



Telecoms, Media & Internet



17th Edition

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Industry Chapter



The Evolution of Telecoms and Media Regulation Dario Betti, Mobile Ecosystem Forum

Expert Analysis Chapters



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Overview 1

1.1 Please describe the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors in your jurisdiction, in particular by reference to each sector's: (i) annual revenue; and (ii) 3–5 most significant market participants.

According to the publicly available figures published by the Ministry of Trade and Industry, the Gross Domestic Product generated by the Information & Communications Industry in 2021 was S\$28.3552 billion.

There are currently four main local telecom service providers offering 4G mobile services in Singapore: Singtel Mobile Singapore Pte Ltd ("Singtel Mobile"); StarHub Mobile Pte Ltd ("StarHub Mobile"); M1 Limited ("M1"); and SIMBA Telecom Pte Ltd ("SIMBA") (formerly TPG Telecom Pte Ltd).

With respect to the deployment of 5G mobile services, the Info-communications and Media Development Authority ("IMDA") had, in 2021, provisionally awarded 2.1 GHz spectrum lots to Singtel Mobile, a consortium formed by StarHub Mobile and M1, and SIMBA. Currently, Singtel Mobile, StarHub Mobile and M1 offer 5G mobile services to customers, while SIMBA is looking to launch its 5G services soon. Other mobile virtual network operators, such as MyRepublic and Circles.Life, also offer 5G mobile plans in Singapore.

In the media sector, Mediacorp Pte Ltd ("Mediacorp") is the sole licensee for the broadcast of nationwide free-to-air television ("FTA TV") channels in Singapore, while StarHub Ltd and Singapore Telecommunications Ltd are the main service providers offering nationwide subscription pay-TV services. The current free-to-air radio broadcasters are Mediacorp, So Drama! Entertainment and SPH Radio Pte Ltd.

1.2 List the most important legislation which applies to the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors in your jurisdiction and any significant legislation on the horizon such as the regulation of online harms, regulation of social media or artificial intelligence (please list the draft legislation and policy papers)

The Telecommunications Act 1999 ("TA") is the primary legislation governing the telecoms sector in Singapore. It sets out the broad licensing and regulatory framework for the telecoms sector. Other relevant legislation includes the Infocommunications Media Development Authority Act 2016 ("IMDAA"), the Personal Data Protection Act 2012 ("PDPA") and the Cybersecurity Act 2018 ("CS Act").



Lim Chong Kin

For the audio-visual media distribution sector, the Broadcasting Act 1994 ("BA") is the primary legislation governing the broadcasting sector, while the distribution and exhibition of films is primarily governed by the Films Act 1981 ("Films Act").

Other specific issues are dealt with under various regulations, codes of practice, standards of performance, guidelines and other regulatory instruments issued pursuant to these statutes.

With regard to the regulation of online harms and social media, the Protection from Online Falsehoods and Manipulation Act 2019 ("POFMA") aims to prevent the electronic communication in Singapore of false statements of fact, to suppress support for and counteract the effects of such communication, to safeguard against the use of online accounts for such communication and for information manipulation, and to enable measures to be taken to enhance transparency of online political advertisements.

Further, the newly introduced Foreign Interference (Countermeasures) Act 2021 ("FICA"), which took effect on 7 July 2022, empowers the Minister for Home Affairs to issue directions to various entities such as social media services, relevant electronic services, internet access services, and persons who own or run websites, blogs or social media pages, to help the authorities investigate and counter hostile communications activity that is of foreign origin.

The Protection from Harassment Act 2014 ("POHA") covers offences relating to the publication of personal information in order to harass, threaten or facilitate violence against a targeted person (or a related person of the targeted person), or otherwise commonly referred to as "doxing".

The Online Safety (Miscellaneous Amendments) Act 2022 ("Online Safety Act") took effect from 1 February 2023, which introduced new provisions to the BA to regulate Online Communication Services ("OCS") accessible by Singapore users. Presently, only social media services are regulated under the new Part 10A of the BA. For more details, please see the response to question 5.2.

On the regulation of artificial intelligence ("AI"), the IMDA published the Second Edition of its Model AI Governance Framework ("Model Framework") on 21 January 2020, which provides detailed and readily implementable guidance and principles in relation to how private sector organisations may address key ethical and governance issues when deploying AI solutions. The Model Framework is accompanied by an Implementation and Self-Assessment Guide for Organisations to enable organisations to assess the alignment of their AI governance practices with the Model Framework. On 25 May 2022, the IMDA and the Personal Data Protection Commission ("PDPC") launched A.I. Verify-the world's first AI Governance Testing Framework and Toolkit for companies in Singapore that wish to demonstrate responsible AI in an objective and verifiable manner. A.I. Verify is currently available as a minimum viable product for system developers and owners who want to be more

Singapore

transparent about the performance of their AI systems through a combination of technical tests and process checks.

1.3 List the government ministries, regulators, other agencies and major industry self-regulatory bodies which have a role in the regulation of the: (a) telecoms, including internet; (b) audio-visual media distribution sectors; (c) social media platforms; and (d) artificial intelligence in your jurisdiction.

The IMDA is the converged regulator for info-communications (including telecoms and IT) and media in Singapore, and is responsible for the development, promotion and regulation of the info-communications and media sectors. The IMDA is also responsible for regulating social media platforms under the new Part 10A of the BA, the administration of the PDPA (through its designation as the PDPC), as well as the POFMA (through the POFMA Office situated within the IMDA).

The IMDA is under the direct authority of the Ministry of Communications and Information ("**MCI**"), the government ministry in charge of the development of the info-communications technology, cybersecurity, media and design sectors in Singapore.

In terms of AI, the Advisory Council on the Ethical Use of AI and Data has been set up to assist the Singapore Government in developing ethics standards and reference governance frameworks, and publish advisory guidelines, practical guides and codes of practice for the voluntary adoption by the industry.

1.4 In relation to the: (a) telecoms, including internet; and (b) audio-visual media distribution sectors: (i) have they been liberalised?; and (ii) are they open to foreign investment including in relation to the supply of telecoms equipment? Are there any upper limits?

Telecoms

The Singapore telecoms sector was fully liberalised on 1 April 2000. Since then, there have been no direct or indirect foreign equity limits imposed on persons holding a licence to provide telecom services.

The IMDA's current practice is to issue facilities-based operations ("**FBO**") licences only to companies incorporated in Singapore, which can be wholly owned by a foreign entity. In the case of services-based operations ("**SBO**") (Individual) licences, the IMDA would also issue licences to local registered branches of foreign companies, while SBO (Class) licences may also be held by limited liability partnerships or limited partnerships. Dealers who intend to manufacture, import, let for hire, sell, or offer or possess for sale telecoms equipment would need to apply for a Dealer's Individual licence or register for a Dealer's Class licence (as the case may be). Only Singapore citizens, companies incorporated under the Companies Act 1967 ("**CA**"), limited liability partnerships, or persons carrying on a business registered under the Business Registration Act (including foreign persons) are permitted to hold a Dealer's licence.

Merger and acquisition control regulations exist under the Converged Code of Practice for Competition in the Provision of Telecommunication and Media Services ("**TMCC**") and Part 5A of the TA. For more details, please see the response to question 2.7.

Audio-visual media distribution sector

Part 10 of the BA regulates foreign participation in a broadcasting company, which is a company incorporated or registered under the CA that holds any free-to-air licence, or any broadcasting licence (excluding Class licences) under which a subscription broadcasting service may be provided, that permits a broadcast capable of being received in 50,000 dwelling houses or more. The following requirements under Part 10 of the BA apply to all broadcasting companies unless exempted by the Minister for Communications and Information ("**Minister**").

Unless the IMDA approves otherwise, the chief executive officer of a broadcasting company and at least half of its directors must be Singapore citizens.

No person may enter into an agreement to acquire 5% or more of voting power in, or (alone or with his associates) acquire 12% or more shareholding or voting power in, or otherwise become an indirect controller (as defined under the BA) of, a broadcasting company without first obtaining the Minister's approval.

The IMDA's prior approval must be obtained if a person wishes to receive funds from a foreign source to finance any broadcasting service owned or operated by a broadcasting company. In addition, no company (unless the Minister approves otherwise) may be granted or hold a relevant licence (as defined in the BA) if the Minister is satisfied that:

- (a) any foreign source(s) either holds no less than 49% of the shares in the company or its holding company, or controls voting power of no less than 49% in the company or its holding company; or
- (b) all or a majority of the persons having the direction, control or management of the company or its holding company are appointed by; or accustomed or under an obligation to act in accordance with the directions, instructions or wishes of, any foreign source(s).

Persons specified to be regulated persons pursuant to the IMDAA are subject to further merger and consolidation regulations as set out in the IMDAA and the TMCC. Under the TMCC, a regulated person is required to obtain prior written approval from the IMDA before entering into a consolidation (including a merger) with another regulated person or with any ancillary media service provider (as defined under the TMCC).

2 Telecoms

2.1 Is your jurisdiction a member of the World Trade Organization? Has your jurisdiction made commitments under the GATS regarding telecommunications and has your jurisdiction adopted and implemented the telecoms reference paper?

Singapore became a member of the World Trade Organization ("**WTO**") on 1 January 1995. Singapore is a signatory to the General Agreement on Trade in Services ("**GATS**") protocols on telecommunications (Fourth Protocol) and has made commitments thereunder. Singapore has also adopted the telecom reference paper on regulatory principles.

2.2 How is the provision of telecoms (or electronic communications) networks and services regulated?

The operation and provision of telecommunication systems and services in Singapore generally require a licence to be granted under the TA, which can be either an FBO or SBO licence.

Under the TA, "telecommunications" is defined broadly as: "a transmission, emission or reception of signs, signals, writing, images, sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems whether or not such signs, signals, writing, images, sounds or intelligence have been subjected to rearrangement, computation or other processes by any means in the course of their transmission, emission or reception."

Where radio frequency ("**RF**") spectrum is required for the provision of wireless services, additional licensing may be required under the Telecommunications (Radio-communication) Regulations ("**Radio-communication Regulations**").

Regulatory obligations may be imposed on licensed operators by way of licence conditions and other regulatory instruments.

2.3 Who are the regulatory and competition law authorities in your jurisdiction? How are their roles differentiated? Are they independent from the government? Which regulator is responsible for social media platforms? What statutory basis do they have?

The IMDA, as the telecoms regulator, is responsible for administering and enforcing competition rules in the telecoms and media sectors by exercising the powers conferred to it by the IMDAA and TA. To this end, the IMDA has issued the TMCC, which sets out a detailed sector-specific competition framework governing the telecoms and media sectors. The IMDA is a statutory board under the oversight of the MCI, a ministry of the Singapore Government.

Competition matters falling under the IMDA's jurisdiction are carved out of the purview of the Competition and Consumer Commission of Singapore ("**CCCS**"), which administers the general competition law pursuant to the Competition Act 2004.

The IMDA is also responsible for regulating social media services under the new Part 10A of the BA and the administration of the POFMA (through the POFMA Office), which contains provisions that address issues involving the dissemination of online falsehoods (including on social media platforms) that affect the public interest.

Meanwhile, the Minister for Home Affairs is empowered under the FICA to issue directions to various entities such as social media services and internet access services, to assist authorities in investigating and countering foreign hostile activity on online platforms.

2.4 Are decisions of the national regulatory authority able to be appealed? If so, to which court or body, and on what basis?

Telecom licensees aggrieved by any decision of the IMDA under the TA, or anything contained in a code of practice, standard of performance or direction issued under the TA may request the IMDA to reconsider the matter, or appeal to the Minister.

Non-licensees may also request the IMDA to reconsider, or appeal to the Minister against certain types of decisions, directions or codes of practice issued by the IMDA.

The IMDA may determine a reconsideration request, and the Minister may determine an appeal by confirming, varying, or reversing the decision/direction, or amending the code of practice or standard of performance.

Upon the conclusion of an appeal to the Minister, further legal challenges may be mounted by aggrieved persons by way of an action for judicial review in the courts.

2.5 What types of general and individual authorisations are used in your jurisdiction? Please highlight those telecom-based authorisations needed for the installation and/or maintenance of infrastructure?

Persons operating and providing telecom systems and services in Singapore must generally be licensed. The IMDA has adopted a two-pronged licensing approach that distinguishes between FBOs (which require an FBO licence) and SBOs (which require an SBO licence). FBO licences are on a higher hierarchical level than SBO licences. FBOs are persons that deploy and/or operate telecom networks, systems and/or facilities (including telecom infrastructure for the carriage of telecoms or broadcast traffic) for the purpose of providing telecoms and/or broadcasting services outside of their own property boundaries to third parties, who may include other licensed telecoms operators, business customers or the general public.

Although the general conditions of an FBO licence are standardised across all FBO licensees, additional specific conditions may apply to each individual FBO licensee depending on the services that the licensee may provide.

SBO licences are granted to operators that do not intend to deploy telecoms infrastructure, and instead lease telecom network elements from FBO licensees to provide telecom services, or to resell the telecom services of other licensees. SBO licences fall under two categories: SBO (Individual) licences; or SBO (Class) licences, depending on the scope of operations and nature of services offered. In general, operators who lease international transmission capacity for the provision of services will be licensed individually. For more details as to SBO (Class) licences, please refer to the response to question 2.6.

Other types of telecom licences may be required for the carrying on of other activities. For example, dealers of telecommunication equipment may require a telecom dealer's licence. The operation of radio-communication stations or networks may also require other licences to be obtained.

2.6 Please summarise the main requirements of your jurisdiction's general authorisation.

Parties that provide telecom services falling within the scope of an SBO (Class) licence are required to register with the IMDA before commencing services. There is no renewal required for SBO (Class) licences.

Some examples of services that require an SBO (Class) licence include: internet-based voice and data services; resale of public switched telecommunication services; and store-and-forward value-added network services.

Operators providing the services within the scope of the SBO (Class) licence will be deemed to have read and agreed to the prescribed terms and conditions of the licence.

2.7 In relation to individual authorisations, please identify their subject matter, duration and ability to be transferred or traded. Are there restrictions on the change of control of the licensee?

The operation or provision of any telecommunication system and service would require an FBO or SBO licence, depending on the intended scope of activities (see the response to question 2.5). Each licensee will be authorised to undertake the activities for which it is granted its licence.

FBO licences are typically granted for 15 years and may be renewed as the IMDA deems fit. SBO (Individual) licences are valid for an initial period of five years and may be renewed for further five-year periods. All such licences may not be transferred or traded without the IMDA's prior written approval.

Under Part 5A of the TA, all designated telecommunication licensees ("**DTLs**"), designated business trusts ("**DBTs**") and designated trusts ("**DTs**") are required to comply with merger control requirements. Generally, where the transaction would result in a party and its associates holding or controlling more than 12% or more than 30% of the voting power in a DTL, DBT or DT, the IMDA's prior written approval must be sought for the transaction. In addition, the IMDA must be notified if a transaction would result in a person holding or controlling 5% or more, but less than 12%, of the voting power in a DTL, DBT or DT. Other licensees may, under the conditions of their licence, be required to notify the IMDA upon a change of control.

2.8 Are there any particular licences or other requirements (for example, in relation to emergency services) in relation to VoIP services?

According to the IMDA's Guidelines on Licensing and Regulatory Framework for IP Telephony Services in Singapore, applicants must first obtain either an FBO or SBO licence to provide any Voice over Internet Protocol ("**VoIP**") services.

IP Telephony services are defined as any VoIP services offered using an E.164 telephone number allocated to customers in Singapore, which allow customers to make and receive voice, data and/or video calls using the same IP telephone number from any domestic or overseas location where broadband internet access is available.

Applicants will need an FBO licence if they intend to deploy and/or operate any form of telecommunication network, systems and/or facilities for the purpose of providing IP Telephony services outside of their own property boundaries to third parties (including other licensed telecommunication operators, business customers or the general public).

Applicants will need an SBO licence if they intend to lease telecommunication elements from any licensed FBO to provide IP Telephony services, or to resell IP Telephony services of FBOs.

Depending on the type of licence, licensees will be allocated eight-digit number blocks starting with level "6" or "3".

With regard to emergency services, licensees offering IP Telephony services utilising Level "6" numbers must provide access to emergency services such as 999, 995 and 993 at all times and without charge, whether through customer premises equipment or public payphones.

Other obligations that licensees must comply with include allowing number portability for their IP Telephony services, complying with Quality of Service standards as may be established by the IMDA, and providing integrated directories and directory enquiry services.

2.9 Are there specific legal or administrative provisions dealing with access and/or securing or enforcing rights to public and private land in order to install telecommunications infrastructure?

Under the TA, licensees designated as public telecommunication licensees ("**PTL**") by the IMDA may, subject to certain conditions and safeguards, exercise certain statutory rights to facilitate the deployment of telecom infrastructure, including the right to enter state and private property to lay telecom infrastructure.

Under the IMDA's Code of Practice for Info-communication Facilities in Buildings ("**COPIF**"), building developers and owners are required to provide certain spaces and facilities to enable the deployment and operation of telecom installations, plants or systems. The COPIF also sets out various duties that developers, owners and telecom licensees are required to observe in relation to the provision, maintenance and utilisation of relevant spaces and facilities. 2.10 How is wholesale interconnection and access mandated? How are wholesale interconnection or access disputes resolved?

Interconnection and access issues are primarily regulated by the IMDA pursuant to the TMCC. The TMCC provides that FBO licensees and SBO licensees using switching or routing equipment to provide services to the public are under a general duty to interconnect with one another. Interconnection agreements must be submitted to the IMDA. While the IMDA generally does not involve itself in interconnection negotiations between non-dominant licensees, an interconnection agreement between non-dominant licensees must nevertheless fulfil certain minimum interconnection duties as specified in the TMCC, and the IMDA reserves the right to reject an interconnection agreement between non-dominant licensees that does not fulfil the requirements.

Licensees have a duty to co-operate in good faith and in a commercially reasonable manner in implementing the terms of their interconnection agreements, avoiding unnecessary disputes and resolving any disputes promptly and fairly. The IMDA generally recognises that interconnection agreements are private contracts between licensees, and will not involve itself in disputes arising from interconnection agreements where both parties are non-dominant licensees.

Licensees who wish to interconnect with dominant licensees may generally do so under one of three options: (1) pursuant to a reference interconnection offer ("**RIO**") approved by the IMDA; (2) on the same prices, terms and conditions that a dominant licensee has agreed to with another similarly situated licensee; or (3) pursuant to the prices, terms and conditions of an individualised interconnection agreement between the two parties.

The TMCC sets out certain procedures governing voluntary negotiations for an individualised interconnection agreement with a dominant licensee. Where licensees are unable to reach a voluntary agreement, the IMDA may resolve the dispute in accordance with its Dispute Resolution Guidelines.

In the context of the next-generation nationwide broadband network ("NGNBN"), the IMDA has also imposed similar obligations on the appointed network company ("NetCo") and operating company ("OpCo"), set out in detail in the NetCo Interconnection Code and the OpCo Interconnection Code (see the response to question 2.13), to make available certain mandated services to qualifying persons under the terms of standardised interconnection offers ("ICOs").

2.11 Which operators are required to publish their standard interconnection contracts and/or prices?

All interconnection agreements involving dominant telecommunication licensees, under which interconnection-related services and mandated wholesale services on prices, terms and conditions that are pre-approved by the IMDA are offered, will generally be published by the IMDA. A telecommunication licensee will be classified by the IMDA as dominant if:

- (a) it is licensed to 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) it has the ability to exercise significant market power in any market in Singapore in which it provides telecommunication services.

Presently, the IMDA has published the RIO of Singtel (which is the incumbent fixed-line network operator and also operates a number of telecom facilities such as submarine cable landing stations) and the Reference Access Offer of NetLink Trust (whose assets include central offices, ducts and manholes).

In the context of the NGNBN, NetLink Management Pte Ltd (as Trustee of the NetLink Trust) is the appointed NetCo, while Nucleus Connect Pte Ltd ("**Nucleus Connect**") is the appointed OpCo. The details of NetLink Trust and Nucleus Connect's standardised ICOs are published on the IMDA's website.

2.12 Looking at fixed, mobile and other services, are charges for interconnection (e.g. switched services) and/ or network access (e.g. wholesale leased lines) subject to price or cost regulation and, if so, how?

Dominant licensees are required to submit RIOs to the IMDA for approval, setting out the prices, terms and conditions on which they offer interconnection-related services and mandated wholesale services (see the responses to questions 2.10 and 2.11). The pricing of interconnection-related services and mandated wholesale services are reviewed by the IMDA in line with pricing methodologies set out in the TMCC.

In relation to the NGNBN, the NetCo and OpCo Interconnection Codes set out certain price review processes under which the IMDA regularly reviews, modifies and approves the prices of mandated services under the respective NetCo and OpCo ICOs. The pricing methodologies used by IMDA will be specified by the IMDA at the point of each price review.

2.13 Are any operators subject to: (a) accounting separation; (b) functional separation; and/or (c) legal separation?

Accounting separation

Certain licensees are subject to the IMDA's Accounting Separation Guidelines, which provide for two levels of accounting separation: detailed segment reporting; and simplified segment reporting.

Detailed segment reporting generally applies to dominant FBO licensees, and FBOs and SBOs controlled by a dominant licensee. It involves separate reporting of key service segments and certain individual retail services. The requirements include a specified cost allocation process and prescribed allocation methodologies for certain cost and revenue items. Reports include both income statements and mean capital employed statements.

Simplified segment reporting applies to certain entities as specified in the Accounting Separation Guidelines, such as FBO and SBO licensees that control a dominant FBO licensee. It requires less disaggregation of operations and a less rigorous cost allocation process. Only income statement reporting is required.

Functional and legal separation

Generally, the IMDA does not require functional or legal separation between an operator's network and service activities in Singapore. However, within the NGNBN, the IMDA has established a multi-layered industry structure consisting of: the NetCo; several OpCos including the appointed OpCo; and numerous retail service providers.

At the first layer, the appointed NetCo is responsible for building and operating the passive infrastructure, which includes the dark fibre network. OpenNet Pte Ltd ("**OpenNet**") was the initial NetCo appointed by the IMDA. The assets and operations of OpenNet have since been taken over by the NetLink Trust, following the NetLink Trust's acquisition of OpenNet, effective 1 October 2014. In July 2017, the units in the NetLink Trust were fully acquired by the NetLink NBN Trust. Under the conditions of the FBO licence held jointly by NetLink NBN Management Pte Ltd (as trustee-manager of NetLink NBN Trust) and NetLink Management Pte Ltd (as trustee of NetLink Trust), the NetCo is required to ensure structural separation, which involves, among other things, ensuring: that it has no effective control over any other telecom licensee or broadcasting licensee; it is not under the effective control of any other telecom licensee or broadcasting licensee; and it is not under the effective control of the same controlling entity as any other telecom licensee or broadcasting licensee.

At the second layer, Nucleus Connect, the appointed OpCo, is responsible for building and operating the active infrastructure, comprising switches and transmission equipment, to provide wholesale network services. While Nucleus Connect may be owned by its downstream operating units, it is nevertheless subject to a range of detailed operational separation requirements under its FBO licence conditions.

Such requirements are intended to ensure, among other things, that downstream operators are treated in a non-discriminatory manner, and that the NetCo or OpCo independently formulates and makes its own commercial decisions.

The TA also empowers the Minister to, subject to certain prerequisites, including being satisfied that it is in the public interest to do so, issue a separation order requiring the transfer of a telecom licensee's business or assets to a separate or independent entity.

2.14 Describe the regulation applicable to high-speed broadband networks. On what terms are passive infrastructure (ducts and poles), copper networks, cable TV and/or fibre networks required to be made available? Are there any incentives or 'regulatory holidays'?

At present, NGNBN entities are regulated under existing telecom and media legislation, as well as regulations, directions, licences, codes of practice and other regulatory instruments issued by the IMDA. In particular, the respective ICOs of NetLink Trust (which owns and operates the passive infrastructure of the NGNBN) and Nucleus Connect set out the prices, terms and conditions upon which they would provide certain mandated NGNBN services. The ICOs are offered pursuant to the NetCo Interconnection Code and the OpCo Interconnection Code respectively, both of which were issued by the IMDA in 2009 and subsequently updated in April 2017 and April 2020.

Recognising the importance of a pervasive and ultra-highspeed broadband network to Singapore's economic development and position as an info-communications hub, the Singapore Government had announced in 2008 that it would provide grants of S\$1 billion to fund the development of the NGNBN. Of this figure, S\$750 million was allocated to the appointed NetCo to design, build and operate the passive infrastructure layer of the network, and S\$250 million was allocated to the appointed OpCo to design, build and operate the active infrastructure.

2.15 Are retail price controls imposed on any operator in relation to fixed, mobile, or other services?

Except where exempted by the IMDA, dominant licensees must file tariffs with the IMDA for services they intend to offer, including services provided to end-users, whether on a trial basis or not, and must obtain the IMDA's prior approval before offering the services.

The proposed tariff filing must include certain specified information, including: a description of the service; the relevant prices; terms and conditions; any discounts or special considerations that will be offered; and the minimum time period for which the service will be available. The IMDA will assess whether the proposed tariff is just and reasonable, which in relation to end-user services includes an assessment as to whether the prices, terms and conditions are excessive or inadequate.

2.16 Is the provision of electronic communications services to consumers subject to any special rules (such as universal service) and if so, in what principal respects?

The IMDA has imposed universal service obligations ("**USOs**") in relation to certain basic services provided by PTLs under their licence conditions.

For example, Singtel is required under its licence conditions to provide a basic telephone service to any person in Singapore who requests such service. A similar requirement to provide a basic telephone service upon request can be found in the licence conditions of StarHub.

In relation to the NGNBN, which is intended to deliver high-speed broadband access throughout Singapore, the IMDA has imposed USOs on both the appointed NetCo and OpCo following the creation of the NGNBN. The NetCo's USO took effect from 1 January 2013 and requires it to provide its fibre services upon request by qualifying persons to all physical addresses and other locations, as may be reasonably requested, in Singapore. Correspondingly, the OpCo is required under its USO to provide services to all physical addresses and other locations, as may be reasonably requested, in Singapore, upon request by qualifying persons.

2.17 How are telephone numbers and network identifying codes allocated and by whom?

The IMDA administers the number allocation scheme in Singapore in accordance with its National Numbering Plan ("**NNP**"). Among other things, the NNP sets out rules and guidelines for the use and assignment of numbers to telecommunication services delivered over the public switched telephone network ("**PSTN**"), the radio network and the internet, or other internet-protocol-based networks, and describes the assignment of numbers to international services, trunk services, emergency services and special services such as voicemail and intelligent network ("**IN**") services.

There is only one numbering area in Singapore, and area or trunk codes are not used. The PSTN, radio network, and IP telephony share the same numbering plan -a uniform eight-digit numbering plan. Numbers are categorised in various services according to the first digit.

2.18 Are there any special rules which govern the use of telephone numbers?

Under the NNP, the allocation of numbers is such that the first digit of the number indicates the type of services offered by that number:

- (a) "0" for international services, such as the International Direct Dial service;
- (b) "1" for special services which includes calls for operator assistance, service enquiry, machine-to-machine, internet dial-up, voice information, IN services and access code international direct dial type of services;
- (c) "3" for the IP telephony services and user-centric dataonly services;

- (d) "6" for the PSTN and IP telephony services;
- (e) "8" and "9" for eight-digit radio network numbers; and
- (f) "99" for three-digit emergency services.

2.19 Are there any special rules relating to dynamic calling line identification presentation?

At present, there are no special rules specifically relating to dynamic calling line identification presentation. Nonetheless, in order to mitigate and protect the public from spoofed calls, the IMDA requires telecommunication operators to display the "+" sign prefix on phone screens for all international incoming calls. Domestic calls will not display the "+" sign prefix. This measure is intended to help consumers who are not expecting any overseas calls to be more vigilant and exercise greater care when answering calls showing a "+" prefix.

2.20 Are there any obligations requiring number portability?

Singapore has had full number portability since June 2008. Number portability across mobile networks and fixedline services is obligatory. Fixed-line and mobile telephony operators are required to allow consumers to retain full use of their existing phone numbers when switching service providers.

Syniverse Technologies is the centralised database administrator appointed to operate the centralised number portability database system. The IMDA has published a document entitled "Fixed Number Portability Guidelines" to set out the technical approach to fixed number portability by FBOs offering a fixed-line voice service.

3 Radio Spectrum

3.1 What authority regulates spectrum use?

The IMDA, as the telecoms regulator, regulates spectrum use and is the authority responsible for planning, allocating and assigning frequencies.

Detailed provisions governing the grant of spectrum rights, spectrum sharing and trading, as well as licensing of radiocommunication stations and networks are set out in the Radiocommunication Regulations.

The IMDA has also issued the Spectrum Management Handbook which describes, *inter alia*, the various spectrum management activities carried out by the IMDA, including spectrum allocations, assignment criteria and application procedures for various services, including public mobile, private land mobile, terrestrial fixed and broadcasting services.

3.2 How is the use of radio spectrum authorised in your jurisdiction? What procedures are used to allocate spectrum between candidates – i.e. spectrum auctions, comparative 'beauty parades', etc.?

The use of radio spectrum is authorised by the IMDA by way of a combination of various regulatory instruments, including the grant of spectrum rights, licences and exemptions.

The IMDA has discretion in relation to the procedure for allocation of spectrum rights. Without limitation to the methods that the IMDA may use, spectrum rights may be granted via one or a combination of the following methods: (i) auction; (ii) tender; or (iii) allocation in exchange for a pre-determined or negotiated fee.

Currently, the IMDA allocates spectrum through a combination of administrative allocation and market-based (i.e. auction) approaches. Spectrum required for the provision of 2G, 3G and 4G mobile services have been granted as spectrum rights through an auction process. In respect of the first wave of the 5G spectrum assignment, the IMDA adopted a "Call for Proposal" approach in 2020 for the selection of mobile network operators to deploy two nationwide standalone 5G networks, whereby existing mobile network operators participated and indicated their preference for the spectrum lots and submitted offer prices and detailed proposals on, inter alia, their plans for 5G deployments for the IMDA's subsequent assessment and selection. In 2021, the IMDA conducted the Auction of 2.1 GHz Spectrum Rights (2022) for the deployment of 5G networks in Singapore. The auction followed IMDA regulations for spectrum rights auctions and assignments, with winning bidders (i.e. Singtel Mobile, an M1-Starhub Mobile consortium and SIMBA) agreeing to comply with prescribed technical specifications and terms and conditions of use.

As for other services such as trunked radio and fixed links, the IMDA generally applies an administrative allocation-based approach.

Persons may also apply for the use of certain prescribed frequencies on a temporary and occasional use basis for a period ranging from a few hours to a maximum of 90 days. Such usage is on a shared-use, non-protection and non-interference basis, among other conditions.

3.3 Can the use of spectrum be made licence-exempt? If so, under what conditions? Are there penalties for the unauthorised use of spectrum? If so, what are they?

The IMDA has exempted the operation of certain short-range devices ("**SRDs**") from licensing requirements, provided they fall within certain specified parameters relating to RF bands and maximum field strength or power. The IMDA has also published guidelines on the operation of unmanned aircraft systems ("**UAS**"), under which users of UAS will be exempted from the IMDA's licensing requirements if these devices are operated within certain prescribed parameters.

Section 3 of the TA confers upon the IMDA the exclusive privilege to operate and provide telecommunications systems and services in Singapore. Pursuant to this exclusive privilege, the IMDA may (under Section 5 of the TA), at its discretion, license third parties to run telecommunication systems and services in Singapore.

Under Section 53 of the TA, any person who establishes, installs, maintains, provides or operates a telecommunication system or service within Singapore without a licence granted under Section 5 of the TA shall be guilty of an offence punishable by a fine not exceeding S\$100,000 or to imprisonment for a term not exceeding three years, or to both, and in the case of a continuing offence, to a further fine not exceeding S\$10,000 for every day or part thereof during which the offence continues after conviction.

3.4 If licence or other authorisation fees are payable for the use of radio frequency spectrum, how are these applied and calculated?

The fees payable for the long-term use of radio spectrum typically comprise:

- a one-time Application & Processing Fee payable upon approval of frequency(s) assignment; and
- (b) an annual Frequency Management Fee, which is a recurrent fee payable annually to cover the cost of the activities performed to safeguard the use of the frequency(s).

Generally, the fee payable for the temporary use of radio spectrum depends on the period of usage, the bandwidth and the frequency band used.

In addition to the foregoing, other charges such as licence fees (as prescribed in the Radio-communication Regulations) or charges for spectrum rights (e.g., spectrum lot fees in accordance with successful spectrum auction bids) may be payable.

3.5 What happens to spectrum licences if there is a change of control of the licensee?

The IMDA is empowered to grant spectrum rights subject to such conditions as it considers appropriate, including conditions requiring the IMDA's prior approval for a change of control. In addition, other regulatory requirements pertaining to changes of control, such as under Part 5A of the TA (see the response to question 2.7) may apply.

3.6 Are spectrum licences able to be assigned, traded or sub-licensed and, if so, on what conditions?

The Radio-communication Regulations provide that spectrum right grantees may assign or otherwise deal with the whole or any part of the rights and privileges granted under the spectrum right, subject to the IMDA's written approval and to such conditions as the IMDA may impose.

4 Cyber-security, Interception, Encryption and Data Retention

4.1 Describe the legal framework for cybersecurity. Are there any specific requirements in relation to telecoms operators?

The key Singapore legislation on cybersecurity issues are the CS Act and the Computer Misuse Act 1993 ("**CMA**").

The CS Act, which first came into operation on 31 August 2018, establishes a legal framework for the oversight and maintenance of national cybersecurity in Singapore, and provides, *inter alia*, for the following:

- (a) powers for the Commissioner of Cybersecurity to designate computers or computer systems in 11 key sectors as critical information infrastructure ("CII"), including in the info-communications and media sectors. Owners of CII are subject to certain duties, including to provide information, report cybersecurity incidents, comply with codes and directions, and conduct cybersecurity audits and risk assessments;
- (b) powers for the Commissioner of Cybersecurity to investigate cybersecurity threats and incidents; and
- (c) a framework for the regulation and licensing of service providers involved in providing penetration testing services, and managed security operations centre monitoring services.

The CS Act, which is currently undergoing review by the CSA, does not specifically carve out requirements which would apply only to telecoms operators. Notwithstanding, designated telecoms licensees (such as major Internet Service Providers ("**ISPs**")) are subject to the requirements set out under the Telecommunications Cybersecurity Code of Practice issued by the IMDA, which include, *inter alia*, security incident management requirements and requirements to prevent, protect, detect and respond to cybersecurity threats. Please also see the response to question 4.6.

The CMA criminalises activities such as the unauthorised access to or modification of computer material, using a computer to access any computer program or data to commit an offence, unauthorised use or interception of computer services and unauthorised disclosure of access codes.

Other laws or regulations that may be relevant include:

- (a) the PDPA, which establishes a baseline standard of protection for personal data across the private sector, including the obligation for organisations to make reasonable security arrangements to protect personal data under their possession or control; and
- (b) sector-specific requirements, such as the notices on cyber hygiene and technology risk-management guidelines issued by the Monetary Authority of Singapore in respect of the financial sector in Singapore.

4.2 Describe the legal framework (including listing relevant legislation) which governs the ability of the state (police, security services, etc.) to obtain access to private communications.

There exist certain broadly worded statutory provisions under various laws and regulations which may be relied upon by the Singapore Government authorities to obtain access to private communications, some examples of which are as follows:

- (a) under the Criminal Procedure Code 2010 ("CPC"), an authorised person or police officer of sergeant rank or above may issue a written order to a person to require production of, or give access to, any document or thing, if necessary or desirable for any investigation, inquiry, trial or other criminal proceeding;
- (b) under the Kidnapping Act 1961, the Public Prosecutor may, in certain prescribed circumstances, authorise any police officer to intercept or listen to any conversation by phone, or intercept any message transmitted or received by telecommunication;
- (c) under the Corruption, Drug Trafficking and Other Serious Crimes (Confiscation of Benefits) Act 1992, an authorised officer may apply to court for an order requiring the production of particular material for the purpose of investigating drug dealing or criminal conduct;
- (d) under the Electronic Transactions Act 2010 ("ETA"), the controller is empowered to access, inspect and check the operation of any computer system reasonably suspected of having been used in connection with any offence under the ETA;
- (e) under the Official Secrets Act 1935, the Minister may, where such a course is expedient in the public interest, require any person who owns or controls any telecommunication system used for the sending or receipt of messages to or from any place out of Singapore, to produce the originals and transcripts of messages sent or received to or from any place out of Singapore by means of any such telecommunication system;
- (f) under the FICA, the Minister for Home Affairs may authorise a competent authority to direct a person to provide information to counteract acts of foreign interference; and
- (g) under the TA, the IMDA is empowered to require any person to produce any document or information that the IMDA considers to be related to any matter relevant to an investigation under the TA, or for discharging the IMDA's regulatory functions under the TA. Telecom licensees may also be required, pursuant to the conditions of their licences, to provide documents and information when requested by the IMDA.

4.3 Summarise the rules which require market participants to maintain call interception (wire-tap) capabilities. Does this cover: (i) traditional telephone calls; (ii) VoIP calls; (iii) emails; and (iv) any other forms of communications?

Telecom licences granted to operators typically contain conditions generally requiring licensees to co-operate with relevant government agencies to support national security, public safety and security, and to participate in emergency activities or preparations thereof. Specific interception requirements are not publicly promulgated.

4.4 How does the state intercept communications for a particular individual?

Please see the responses to questions 4.2 and 4.3.

4.5 Describe the rules governing the use of encryption and the circumstances when encryption keys need to be provided to the state.

There is no overarching framework regulating the use of encryption. Government authorities may rely on certain statutory provisions to require the provision of encryption keys, for example:

- (a) under the CPC, the Public Prosecutor may, for the purposes of investigating an arrestable offence, authorise a police officer or an authorised person to access any decryption information, and require any person reasonably suspected to be in possession of any decryption information to grant him access to such decryption information; and
- (b) under the CS Act, the Minister may, for the purposes of preventing, detecting or countering serious and imminent threats to essential services and national security (among other things), authorise or direct any person or organisation to similarly access any decryption information, and require any person reasonably suspected to be in possession of any decryption information to grant him access to such decryption information.

4.6 Are there any specific cybersecurity requirements on telecoms, cloud providers or social media platforms? (If so, please list the relevant legislation.)

Apart from the requirements in the CS Act that apply to providers in the infocomm and media sectors who operate systems that have been designated as CII, designated telecoms licensees (such as major ISPs) are also required to comply with the Telecommunications Cybersecurity Code of Practice issued by the IMDA, which includes, *inter alia*, security incident management requirements and requirements to prevent, protect, detect and respond to cybersecurity threats.

Separately, the IMDA has also issued the Internet-of-Things ("**IoT**") Cyber Security Guide, which provides guidance on a broad range of areas, including the implementation of baseline recommendations for enterprise users and vendors intending to deploy IoT solutions.

While there are currently no cybersecurity requirements targeted specifically at social media platforms, the organisations responsible for such platforms are subject to data protection obligations under the PDPA. For instance, if an exfiltration of personal data arising from the hacking of social media accounts results in significant harm to the users, the organisation responsible for this platform must notify both the PDPC and affected individuals. The Cyber Security Agency of Singapore also launched the Internet Hygiene Portal in 2022, which serves as a one-stop platform for enterprises to adopt internet security best practices.

4.7 What data are telecoms or internet infrastructure operators obliged to retain and for how long?

Telecom licences granted to operators may contain conditions requiring certain records to be kept. The precise scope of records to be kept, and the retention period, will depend on the licence issued and the type of telecom services provided by an operator. Such records may include, for instance:

- (a) subscriber particulars (such as: name; NRIC/passport/ business registration number; billing/service address; contact information – e.g., phone and email; date of activation of account; service types and period; and assigned user ID and equipment ID, where applicable);
- (b) data retention records (such as: assigned source/ destination IP address and/or port; date and time stamps; bytes/packets counts; protocol and domain name) and/or call detail records; and
- (c) retailer particulars (such as: name; business address; NRIC/passport/business registration number; and contact number).

A typical retention period for such records is 12 calendar months.

The IMDA generally reserves the right to require its licensees to retain other such records as it may deem necessary.

To the extent that these records are personal data under the PDPA, the retention limitation obligation applies, and the organisation in question would be required to cease to retain the personal data as soon as it is reasonable to assume that the retention of such personal data no longer serves the purpose for which it was collected, and is no longer necessary for legal or business purposes.

5 Distribution of Audio-Visual Media

5.1 How is the distribution of audio-visual media regulated in your jurisdiction?

The IMDA is the statutory body responsible for regulating the media (including broadcasting and film) sectors.

The BA regulates, *inter alia*, the dealing in, the operation of and ownership in broadcasting services and broadcasting apparatus. The provision of licensable broadcasting services (as defined under the BA) in or from Singapore requires a licence to be granted under the BA.

The Films Act regulates, *inter alia*, the possession, importation, distribution and exhibition of films in Singapore. Under the Films Act, any person carrying on the business of importing, distributing or publicly exhibiting films is required to obtain a licence. With the exception of certain categories of videos, all films and videos distributed and exhibited in Singapore must be submitted to the IMDA for classification and certification under the Films Act.

5.2 Is content regulation (including advertising, as well as editorial) different for content broadcast via traditional distribution platforms as opposed to content delivered over the internet or other platforms? Please describe the main differences.

The IMDA's approach to content regulation generally recognises

the principle that services with a higher reach and impact should be subjected to more stringent content regulatory requirements. To this end, the IMDA has issued various medium-specific codes of practice establishing content standards for different platforms.

For example, the Content Code for Nationwide Managed Transmission Linear Television Services outlines general standards for FTA TV services and linear channels of nationwide subscription cable and Internet Protocol television ("**Subscription TV**") services. FTA TV services are subject to stricter standards. For example, programmes rated PG13 can only be broadcast on FTA TV channels between 10pm and 6am, while programmes rated higher than PG13 are not permitted for broadcast. In contrast, Subscription TV channels may broadcast programmes rated M18 between 10pm and 6am, while programmes rated R21 are not permitted for broadcast.

The Content Code for Over-the-Top, Video-on-Demand and Niche Services outlines general standards for those services. Except for services targeting children, service providers of such services may offer content rated NC16 or higher, provided that parental locks are available, and R21 content can only be offered with a reliable age verification mechanism and must be locked by default with a PIN.

The Television and Radio Advertising and Sponsorship Code outlines general standards for advertisements and sponsored programmes on FTA TV, FTA radio and subscription TV services.

The Code of Practice for Television Broadcast Standards outlines the technical performance standards to be observed by nationwide TV licensees.

The IMDA generally adopts a light-touch approach towards regulating internet content and seeks to strike a balance between ensuring minimum standards for the responsible use of the internet and offering flexibility to industry operators. The Internet Code of Practice requires ISPs and Internet Content Providers ("**ICPs**") to use their best efforts to ensure that prohibited material is not broadcast via the internet to users in Singapore. Prohibited material is generally defined as: "[M]*aterial that is objectionable on the* grounds of public interest, public morality, public order, public security, national harmony, or is otherwise prohibited by applicable Singapore laws."

To address the risks of harmful online content, the Singapore Parliament passed the Online Safety Act, which contains measures that allow the Government to improve online safety for users in Singapore, combat harmful content on online services accessible to users in Singapore, and empower users with the necessary information and tools to protect themselves from harmful or detrimental content. Under the amended BA, OCS with significant reach and impact in Singapore may be designated as Regulated Online Communication Services and the providers of such Regulated Online Communication Services are required to comply with applicable Codes of Practice and put in place measures on their services to mitigate the risks of danger to Singapore users from exposure to harmful content and provide accountability to their users on such measures. Further, the new Part 10A of the BA also empowers the IMDA to issue directions to deal with egregious content that can be accessed by Singapore users on an OCS. For instance, the IMDA may issue directions to an OCS provider to disable access by Singapore users to the egregious content on the service or to ensure that a specified account cannot continue to communicate to Singapore users. Moreover, the IMDA is also empowered to issue directions to internet access service providers to block access by Singapore users to the non-compliant OCS if an OCS provider fails to comply with the IMDA's direction.

5.3 Describe the different types of licences for the distribution of audio-visual media and their key obligations.

Under the BA, the IMDA may grant broadcasting licences and broadcasting apparatus licences.

The IMDA has established different categories of licences for broadcasting services, depending on the type of service to be offered. The licences issued by the IMDA include: free-to-air nationwide television service licences; free-to-air nationwide radio service licences; nationwide subscription TV service licences; niche television service licences; subscription international television service licences; and operators of digital display panels ("**DDPs**") Class licences.

The conditions to be observed under each licence may be determined by the IMDA in its discretion, and, with the exception of the conditions of Broadcasting Class licences and Operators of DDPs Class licences, have not been made publicly available. Without limitation, licensees may be required to make payment of applicable licence fees, as well as comply with applicable content standards, ownership restrictions and reporting obligations.

Certain broadcasting services, such as audio-text services and computer online services provided by ICPs and ISPs, are subject to the Broadcasting Class Licence Scheme. All Broadcasting Class licensees must comply with the licence conditions published in the Broadcasting (Class Licence) Notification ("**BCLN**"). Certain categories of Class licensees are also required to register themselves formally with the IMDA, within 14 days of commencing/providing the services.

Additionally, operators of a network of DDPs comprising two or more DDPs situated in a public place in Singapore or installed within a public passenger transport vehicle are automatically class-licensed under the Broadcasting (Class Licence – Broadcasting to DDPs) Notification of the BA upon commencement of service.

At present, the only category of broadcasting apparatus licence issued by the IMDA is the television receive-only ("**TVRO**") satellite system licence, which is required for the installation and operation of a TVRO satellite system.

A Film Distribution licence is required for individuals or entities distributing films and videos, unless exempted. There are two types of Film Distribution licences – (a) Class licences for the distribution of films rated G, PG and PG13; and (b) Film Distribution (Restricted) licences for the distribution of films rated NC16 and M18. The distribution of films rated R21 is not allowed.

A Film Exhibition licence is required for all entities that publicly exhibits films and videos rated NC16, M18 and R21.

5.4 Are licences assignable? If not, what rules apply? Are there restrictions on change of control of the licensee?

Under Section 7 of the BA, transfers of broadcasting licences or broadcasting apparatus licences require the prior written consent of the IMDA, and any such purported transfers are deemed void.

Changes of control of broadcasting companies and consolidations involving regulated persons may be subject to prior approval requirements. For more details, please see the response to question 1.4.

6 Internet Infrastructure

6.1 How have the courts interpreted and applied any defences (e.g. 'mere conduit' or 'common carrier') available to protect telecommunications operators and/ or internet service providers from liability for content carried over their networks?

The ETA contains a general defence for network service providers ("NSPs") from liability for third-party material. Under section 26(1) of the ETA, an NSP shall not be subject to any civil or criminal liability under any rule of law in respect of third-party material in the form of electronic records to which they merely provide access if such liability is founded on: (1) the making, publication, dissemination or distribution of such material or any statement made in such material; or (2) the infringement of any rights subsisting in or in relation to such material. Section 26(2) of the ETA also provides that an NSP shall not be subject to any liability under the PDPA in respect of third-party material in the form of electronic records to which they merely provide access (i.e., through the temporary and automatic caching of third-party material in the form of electronic records that contain personal data). However, section 26(3) states that the general defence under the ETA does not apply to:

- (a) any obligation founded on contract;
- (b) the obligation of an NSP as such under a licensing or other regulatory regime established under any written law;
- (c) any obligation imposed under any written law or by a court to remove, block or deny access to any material; or
- (d) any liability of an NSP under the Copyright Act 2021 in respect of an infringement of copyright or an infringing use of a protected performance ("**Rights Infringement**").

In relation to copyright infringement, Part 6, Division 2 of the Copyright Act 2021 contains restrictions of remedies against Rights Infringement by an NSP in the course of providing network services, such as transmission, routing and provision of connections, system caching, storage and information location, provided that NSPs satisfy certain prescribed conditions.

The scope and application of the foregoing defences do not appear to have been considered extensively by the Singapore courts. In one case, the Singapore High Court held that an online service provider that allowed users to record free-to-air broadcasts for later viewing was not an NSP for the purpose of the Copyright Act. The court in that case noted that an NSP is commonly understood to mean a "business or organisation that sells bandwidth or network access by providing direct access to the Internet. In other words, a network service provider provides the service of enabling a person to connect to a network".

6.2 Are telecommunications operators and/or internet service providers under any obligations (i.e. to provide information, inform customers, disconnect customers) to assist content owners whose rights may be infringed by means of file-sharing or other activities?

Rights owners (as defined in the Copyright Act) may lodge a take-down notice with NSPs in the form specified on: https:// www.ipos.gov.sg, referred to under the Copyright Regulations 2021, to request the removal or disablement of access to the alleged infringing material on their networks. Compliance with such take-down notices is one of the conditions that NSPs must fulfil in order to ensure that remedies available against NSPs for rights infringement can be restricted. 183

In addition, the rights owner may apply to a court for an order requiring an NSP to disable access to online locations that flagrantly infringes copyright.

6.3 Are there any 'net neutrality' requirements? Are telecommunications operators and/or internet service providers able to differentially charge and/or block different types of traffic over their networks?

The IMDA's policy framework on net neutrality is set out in a decision dated 16 June 2011, and sets out five main requirements:

- (a) ISPs and telecom network operators are prohibited from blocking legitimate internet content or imposing discriminatory practices, restrictions, charges or other measures that will render any legitimate internet content effectively inaccessible or unusable;
- (b) ISPs and telecom network operators must comply with the IMDA's competition and interconnection rules in the TMCC;
- (c) ISPs and telecom network operators must comply with the IMDA's requirements as to information transparency and disclosure to end-users of network management practices and typical internet broadband download speeds;
- (d) ISPs must meet the minimum broadband quality of service standards prescribed by the IMDA. Reasonable network management practices are permitted, provided that the minimum broadband quality of service requirements are adhered to, and that such practices will not render legitimate internet content unusable; and
- (e) ISPs and telecom network operators are allowed to offer niche or differentiated services that meet the IMDA's information transparency, minimum quality of service and fair competition requirements.

6.4 Are telecommunications operators and/or internet service providers under any obligations to block access to certain sites or content? Are consumer VPN services regulated or blocked?

ISPs and other Broadcasting Class licensees are required to comply with the conditions of the Class licence, which include the following requirements:

- (a) a licensee shall remove or prohibit the broadcast of the whole or any part of a programme included in its service if the IMDA informs the licensee that the broadcast is contrary to a code of practice (e.g., the Internet Code of Practice), is against the public interest, public order or national harmony, or offends against good taste or decency. In practice, the IMDA may issue directions to ISPs to require end-user access to be blocked to specified websites; and
- (b) ISPs offering residential or mobile internet access services are required to offer optional internet filtering services to their subscribers. In this regard, the IMDA may require ISPs to modify their content filters to prevent end-user access to internet content that the IMDA is satisfied is undesirable, harmful or obscene.

Under the Gambling Control Act 2022, the Gambling Regulatory Authority of Singapore is empowered to direct the IMDA to order ISPs to take reasonable steps to disable access to online remote gambling services.

Under the POFMA, any Minister may direct the IMDA to order ISPs to take reasonable steps to disable access to websites where end-users in Singapore can access online falsehoods (subject to certain pre-conditions). Under the FICA, the Minister may authorise the competent authority to give various directions to social media service providers, telecommunication service providers, broadcasting licensees, internet access service providers and website operators. Such directions could include, on a non-exhaustive basis, disabling access to end-users in Singapore to the relevant information to provide user information, terminating or suspending certain functionality of the social media service, stopping or delaying delivery of or access to messages or information accessible to end-users in Singapore.

Apart from the Broadcasting Class Licence framework, which generally empowers the IMDA to issue blocking directions, there are no specific regulations relating to the blocking of consumer VPN services. Providers of VPN services may be subject to general licensing requirements for the provision of telecom services.

Under the new Part 10A of the BA, the IMDA may direct internet access service providers to block access by Singapore users to the non-compliant OCS if the OCS provider fails to comply with the IMDA's direction.

6.5 Is there any regulation applicable to companies that act as 'intermediaries' or 'platforms' in their role of connecting consumers with goods, services, content, or are there any proposals for such regulation? Include any proposals or legislation regulating social media platforms in relation to online content or safety.

At present, there is no single overarching legislation that comprehensively and specifically addresses all aspects of activities undertaken by companies that act as intermediaries or platforms in the online sphere, although different activities may be regulated under an existing patchwork of regulations that apply to specific sectors or subject matter. These may include, but are not limited to, the following:

- (a) to the extent that the services provided to consumers constitute a telecoms service, they may be subject to the telecoms licensing and regulatory framework under the TA;
- (b) to the extent that the services provided to consumers constitute a broadcasting service, they may be subject to the broadcast licensing and content regulatory framework under the BA;
- (c) to the extent that the companies are regarded as internet intermediaries (e.g., social networks, search engines, content aggregators, internet-based messaging services and video-sharing services), they may be subject to directions and obligations in relation to the transmission of online falsehoods under the POFMA;
- (d) to the extent that the companies undertake electronic communications activity in relation to any information or material, they may be subject to directions and obligations under the FICA;
- (e) to the extent that companies collect, use or disclose personal data relating to individuals, they may be subject to data protection obligations under the PDPA;
- (f) to the extent that there are any competition issues involving such companies that act as intermediaries, they may either be subject to the general competition law as administered by the CCCS, or sector-specific regulatory frameworks as administered by the relevant regulatory authority (for example, the IMDA, as the regulator for the telecoms and media sectors); and
- (g) to the extent that companies are providers of OCS, they may be subject to directions and obligations under the BA.

For more details on the proposals regulating social media platforms in relation to online content or safety, please see the response to question 5.2.



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The TMT Practice Group has constantly worked on every significant development in the Singapore TMT market. In addition to conceptualising and drafting regulatory frameworks, the TMT Practice Group routinely assists regulators to enforce and implement their directions, regulations and decisions against licensees, mandating market access and addressing unfair competition issues.

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