? Do you think that these business models are here to stay or are these developments likely to only remain in the short to medium term?*

*Question 12:2: What competition policy and philosophy should sectoral regulators adopt in the digital economy?*

*Question 12:3: What are some of the key, traditional competition concepts that need to be reviewed and relooked in a digital economy? For example:*

- a) *Taking account of non-price dimensions in competition assessments;*
- b) *Data as an input and qualifying as an essential resource or facility; and*
- c) *New bottlenecks that might be pivotal to affording a platform market power;*

*Question 12:4: Should competition assessments be overlaid with broader policy considerations in a digital economy? Which policy considerations would be relevant to consider?*

---

<sup>80</sup> Within ASEAN for instance, Singapore signed the ASEAN Agreement on E-Commerce and introduced the ASEAN-wide Self Certification scheme to facilitate cross-border online transactions (see <https://www.pmo.gov.sg/newsroom/pm-lee-hsien-loong-closing-ceremony-33rd-asean-summit-and-related-summits>). On cross border data flows and data protection, Singapore has been involved in the development of the ASEAN Framework on Personal Data Protection and the Digital Data Governance Framework – see [https://www.gov.sg/~sgpcmedia/media\\_releases/mti/speech/S-20180605-2/attachment/Delivered%20Keynote%20Speech%20by%20Minister%20Iswaran%20for%20Digitize%20ASEAN%202018.pdf](https://www.gov.sg/~sgpcmedia/media_releases/mti/speech/S-20180605-2/attachment/Delivered%20Keynote%20Speech%20by%20Minister%20Iswaran%20for%20Digitize%20ASEAN%202018.pdf)

*Question 12:5: Should there be early policy or regulatory intervention in data and AI centric business models that lend to significant scale advantages?*

*Question 12:6: What new capabilities and toolkits would be necessary to assess competition dynamics in markets where data and AI are central?*

## PART XIII: INVITATION TO COMMENT

- 13.1 IMDA would like to seek views and comments from the industry and members of the public on the broad policy proposals to adopt in the Converged Code set out in this document, including comments and views on whether (and if so, how) IMDA should adapt its regulatory regime to the changing market environment.
- 13.2 Respondents should organise their submission as follows:
  - (a) cover page (including their personal or company particulars and contact information);
  - (b) table of contents;
  - (c) summary of major points (structured to follow the individual parts of the consultation document);
  - (d) statement of interest;
  - (e) comments (in response to the questions set out in the consultation document and any other comments); and
  - (f) conclusion.

Supporting materials may be placed as annex(es) to the comments raised.

- 13.3 All views and comments should be submitted in soft copy (Microsoft Word and PDF format), and should reach IMDA by **12 noon, 17 April 2019**. All views and comments should be addressed to:

Ms Aileen Chia  
Director-General (Telecoms and Post)  
Infocomm Media Development Authority  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438

**AND**

Please submit the soft copy of your views and comments, with the email header “Public Consultation on Proposed Converged Code”, via email to [Consultation@imda.gov.sg](mailto:Consultation@imda.gov.sg).

- 13.4 IMDA reserves the right to make public all or parts of any written submission and to disclose the identity of the source. Respondents may request confidential treatment for any part of the submission that the respondent believes to be proprietary, confidential or commercially sensitive, with supporting justification for IMDA’s consideration. In such cases, the

submission must be provided in a non-confidential form suitable for publication, with any confidential information redacted as necessary and placed in a separate annex.

- 13.5 If IMDA grants confidential treatment, it will consider, but will not publicly disclose, the information. If IMDA rejects the request for confidential treatment, it will return the information to the party that submitted it and will not consider the information as part of its review. As far as possible, parties should limit any request for confidential treatment of information submitted. IMDA will not accept any submission that requests confidential treatment for all, or a substantial part, of the submission.

## ANNEX A - ASSESSMENT OF COMPETITION IN KEY MEDIA AND TELECOMMUNICATION MARKETS IN SINGAPORE

### Background

1. IMDA has undertaken general market studies to provide an overview of the current level of competition in key media and telecommunication markets in Singapore, the expected impact of ongoing global and domestic trends on future competition, and the implications for IMDA's competition regulatory framework under a Converged Code.
2. The subsequent sections set out the general media and telecommunication market trends in the following manner:
  - (a) Macro trends affecting media and telecommunication markets<sup>81</sup> in Singapore.
  - (b) Overview of current demand and supply conditions in the key media and telecommunication markets as well as impact of macro trends on these markets.
  - (c) Implications for IMDA's regulatory framework under the Converged Code.

### **Macro (Technology and Business) Trends Affecting Media and Telecommunication Markets in Singapore**

3. There are five technology and business trends that have a material impact on competition in the key media and telecommunication markets in Singapore over the next few years:
  - (a) transition to IP-based services on the Nationwide Broadband Network (“NBN”);
  - (b) increasing prevalence of service bundling;
  - (c) increasing competition from non-traditional digital services and platforms;
  - (d) growth of over the top (“OTT”) media services; and
  - (e) diminishing reach of traditional media platforms.

---

<sup>81</sup> The market studies are confined to the telecommunication and media markets for which the TCC and MMCC apply respectively.

### Transition to IP-based Services on the NBN

4. A key development in the Singapore telecommunication industry in the last few years has been the deployment of a nationwide optical fibre network infrastructure (through the NBN project), and the resultant migration of End Users' broadband Internet connections and Pay TV services from legacy infrastructure to the NBN fibre infrastructure. The roll-out of the NBN has enabled a competitive marketplace for IP-based services over high-bandwidth connections, which are gradually replacing their legacy counterparts (e.g., Digital Subscriber Line ("DSL") broadband access and time-division multiplexing ("TDM") telephony).
5. The roll-out of the NBN has allowed more broadband Internet service providers to enter the market to offer broadband services, with a better End User experience and at more competitive prices, leading to rapid End User migration from the traditional broadband Internet platforms such as DSL and co-axial cable to fibre-based ultra-high-speed (i.e. 100 Mbps and above) broadband platform on the NBN. As of September 2018, fibre broadband subscriptions form about 89% of the total residential broadband Internet service subscriptions in Singapore, and of these, about 80% subscribe to broadband speeds of 1 Gbps and above. The NBN has also allowed the Pay TV providers to provide fibre-based IPTV services. The transition of services from legacy DSL and co-axial cable platforms to the NBN will soon be complete with Singtel having announced the cessation of DSL-based telecommunication and Pay TV services in September 2017, while StarHub announced the cessation of co-axial cable-based services in November 2018.
6. With the proliferation of high-speed broadband to all homes in Singapore, more Internet broadband providers are bundling Voice over Broadband ("VoBB") with broadband Internet access at low or zero incremental price. As a result, consumers are also progressively shifting from traditional DEL to VoBB for voice services.

### Increasing Prevalence of Service Bundling

7. The equal access to wholesale inputs (in particular leasing of dark fibre) on the NBN has allowed new entrants to deploy innovative solutions and compete effectively in the broadband Internet access market. This has resulted in the gradual commoditisation of broadband connectivity, and service providers are looking for different and innovative ways to compete, for example, through prices and service quality, or by differentiating services that are provided using the NBN, including service bundling. The main areas of differentiation through bundling is via the combination of broadband Internet access with fixed-line telephone, mobile phone services, and/or TV content (e.g., Pay TV) (also

known as “triple play” or “quad play”). TV content services are a good complement to broadband Internet access as content is usually delivered through the same passive infrastructure network as broadband Internet access, and share many common costs. As such, globally, many broadband Internet providers have bundled Pay TV services or OTT TV services with broadband Internet access in order to compete in the broadband Internet access market. In Singapore, IMDA estimates that close to 70% of StarHub’s broadband customers were on bundled services (three or more services), while about 82% of Singtel’s broadband customers were on bundled services<sup>82</sup>.

8. Similarly, the Mobile Network Operators (“MNOs”) are competing in the broadband Internet access market by offering substantial discounts on mobile services for customers who subscribe to both broadband Internet access services and mobile services from the same operator, trying where possible to capture the more of a household’s expenditure on telecommunication services and reduce “churn” across all services. With the transition to IP-based network, which enables all traffic to be carried using a common protocol, traffic for mobile and fixed-line services can be carried through a single network, leading to mobile and fixed-line networks becoming more integrated. Services across platforms may likely get more integrated over time as well.
9. It should be recognised that the prevalence of service bundling can be observed across industries, and is no longer unique to telecommunication and media markets. In fact, it is observed that this is how many technology firms and platform markets operate, providing multiple user-centric services using the same platform. For example, Grab has evolved from a company providing a platform to match ride hailing service between drivers and riders, to providing payment solutions, and food delivery services.

#### Increasing competition from non-traditional digital services and platforms

10. The traditional approach for providing telecommunication services saw vertically integrated network operators controlling the end-to-End User experience for narrow service segments. The nationwide availability of NBN and mobile broadband services, and emergence of highly sophisticated End User devices, has enabled new, non-traditional players to play a key role in media and telecommunication markets. These include handset manufacturers and operating system providers such as Google and Apple, as well as

---

<sup>82</sup> This is based on StarHub’s and Singtel’s financial results. For StarHub, as of 30 December 2017, there were 326,000 households with three or more services of Post-paid Mobile, Pay TV and Broadband and/or Digital Voice services. StarHub had a total of 471,000 broadband customers (based on bundled services or standalone broadband service). For Singtel, as of 30 December 2018, there were 515,000 households on triple play or quad play service bundles, while there were 628,000 fixed broadband Internet subscribers (based on bundled or standalone service).

application and OTT service providers such as WhatsApp (messaging and voice), Skype (voice) and Netflix (films and TV). Between Q1 2013 and Q3 2018, the total number of SMS messages carried over the mobile network decreased by 64%; over the same period, the amount of mobile data sent over the mobile network increased by 244%, which indicate the increasing use of OTT communication services by consumers.

11. These developments, in some ways, reduce the competitive advantage of service providers who differentiate their services based on a vertically-integrated business and operational model. Consumers are increasingly choosing their service provider(s) based on a broader set of considerations, including *ala carte* content and services provided by players that lie outside of the traditional media and telecommunication space (e.g., OTT services, or a service provider's own applications made available only to that service provider's subscribers), in addition to network capabilities or service variants brought about by vertical integration. Such developments arising from the convergence of the technology, may see the media and telecommunication markets shifting away from the traditional approach of providing telecommunication and media services into new business models.

#### Growth of OTT Media Services

12. In recent years, significant growth of OTT media services has been observed in the Singapore market. The OTT media services market (in terms of revenue) is projected to grow at a compounded annual growth rate (“**CAGR**”) of 15.9% to hit US\$128m in 2022<sup>83</sup>. For example, Singtel, Sony Pictures and Warner Bros established HOOQ to offer a regional OTT service in Asia. Other regional OTT video service providers such as Viu have also seen aggressive growth – Viu reached 12 million active users in June 2017, which represented a 200% growth from 4 million active users in November 2016<sup>84</sup>. Viu has both freemium and premium services for its subscribers. Viu freemium users have access to Viu’s catalogue of Asian content for free while its premium subscribers would get to watch the latest drama series and variety shows as fast as 8 hours after telecast in originating countries with limited advertisements<sup>85</sup>. Against this backdrop, local Pay TV operators have also been innovative with their service offerings, for example, Singtel and StarHub offer their own OTT services and have also partnered with OTT content providers such as Netflix to offer a wide suite of content for its subscribers. On the consumption side, IMDA notes that online video consumption is increasing – the monthly reach i.e., those who

---

<sup>83</sup> Source: PwC Global Entertainment and Media Outlook: 2018-2022, [www.pwc.com/outlook](http://www.pwc.com/outlook)

<sup>84</sup> Source: Article “Hony, Foxconn, Temasek Back PCCW Streaming Ventures” dated 10 August 2017 from [variety.com](http://variety.com).

<sup>85</sup> Source: Article “Viu launches premium subscription in Singapore with Singtel” dated 11 July 2016 from [casaba.com](http://casaba.com).

watched online movies/TV/videos or downloaded videos in the past month, increased from 44% in 2012 to 81% in 2018<sup>86</sup>.

### Diminishing Reach in Traditional Media Platforms

13. The proliferation of OTT/online services such as mothership.sg and channelnewsasia.com and the change in consumers' consumption behaviour are some of the contributing factors that led to the diminishing reach of traditional media platforms.<sup>87</sup> For instance, about seven in 10 adults also watched movies, TV or videos online. MediaCorp's digital entertainment service reached 10.8% of Singapore adults each week in 2017, up from 9.5% in 2016<sup>88</sup>.
14. On the Pay TV front, IMDA notes that the Pay TV subscription numbers have declined from its peak of 962,000 subscribers in 2014 to 790,000 subscribers in December 2018<sup>89</sup>. Revenue is projected to fall at a CAGR of 2.3% from US\$328m in 2017 to US\$292m in 2022.<sup>90</sup> Price competition to attract new subscriptions is intensifying as new services from regional and international OTT service providers gain traction. For instance, OTT services such as Singtel TV Go start from S\$6.90 per month and StarHub Go start from S\$9.90 per month.
15. The Singapore radio market<sup>91</sup>, which is sustained by advertising revenues, is forecast to be fairly stable, growing slightly from US\$122m in 2017 to US\$124m in 2022, which is a CAGR of 0.3%. IMDA also notes that radio listenership<sup>92</sup> has also been fairly stable with about 90% listenership over the past five years (2013 to 2017).
16. The traditional print industry is also facing similar challenges posed by online media services. That said, IMDA notes that our local players are also transforming and putting their content on the digital/online medium. For example, MediaCorp and SPH have formed a digital advertising joint venture, Singapore Media Exchange, to provide scale for a premium advertising marketplace in Singapore. The inventory for this digital advertising marketplace

---

<sup>86</sup> Source: Nielsen Media Index 2012-2018.

<sup>87</sup> Media platforms refer to the broadcast (TV and radio) and newspaper markets, which fall under the ambit of the MMCC.

<sup>88</sup> ChannelNewsAsia.com article dated 2 November 2017 – More in Singapore consuming news online: Nielsen survey.

<sup>89</sup> Source: Operators' website

<sup>90</sup> Source: PwC Global Entertainment and Media Outlook: 2018-2022, [www.pwc.com/outlook](http://www.pwc.com/outlook)

<sup>91</sup> There are currently three local radio broadcasters – MediaCorp Pte Ltd, Singapore Armed Forces Reservists' Association Radio and SPH Radio, offering a total of 18 radio stations in Singapore. IMDA awarded two radio frequencies to SPH Radio in early 2017, bringing the total radio stations to 20 radio stations.

<sup>92</sup> Source: Nielsen Radio Diary, 2013-2017.

resides across desktop, mobile web and mobile apps. To prepare for the digital future, MediaCorp announced in August 2017 that the TODAY newspaper will discontinue its print edition and become the first newspaper in Singapore to go fully digital.<sup>93</sup>

17. The impact of the abovementioned macro trends in key media and telecommunication markets in Singapore is assessed in the following section.

### **Impact of Macro Trends on Competitive Dynamics in Key Markets**

18. The following sets out a high-level review of six key markets:
  - (a) Fixed-line Broadband Internet Access;
  - (b) Domestic Fixed-line Telephony;
  - (c) International Telephony;
  - (d) Mobile Services;
  - (e) Business Capacity Services; and
  - (f) Pay TV.
19. These key markets are further split into smaller market segments (where applicable) for the purpose of analysis.
20. The markets were identified in general terms to provide a high level overview, and hence do not constitute a formal market definition exercise by IMDA.<sup>94</sup> IMDA notes that while the six markets are discussed separately for the purposes of the consultation, it must be noted that these markets may overlap or converge arising from market developments.

#### Fixed-line Broadband Internet Access

21. Fixed-line broadband Internet access includes DSL, cable and fibre-based products. The fixed-line broadband Internet access market can be further split into wholesale and retail fixed-line broadband Internet access sub-markets.

#### *Impact Arising from Macro Trends*

22. The NBN is available to all providers on an open and non-discriminatory basis. This equal access to wholesale inputs has allowed new entrants to compete effectively in the retail fixed-line broadband Internet access market. There is

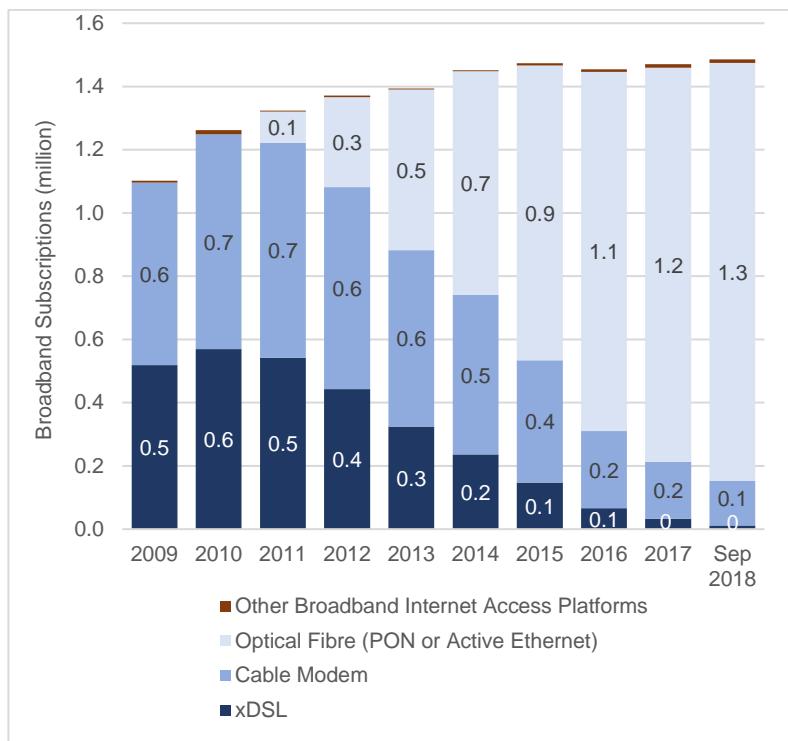
---

<sup>93</sup> Source: SPH to divest stakes in MediaCorp TV and Press while TODAY newspaper will cease print edition and go fully digital, Straitstimes.com, 25 August 2017.

<sup>94</sup> That is, the markets identified are without prejudice to the markets defined, or that will be defined, in specific cases under the MMCC, the TCC, or the Converged Code.

no player identified by IMDA with SMP<sup>95</sup> in the retail fixed-line broadband Internet access market in Singapore.

23. There has been strong take-up of fibre services since 2011, chiefly at the expense of DSL and cable. As of September 2018, fibre accounted for 89% of connections. Figure 1 shows the number of fixed-line broadband Internet access subscription by technology from 2009 to September 2018.



*Figure 1: Fixed-line broadband Internet access subscriptions (residential and business) by technology in Singapore*  
[Source: IMDA, 2018]

24. This has resulted in a trend towards the commoditisation of broadband connectivity as the market moves into services that are provided using the NBN. Access to the NBN enables all providers to offer similar End User bandwidth and quality of service. This has also enabled (i) new entrants in the last few years, such as MyRepublic and ViewQwest, to engage in service differentiation as well as price-based competition; and (ii) the growing market share of existing players such as M1. As a result, there are now eight players in the retail residential broadband Internet access market. The same can be observed in the retail business broadband Internet access market, where there are close to 20 retail players providing high-speed broadband Internet access services either through the NBN, or through other operators' fibre network. Whilst these new and smaller players are still establishing themselves in the market against the larger players, the conditions are in place to enable their growth, and structural barriers to their expansion appear limited.

<sup>95</sup> SMP is defined under Sub-section 1.9 (x) of the TCC as 'the ability to unilaterally restrict output, raise prices, reduce quality or otherwise act, to a significant extent, independently of competitive market forces'.

25. IMDA's market studies recognised that there are, nonetheless, other trends that, at least in theory, may challenge these competitive dynamics. An important example is the bundling of TV content and mobile services with a fixed-line broadband Internet access connection. Pay TV services are a key service differentiator, and whilst these are sometimes available on a standalone basis (e.g., Singtel TV starter packs), the economic advantage of purchasing these as part of a bundle is clearer to some consumers. For example, consumers who take two or more services with StarHub (with one of the service being Pay TV) form a significant part of StarHub's customer base. In December 2017, IMDA estimates that close to 70% of StarHub's broadband customers were on bundled services (three or more services).<sup>96</sup> However, there is also a trend of consumers accessing OTT content/services that may be provided independently from network connectivity. Rising consumption of OTT content/services may therefore be helping to place a check on the impact of larger players' bundled offers. As for the bundling of mobile services, it is possible for new entrants that currently offer only fixed-line broadband Internet services to establish themselves as MVNOs to offer bundled services.<sup>97</sup>

#### *Implications for IMDA's Regulatory Approach*

26. There is currently no operator designated as dominant in retail fixed-line broadband Internet access market, and the current situation and trends suggest that this remains appropriate. However, given the trend of bundling of TV content and mobile services with a fixed-line broadband Internet access connection (see paragraph 25), there is a need to future-proof the Converged Code to address potential impact on competition arising from bundling practices.
27. The deployment of the NBN has contributed to the ongoing migration of broadband services from legacy copper/cable networks to fibre networks. New entrants are entering the market using fibre rather than using legacy networks, which will soon be ceased. As a result, wholesale broadband regulation on Singtel and StarHub for their respective legacy broadband products of copper and co-axial cable, respectively, have become irrelevant.
28. The wholesale fixed-line broadband Internet access market is currently subject to dominance regulation: Singtel and SCV are currently considered dominant in

---

<sup>96</sup> Based on StarHub's financial result. As of 30 December 2017, there were 326,000 households with three or more services of Post-paid Mobile, Pay TV and Broadband and/or Digital Voice services while StarHub had a total of 471,000 broadband customers (based on bundled services or standalone broadband service)

<sup>97</sup> For example, in June 2018, MyRepublic launched new mobile plans. See MyRepublic's website (<http://myrepublic.net/sg/press-release/>).

this market.<sup>98</sup> Following the roll-out of the NBN, NetLink NBN Management Pte Ltd (as Trustee-Manager of NetLink Trust) and NetLink Management Pte Ltd (as Trustee of NetLink Trust) (collectively known as “**NetLink Trust**”) are also jointly designated as a Dominant Licensee. Competitive dynamics have shifted as a result of the deployment of the NBN, as the market moves to fibre-based passive wholesale products provided by NetLink Trust, with RSPs either self-providing an active connection as an Operating Company (“**OpCo**”) or using Nucleus Connect Pte Ltd (“**NC**”) as a layer two wholesale service provider. All RSPs, including SingNet and StarHub, are substituting legacy wholesale products such as DSL and coaxial cable with fibre-based products. For example, StarHub has started migrating their broadband customers on its co-axial cable network to wholesale fibre services provided by NC. StarHub has also announced that it would cease all services provided by the co-axial cable by June 2019. Singtel has also announced in September 2017 that they will be ceasing their DSL-based Internet access services. With this trend, the Dominant Licensee obligations imposed on Singtel and SCV for wholesale fixed-line broadband Internet access will need to be reviewed.

#### Domestic Fixed-line Telephony

29. The domestic fixed-line telephony market broadly comprises two service types: domestic telephone line access service and domestic calls. These services can be further split into residential and business, and between retail and wholesale segments.
30. Retail residential domestic fixed-line telephone line access services consist of either a public switched telephone network (“**PSTN**”) or VoBB connection purchased by consumers for household usage. Retail business domestic telephone line access services include legacy integrated services digital network (“**ISDN**”) and Direct Exchange Lines (“**DEL**”) services, as well as managed IP-based services such as IP Centrex and Session Initiation Protocol (“**SIP**”) services.
31. Retail domestic calls are calls to Singapore telephone numbers, provided over the domestic telephone line access service. They may be provided by the same supplier, or, less commonly, by a different supplier (e.g., based on wholesale origination for “indirect access”). Wholesale domestic calls are sold by one licensee to another in order to facilitate the provision of retail services and include call origination and termination services.

---

<sup>98</sup> Both licensees have not been exempted from its Dominant Licensee obligations in relation to services they provide in this market.

32. The wholesale segment for domestic fixed-line telephony is currently not significant, because of the nature of the wholesale inputs. With the migration to IP-based networks, an RSP may look for a ubiquitous fibre network which can be used as inputs for most fixed telecommunication services (including fixed broadband Internet access services and fixed-line telephony) instead of relying on wholesale input to provide voice-only service.

*Impact Arising from Macro Trends*

33. IMDA's market studies found that Singtel remains dominant in both the wholesale and retail residential domestic fixed-line telephony markets in Singapore. That said, as mentioned in paragraphs 7 and 25, fixed-line broadband Internet providers have been bundling VoBB with residential broadband Internet access at low or zero incremental cost, and as such, IMDA's market studies found that the VoBB penetration for residential segments has consistently increased with broadband penetration. In time, this is expected to result in most households having access to VoBB and being able to use a VoBB product over their fixed-line broadband Internet access connection, in replacement of a traditional PSTN line. However, a segment of the market is likely to remain voice-centric. For these customers (e.g., in lower socio-economic categories and higher age groups), they are likely to continue to rely on standalone voice-only services.
34. For traditional business telephone services, both the retail and wholesale segments remain dominated by Singtel. IMDA's market studies further noted that there could be more direct competition from VoBB but the take-up of business VoBB is also dependent on the overall telecommunication needs of the business customer, hence suggesting that there may be other competitive constraints in this market. IMDA notes that unlike for residential broadband Internet subscriptions, most fixed-line broadband Internet providers do not bundle VoBB with broadband Internet access service. Hence, as of today, traditional DEL and ISDN services remain the main services procured in the business domestic fixed-line telephony market.

*Implications for IMDA's Regulatory Approach*

35. Currently, Singtel's designation as a Dominant Licensee includes the provision of domestic fixed-line telephone services (residential and business). IMDA's market studies noted that the current trends suggest that residential domestic fixed-line telephony in the form of VoBB service is increasingly being treated as an add-on to broadband connectivity. Despite this, IMDA's market studies noted that, as the market is mature with limited growth potential, the market share of Singtel in the residential domestic fixed-line telephony market remained stable over the past few years with competitors focusing on other markets such as

broadband Internet access services and mobile services. IMDA will continue to monitor the residential domestic fixed-line telephony market, as well as to apply *ex ante* Dominant Licensee regulation.

36. In terms of business fixed-line telephone services (wholesale and retail), IMDA's market studies noted limited substitutability of traditional fixed-line telephony for VoBB. Whilst ISDN solutions may be replaced by IP-based equivalents, a dedicated connection will still be required. In connection with this, while many operators have deployed their own networks that are able to provide IP-based connections, these networks are limited to business districts. Further, getting dedicated connections from the NBN to provide only business fixed-line telephone service may not be cost-efficient. As such, any purchase of dedicated connections for the provision of business fixed-line telephone service on a nationwide basis is typically acquired from Singtel, while we recognise that the NBN provides a possible alternative if business fixed-line telephone services are bundled with broadband or managed data services provided over the NBN. As such, the levels of competition in the business telephony market will remain limited and the Dominant Licensee obligations will continue to apply on Singtel for some time to come. That said, there is a need to review the interconnection regime to take into account the ongoing migration of services and End Users from the traditional copper-based networks to IP-based networks.

### International Telephony

37. Retail international telephony enables End Users to make end-to-end international calls from retail telephone lines. Such services may be provided by the same service provider as the domestic telephone line access service, or by a different service provider based on alternative access modes, often in the form of calling cards, but also through directly-billed retail gateway services.<sup>99</sup> Using a separate service provider for international calls is common amongst End Users in Singapore.
38. At the wholesale level, the main input is international traffic carriage, provided at international gateways by all the main international carriers.
39. In 2003, IMDA deemed the wholesale international telephony market to be competitive and exempted Singtel from its obligations as a Dominant Licensee for this market. In 2007, IMDA exempted Singtel from Dominant Licensee

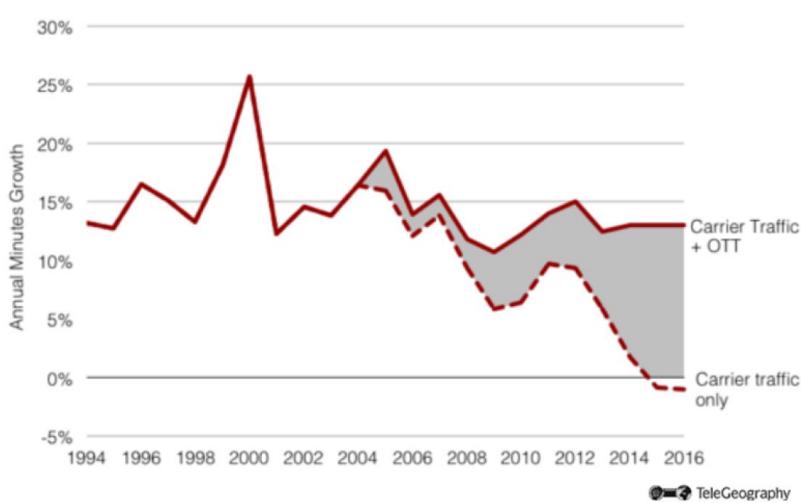
---

<sup>99</sup> For example, an end user who procures the domestic telephone line access service from Singtel could use M1's international fixed-line telephone service by entering M1's International Direct Dial number (002).

obligations in the retail international telephony market for both residential and business services.

### *Impact Arising from Macro Trends*

40. IMDA's market studies found the international telephony market remains to be competitive at both the wholesale and retail levels, with more than 90 licensed providers, as well as additional competition from OTT service providers such as Skype. OTT services are highly competitive and put pressure on prices. Consumers are turning to different ways of communicating with overseas parties, including OTT services. Globally, international phone traffic grew at a CAGR of 15% between 1983 and 2007. However, this grew at a lower CAGR of 7% from 2007 to 2014 and fell about 1% each in 2015 and 2016. Traditional carrier traffic has slumped due to increase in use of OTT services ([Figure 2](#)). Similar trend in terms of International phone traffic was observed in Singapore. From 2005 to 2008, the annual growth rate of outgoing retail international call minutes in Singapore ranged between 10% to 34%. The growth rates tapered from 2009 to 2012, ranging between 0% to 15%. From 2013 to 2017, the outgoing retail international call minutes fell between 1% and 21% annually. It is likely that customers in Singapore have switched to using OTT services to make international calls in recent years, which attributed to the fall in outgoing retail international call minutes.



*Figure 2: The Effect of OTT on International Telephony*  
[Source:  
*Telegeography International traffic report*]

### *Implications for IMDA's Regulatory Approach*

41. The international telephony market (both residential and business) is already highly competitive in Singapore. The migration of End Users to VoBB should not negatively affect this competition. Indeed, the increasing use of OTT services will provide additional competition within this market. As such, the current regulatory approach, whereby no single operator is found to be

dominant and *ex ante* Dominant Licensee obligations are not applied in this market, can be maintained.

### Mobile Services

42. Retail mobile services include access to voice, data, SMS and value-added services (“**VASes**”) delivered over mobile networks. End Users access such services through a mobile terminal (handset or mobile data device) and a subscriber identity module (“**SIM**”). These services are consumed on different forms of mobile terminal devices, including handsets, tablets, e-readers and laptops.
43. Wholesale mobile services are sold by one licensee to another in order to facilitate the provision of retail services between each mobile service operator<sup>100</sup> (e.g., facilitating the call made by a subscriber of one mobile service operator to a subscriber of the other mobile service operator). They include termination<sup>101</sup>, and in some cases transit, of voice and messaging services. Wholesale mobile services also include wholesale access provision to MVNOs, which may include voice, data, SMS and VASes.

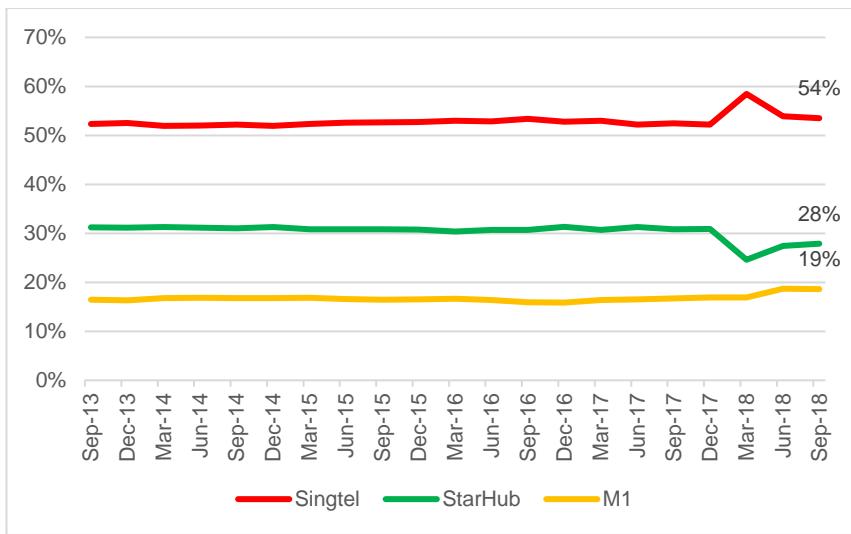
### *Impact Arising from Macro Trends*

44. Notwithstanding that the mobile market in Singapore has remained relatively stable over the last four years, without significant change in the revenue share of the three MNOs, IMDA notes that the mobile market has become more vibrant with more competitive and innovative offerings in recent years. Figure 3 shows the market share by revenue of the MNOs from June 2013 to September 2018.

---

<sup>100</sup> A mobile service operator can either be an MNO or MVNO.

<sup>101</sup> Although, as noted in paragraph 10.39 of Part X of the consultation document, Singapore maintains a BAK regime whereby the termination rate is set to zero.



**Figure 3:**  
Service revenue market share of MNOs in Singapore<sup>102</sup>  
[Source: MNOs' financial reporting to December 2018]

45. The three MNOs rely mainly on handset subsidies (in post-paid segments) and 'below-the line'<sup>103</sup> promotions (in prepaid segments), to differentiate their services. Figure 4 compares the post-paid tariffs (bundled with handset) offered by the three MNOs for a similar type of price plan (out of a range of different price plans). IMDA notes that M1 has recently introduced a new suite of post-paid tariffs (bundled with handset) which focus on providing more data with less call minutes and SMSes, at a cheaper price.

Figure 4: Comparison of MNOs' post-paid tariffs					
Operator	Plans	Minutes	SMS	Data	Price**
<b>Singtel Mobile</b>	Combo 3	unlimited#	unlimited##	3GB*	SGD68.90
<b>StarHub Mobile</b>	\$50 2-year plan	100 mins	0@@	3GB@	SGD50.00
<b>M1</b>	Reg	300 mins	1200	4GB	SGD62.00
	mySIM(e)40	100 mins	100	5GB^	SGD40.00

\*plus 2GB on Singtel Wi-Fi

\*\*does not include the price of the handset bundled with the tariff, which is typically paid upfront

@ includes free 10GB per month for 24 months and unlimited data usage on all weekends

@@ charged at SGD 0.0535 per SMS

# capped at 10,000 local minutes

## capped at 10,000 SMS

^ includes free 10GB per month for 24 months

Source: MNOs' websites, 28 January 2019

46. Currently, notwithstanding that market shares of MNOs have been relatively stable for several years, IMDA notes that one of the primary trend affecting the

<sup>102</sup> IMDA notes that the revenue market share is unlikely to change much with the entry of Circles.Life given that the subscription base for Circles.Life is not yet significant.

<sup>103</sup> Refers to in-store offers which are not widely advertised, including gifts and/or vouchers with the purchase of prepaid SIM cards.

mobile market is the widespread availability and take-up of OTT services, which is constraining the price of operator-managed services such as SMS.

47. This trend means that there are more players who can provide substitutes for messaging services and voice over OTT in a space that was previously only accessible to licensed operators. Barriers to entry are very low, as many OTT services do not operate a local network or require a numbering range, and therefore can operate without a telecommunication licence in Singapore. With the growth of OTT services, mobile service operators are no longer the sole provider of services such as voice calls and messaging, however it also means demand for data services goes up. This, in effect, has the impact of changing the competitive dynamics for some services in the mobile market (messaging and to some extent voice), with mobile service operators focusing their efforts on marketing data services and bundled offers.
48. MNOs have been making their offers more attractive for example, increasing the data allowances through top-ups which consumers can choose to purchase and offering more competitive data roaming offers.
49. IMDA also notes a shift from MNOs who have been promoting their SIM-only plans (i.e., post-paid tariffs which are not bundled with handset offers and subsidies). However, at this stage, it is unclear whether there has been significant take-up of these services, given that consumers have been used to the handset subsidies being bundled with mobile plans on offer in the Singapore mobile market.
50. In view of the strong interest from potential new entrants and the consumer benefits that may be brought about from greater competition and vibrancy in the mobile market, IMDA conducted the New Entrant Spectrum Allocation in December 2016, with TPG Telecom Pte Ltd (“**TPG**”) emerging as Singapore’s fourth MNO.
51. With the impending entry of TPG, retail competition for mobile services is set to increase. It also provided more incentives for existing MNOs to improve their wholesale offering to serve more MVNOs, in order to better utilise the mobile networks. Indeed, it is noted that Zero Mobile, Zero1 and MyRepublic have recently launched mobile services as MVNOs. IMDA notes that the entry of more MVNOs in the recent years have improved the competitiveness of the market, offering competitively priced SIM-only plans. Figure 5 compares the SIM-only post-paid tariffs offered by the three MNOs and four MVNOs for a similar type of price plan (out of a range of different combinations).

Figure 5: Comparison of SIM-only post-paid tariffs <sup>104</sup>					
Operator	Plan	Minutes	SMS	Data	Price
<b>Singtel Mobile</b>	SIM Only 3GB Plan*	200	0	3GB**	SGD25.35
<b>StarHub Mobile</b>	\$25 SIM only plan	100	0	3GB@	SGD25.00
<b>M1</b>	MySim 20	100	100	3GB^	SGD20.00
<b>Circles.Life</b>		100	0	6GB#	SGD28.00
<b>Zero Mobile</b>	Zero X	0	0	unlimited	SGD49.95
<b>Zero1</b>		200	200	3GB^^ at 4G speed; Unlimited at managed speed thereafter	SGD29.99
<b>MyRepublic</b>	Smart 35	1000	1000	9GB at 4G speed; Unlimited at managed speed thereafter	SGD35.00

\* The minimum talk time option has been added to the basic Singtel SIM Only Plan starter pack.

\*\*plus free 12GB mobile data per month and 2GB per month on Singtel Wi-Fi

@ includes free 10GB per month for 12 months and unlimited data usage on all weekends

# includes free 14GB per month for 12 months

^ includes free 12GB per month for 12 months

^^ includes free 12GB per month for 12 months

Source: operators' websites, 28 January 2019

52. At the wholesale level, IMDA notes that the entry of the above-mentioned mass market MVNOs, likely brought about by the keen competition at the retail level. Apart from the mass market MVNO, there are few other MVNOs operating at smaller scale and with limited impact on the retail market, being mostly resellers or targeting only niche segments of the market such as tourists or the foreign communities.

#### *Implications for IMDA's Regulatory Approach*

53. IMDA has not identified any Dominant Licensees within the mobile services market in Singapore at either the retail or wholesale level.
54. IMDA's market studies showed that services-based competition is easier to achieve in the short-term, because launching an MVNO requires less capital and investment compared to an MNO. IMDA's market studies noted that there

<sup>104</sup> SIM-only plans with no contract are chosen for the purpose of comparison.

are challenges to sustaining such new entry and there are relatively few successful MVNOs with significant market shares throughout the world, given the heavy reliance on obtaining a sustainable wholesale agreement with a host operator, at competitive wholesale prices. However, IMDA's market studies note that the entry of MVNOs such as Circles.Life, Zero Mobile, Zero1 and MyRepublic have introduced new competition dynamics to the mobile services market such as data plans which are more competitively priced. As such, the current regulatory approach, whereby no single operator is found to be dominant and *ex ante* Dominant Licensee obligations are not applied in this market, can be maintained.

### Business Capacity Services

55. Business capacity services can be split between terrestrial and non-terrestrial links. Retail terrestrial business capacity services include domestic Local Leased Circuits (“**LLC**”), International Private Leased Circuits, (“**IPLC**”), Local Managed Data Services (“**LMDS**”), International Managed Data Services (“**IMDS**”), and backhaul services.
56. LLCs offer dedicated, symmetrical connectivity between two designated points. These services are characterised by their bandwidth, as well as other features such as resilience, security and redundancy. IPLCs work on a similar basis to LLCs, but can be used to connect offices in other countries.
57. LMDS are packet-based services (e.g., such as Local Frame Relay, Local asynchronous transfer mode-based (“**ATM**”), Local IP-virtual private network (“**IP-VPN**”) and Local Metro-Ethernet) that provide managed connectivity among multiple customer sites, usually linked through the core network of a supplier, and thus have different characteristics to LLCs, which offer dedicated point-to-point connectivity. LMDS can be split between legacy products (e.g., Frame Relay or ATM)) and next-generation products (e.g., IP-VPN and Ethernet-based products). In practice, many LMDS customers require dedicated, symmetrical connectivity, and therefore LMDS typically rely on LLC products. IMDS work on a similar basis as LMDS, where they provide managed connectivity among multiple customer sites; the difference is that for IMDS, at least one customer site is located outside of Singapore.
58. Backhaul services are services relating to the connection between a submarine cable landing station and the point of presence of a licensed operator within Singapore.
59. Non-terrestrial capacity services include VSAT, leased satellite bandwidth, satellite IPLC, satellite TV downlink, satellite TV uplink and DVB-IP services.

60. Wholesale capacity services are sold by one licensee to another in order to facilitate the provision of retail services. These include wholesale LLC and LMDS, as well as wholesale-only products such as backhaul and passive infrastructure access (for example duct/pole/manhole access, as well as dark fibre).
61. In 2005, IMDA deemed the non-terrestrial capacity markets<sup>105</sup> and IMDS market to be competitive and exempted Singtel from its obligations as a Dominant Licensee for these markets. In 2009, IMDA had exempted Singtel from Dominant Licensee obligations in the terrestrial IPLC and backhaul markets.

#### *Impact Arising from Macro Trends*

62. In principle, the availability of the NBN network can support a greater number of services than simply broadband connectivity and VoBB. These include dedicated, symmetrical links, and products that make use of this type of connectivity, such as business telephony and LMDS.
63. This is consistent with the international trend towards the substitution of some legacy capacity services (i.e., some traditional leased circuits) with new forms of managed data services based on Ethernet that replicate the dedicated, symmetrical characteristics of leased circuits.
64. Substitution between legacy LLCs and new LMDS services is particularly common in the high-capacity segment in other countries<sup>106</sup>. In Singapore, IMDA notes that the demand for high-capacity LLCs is relatively small. Instead, customers with demand for high capacity connectivity are purchasing LMDS services which can offer bandwidths greater than 1Gbps.
65. For lower capacity products, substitution is occurring, albeit at a slower pace, as certain applications and industries require low bandwidth, but dedicated and highly secure connectivity, where a high-speed fibre connection does not necessarily offer better characteristics than legacy products.
66. IMDA's market studies found that for the terrestrial domestic business capacity services within Singapore (LLC and LMDS), Singtel remains a significant player, despite the NBN lowering barriers to entry and expansion of new service providers, with high and sustained market share figures in both LLC and LMDS

---

<sup>105</sup> These markets include VSAT, leased satellite bandwidth, satellite IPLC, satellite TV downlink, satellite TV uplink and DVB-IP services markets.

<sup>106</sup> In particular, Ofcom defined a new product market which includes services with bandwidths greater than 1Gbps and services of any bandwidth delivered using WDM equipment at customers' premises in its 2013 review. See <http://stakeholders.ofcom.org.uk/consultations/business-connectivity-mr/final-statement/>.

markets. IMDA's market studies noted that while the NBN provides the opportunity for RSPs to develop their own downstream business capacity products<sup>107</sup>, take-up by RSPs for such offerings via NetLink Trust's network has not been significant to-date. Notwithstanding Singtel's sustained market share in the LLC and LMDS markets, IMDA notes that the prices of Singtel's LLC services and LMDS services, such as its local Metro-Ethernet services and local IP-VPN services, have fallen by up to 80% since 2009.<sup>108</sup> While this may imply increasing competitive pressure faced by Singtel from operators who either roll out their own fibre networks or rely on the NBN for fibre access, IMDA notes that declining local connectivity prices may be a global trend<sup>109</sup>, which suggests other factors causing a fall in prices for services in both LLC and LMDS markets, such as technological improvements which reduces the cost of providing connectivity services.

67. For some customers who do not require a dedicated link, it is possible to substitute a leased line with high-speed broadband delivered over the Gigabit Passive Optical Network (“**GPON**”) from NetLink Trust. However, in the majority of cases, high-speed broadband is not seen as a direct substitute to leased line by business End Users, and as such may not be seen as a competitive alternative.
68. However, this has not hindered competition in the IPLC and IMDS markets. There are a large number of international operators serving these markets and the increase in submarine capacity have further supported competition.
69. IMDA's market studies noted that while demand for additional capacity on backhaul links is likely to grow, increased competition, and self-supply by vertically integrated telecommunication service providers, have put pressure on backhaul revenues. These trends indicate that the backhaul market remains competitive.<sup>110</sup> The demand for backhaul has also increased recently with the increase in the number of data centres being set up in Singapore. There are also more operators providing backhaul services to meet the increasing demand for backhaul connections.
70. IMDA's market studies found that no licensees are deemed to be dominant in any of the non-terrestrial capacity services markets. This is consistent with IMDA's finding in 2005 which led to the exemption of Singtel from its Dominant

---

<sup>107</sup> NetLink Trust offers dedicated (1:1) link to end users (and therefore structurally identical to a leased circuit tail), and which can be combined with another dedicated link somewhere else in Singapore to provide an end-to-end leased circuit.

<sup>108</sup> Based on Singtel's published List Prices for MetroEthernet, IP-VPN and LLC services.

<sup>109</sup> [https://static1.squarespace.com/static/524d7f52e4b061d170a9b22e/t/57ebcb8e725e25b5bb179d7e/1475070866505/1110\\_Greg+Bryan\\_TELEGEOGRAPHY.pdf](https://static1.squarespace.com/static/524d7f52e4b061d170a9b22e/t/57ebcb8e725e25b5bb179d7e/1475070866505/1110_Greg+Bryan_TELEGEOGRAPHY.pdf)

<sup>110</sup> Source: Business and Government Customer Segment and Individual Markets Exemption Decision issued by then-IDA on 2 June 2009.

Licensee obligations for the satellite IPLC, satellite TV downlink/uplink, DVB-IP, VSAT, leased satellite bandwidth, international IP transit, IPLC and IMDS markets in 2005.

*Implications for IMDA's Regulatory Approach*

71. Currently, IMDA classifies Singtel as dominant in the LLC and LMDS markets, while it does not find any operator dominant in the IPLC and IMDS markets, as stated in paragraph 61. IMDA's market studies suggested that Singtel remains dominant in both the LLC and LMDS markets. As such, Singtel's Dominant Licensee status should be maintained for both markets. Notwithstanding, as mentioned above, IMDA notes the downward pricing pressure faced by Singtel for its services in both LLC and LMDS markets, and will continue to monitor the market conditions.
72. IMDA's market studies noted that once economic alternatives to Singtel's LLCs are available, the trend for migration to LMDS may result in increased competition in these markets, which may then support a review of the dominance regulation of the LMDS market. The LLC market could also be reviewed once economic alternatives to Singtel's LLCs are available.
73. In the international business connectivity markets (IPLC and IMDS) where IMDA had already deemed to be competitive, competition in the relevant markets appears to be increasing. IMDA notes the number of submarine cable systems landing in Singapore has increased from 15 in 2012 to 21 in 2018, with total potential cable capacity rising from 114Tbps to more than 488Tbps over the same period.<sup>111</sup> As such, the current regulatory approach whereby *ex ante* Dominant Licensee obligations are not applied in these markets, can be maintained.

Pay TV

74. The Pay TV market can be split into traditional Pay TV services and OTT subscription services. The Pay TV market excludes FTA TV and other visual media sources e.g. films. The Singapore Pay TV market comprises two nationwide Pay TV operators, StarHub and SingNet and a small number of niche TV operators. Given that the subscriber base for niche TV operators is estimated to be small (i.e., in the thousands), we will only focus on the two nationwide Pay TV operators here.
75. StarHub has been operating as the only cable TV operator in Singapore since 1995. SingNet started its Pay TV service over IPTV in 2007, initially delivered

---

<sup>111</sup> Based on Telegeography figures

over ADSL and then via fibre. Together, the two Pay TV operators provide over 400 channels<sup>112</sup> to over 790,000 subscribers<sup>113</sup>.

### *Impact Arising from Macro Trends*

76. Against a backdrop of increasing competition from OTT services, IMDA has observed a gradual decline in Pay TV subscription – both StarHub and SingNet lost about 48,000 subscribers in 2017.<sup>114</sup> By contrast, in a survey commissioned by subscriber management specialist Paywizard, subscriptions to OTT services doubled in 2016.<sup>115</sup> The OTT study commissioned by the then-MDA also found that online viewers spent more than half their time on online videos compared to traditional TV.<sup>116</sup> Notwithstanding that the study was conducted in 2015, this finding is unlikely to change significantly given the proliferation of OTT services.
77. Notwithstanding the entry of OTT service providers, IMDA notes that Pay TV penetration remains significant at over 67%.<sup>117</sup> This could be because not many OTT service providers offer comprehensive packages covering content across different genres, including “live” sports content, which is mostly available via Pay TV. IMDA notes that different genres of content are of differing degrees of importance to consumers in different age groups. For example, those aged under 30 found sports to be one of the most important genres when selecting a Pay TV service. On the other hand, those aged 50 and above found drama to one of the most important genres when selecting a Pay TV service.<sup>118</sup> A research study from Nielsen suggests that OTT services may be a complement rather than a substitute for Pay TV subscriptions, as many users may cut back on their Pay TV subscriptions than to cut the cord completely, and then layer on OTT services.<sup>119</sup>
78. IMDA’s market studies noted that while SingNet’s market share has been growing in recent years, StarHub has maintained the bulk of the market share in both measures (57% by revenue share in December 2018 and 52% by subscribers share in December 2018<sup>120</sup>).

---

<sup>112</sup> As of October 2017

<sup>113</sup> As of September 2018, based on operators’ websites.

<sup>114</sup> Source: Pay TV operators’ websites.

<sup>115</sup> Source: Straits Times article dated 22 January 2017 – TV cuts the cord: More ditching cable for Internet platforms.

<sup>116</sup> Source: Then-MDA OTT study, 2015.

<sup>117</sup> Based on 1.29m households in 2017 and 458,000 StarHub subscribers and 401,000 Singtel subscribers in December 2017. Sources: Department of Statistics and Pay TV operators’ websites.

<sup>118</sup> Source: IMDA Pay TV Study 2016/17.

<sup>119</sup> Source: Nielsen Says Streaming Complements Pay TV, 16 March 2016, Wall Street Journal.

<sup>120</sup> Source: Operators’ websites

79. IMDA notes that both nationwide Pay TV operators (StarHub and SingNet) continue to innovate their service offerings. StarHub and SingNet launched their own OTT services – StarHub Go (previously known as TV Anywhere) in June 2012 and Singtel TV Go in August 2013. StarHub has also recently introduced its own media streaming box, StarHub Go Streaming Box, where the StarHub Go app is pre-loaded, amongst other non-StarHub apps like YouTube and Google Play Store<sup>121</sup>. In addition, other areas of innovation include investing in local content production through the Public Service Broadcasting Contestable Funds Scheme (by StarHub) and establishing joint venture (by Singtel), i.e., HOOQ, with content providers to establish video streaming service.
80. That said, IMDA recognises the competitive pressure posed by OTT services. Content players are increasingly providing their content directly to consumers through on-line applications. This business model will continue to challenge traditional media broadcasting, including our two Pay TV operators. For example, Disney is planning to launch its online streaming service in late 2019<sup>122</sup>. Hulu also secured rights to put five more Discovery channels on its OTT service<sup>123</sup>. IMDA further notes that digital companies have been investing in the livestreaming of original content and increasingly, live sports. For example, Facebook has secured deals to livestream selected professional soccer (e.g. English Premier League and La Liga) and baseball matches in the US<sup>124</sup>. Amazon also secured the exclusive rights to broadcast 20 English Premier League matches for three years in the UK, starting from the 2019/20 season<sup>125</sup>.

#### *Implications for IMDA's Regulatory Approach*

81. Notwithstanding that StarHub is currently classified dominant in the Pay TV market and SingNet has a sizable share of the market, IMDA will continue to monitor the market for the growth of OTT services, which is likely to have at least some impact on the competitive dynamics.
82. Having said that, IMDA notes that Pay TV operators are also moving towards the OTT platform and Pay TV operators may pursue a platform exclusivity strategy. Hence, IMDA is proposing to update the scope of the Cross-Carriage

---

<sup>121</sup> Source: Straits Times article dated 12 September 2018 – Good start for StarHub's Android box

<sup>122</sup> <https://www.google.com.sg/amp/s/variety.com/2018/film/news/disney-streaming-service-2019-1202898412/amp/>

<sup>123</sup> <https://www.google.com.sg/amp/s/variety.com/2018/digital/news/hulu-discovery-live-streaming-networks-vod-1202937928/amp/>

<sup>124</sup> <https://www.google.com.sg/amp/s/www.bbc.com/news/amp/technology-45178848>

<sup>125</sup> <https://www.google.com.sg/amp/s/www.businesstimes.com.sg/companies-markets/amazon-to-live-stream-epl-matches-in-online-shake-up%3famp>

Measure (“CCM”) to include OTT services where Qualified Content<sup>126</sup> is involved. This is discussed in greater detail in Part IX of the consultation document.

83. IMDA notes that the current MMCC provisions only apply to those already designated as dominant. In light of the developing market conditions, IMDA is proposing to adopt the TCC approach, which is to apply the abuse of dominance provisions to entities which are later found to have SMP in specific market(s) but which have not been gazetted as Dominant Persons.

## **Conclusion**

84. Based on the findings of IMDA’s market studies, it is found that while the NBN has generally brought more competitive pressure to historically-dominant operators in markets where there exists a dominant operator, some of these operators have managed to retain their dominance in these markets. However, IMDA is cognisant of the fundamental shift in competitive dynamics in the next few years brought about by the five macro trends that are affecting the telecommunication and media industries, and seeks to prepare for the shift by introducing refinements and simplifications to the regulatory regime to bring about greater flexibility to deregulate specific markets as competition improves, and to regulate new markets if required. It may also be possible to simplify the set of regulations that Singtel, as a Dominant Licensee, is currently subject to, reflecting the obsolescence of some interconnection-related services for example, and its diminishing market power over certain markets. Details of IMDA’s proposals on these changes are described in Parts III to XI of the consultation document.

---

<sup>126</sup> Pursuant to Sub-section 2.3(d) of the MMCC, a piece of content will become Qualified Content if it is acquired or otherwise obtained by a Regulated Person for transmission on its Subscription Television Service in Singapore under an arrangement, whether explicit or implicit, which prevents or restricts, or is likely to prevent or restrict, the channel or programming content from being acquired or otherwise obtained from it for transmission on any Relevant Platform in Singapore by any other Regulated Person outside of the Group (Sub-section 2.3(d)(i)(B) of the MMCC).

## ANNEX B - PROPOSED DRAFTING FOR REGULATORY PRINCIPLES

### 1. Reliance on Market Forces, Private Negotiations and Industry Self-Regulation

Market forces are generally far more effective than regulation in promoting consumer welfare. Competitive markets are most likely to provide consumers with a wide choice of services at just and reasonable prices. Therefore, to the extent that markets or market segments are competitive, IMDA will place primary reliance on private negotiations and industry self-regulation, subject to minimum requirements designed to protect consumers and prevent anti-competitive conduct. As a general principle, private negotiations undertaken by persons to whom the Converged Code applies should be undertaken in good faith.

### 2. Promotion of Effective and Sustainable Competition

Recognising the effectiveness of market forces in promoting consumer welfare, IMDA will intervene where necessary to promote and maintain effective and sustainable competition and to safeguard the public interest. The measures that IMDA may take include:

- removing or minimising any artificial form of impediment to market entry and exit;
- curtailing any concentration of Significant Market Power that has the effect of unreasonably restricting competition;
- eliminating anti-competitive behaviour and unfair methods of competition by industry participants;
- prohibiting Consolidations that are likely to substantially lessen competition in the information, communications and media industry of Singapore and considering whether Consolidations are in the public interest;
- ensuring that industry participants and consumers have access to information on market conditions; and
- ensuring that there is inter-operability of and, where necessary, reasonable access to, networks to prevent impediments to effective competition and market growth.

### 3. Promotion of Facilities-based Competition in the Telecommunication Industry

Effective and sustainable competition in the telecommunication industry will be best achieved through facilities-based competition. However, where there are technological, market or other impediments that will hamper competing

Telecommunication Licensees' ability to deploy telecommunication facilities, IMDA will seek to strike a balance between providing the economic incentives to deploy telecommunication facilities and taking pro-active measures to facilitate services-based competition.

#### **4. Proportionate Regulation**

To the extent that *ex ante* regulation is necessary, IMDA will seek to impose regulatory requirements that are carefully crafted to achieve clearly articulated objectives. Such requirements will be no broader than necessary to achieve IMDA's stated goals.

#### **5. Technology Neutrality**

IMDA's regulatory requirements will reflect the phenomenon of convergence, which is eroding historical differences among telecommunication platforms such as wireline, cable, wireless and satellite, as well as media platforms such as broadcasting, print and on-line services. Regulatory requirements will be based on clear policy objectives and sound economic principles and, to the extent feasible, will be technology-neutral. As the phenomenon of convergence continues to evolve, with different platforms subject to differing degrees of competition, the objective application of these principles and/or public interest concerns, may result in the imposition of different regulatory obligations on service providers that use different platforms.

#### **6. Open, Transparent and Reasoned Decision Making**

IMDA will endeavour to apply the provisions of the Converged Code in a transparent manner. IMDA will generally provide an opportunity for public comment in connection with material issues. Comments will generally be made available to the public, except to the extent that information submitted to IMDA is confidential, proprietary, commercially sensitive or raises law enforcement, or national security, or public interest concerns. In arriving at its decisions, IMDA will give full consideration to the comments received. IMDA will generally make available to the public its decisions adopted pursuant to the Converged Code, and clearly explain the basis for its decisions. IMDA may also make public information related to any enforcement action taken pursuant to the Converged Code. IMDA may also issue guidelines, where appropriate, clarifying the procedures and standards that it will use to implement the Converged Code.

#### **7. Avoidance of Unnecessary Delay**

Recognising the need for market participants to respond rapidly to changing market forces, IMDA will endeavour to make all decisions pursuant to the

Converged Code within the timeframes specified herein and, in any case, as soon as reasonably possible.

**8. Non-discrimination**

IMDA's decisions will be non-discriminatory. IMDA will treat similarly situated persons on an equivalent basis. Where appropriate, IMDA's decisions will reflect relevant differences between such persons.

**9. Consultation with Other Regulatory Authorities**

IMDA, where feasible and appropriate, will consult with other regulatory authorities in Singapore in order to facilitate the development of a consistent regulatory policy that promotes fair and effective competition and serves the public interest.