THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

SIXTH EDITION

Editor John P Janka

LAW BUSINESS RESEARCH

THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

The Technology, Media and Telecommunications Review Reproduced with permission from Law Business Research Ltd.

This article was first published in The Technology, Media and Telecommunications Review - Edition 6 (published in November 2015 – editor John Janka)

For further information please email Nick.Barette@lbresearch.com

The Technology, Media and Telecommunications Review

Sixth Edition

Editor John P Janka

LAW BUSINESS RESEARCH LTD

PUBLISHER Gideon Roberton

SENIOR BUSINESS DEVELOPMENT MANAGER Nick Barette

SENIOR ACCOUNT MANAGERS Katherine Jablonowska, Thomas Lee, Felicity Bown, Joel Woods

ACCOUNT MANAGER Jessica Parsons

PUBLISHING MANAGER Lucy Brewer

MARKETING ASSISTANT Rebecca Mogridge

EDITORIAL ASSISTANT Sophie Arkell

HEAD OF PRODUCTION Adam Myers

PRODUCTION EDITOR Anne Borthwick

> SUBEDITOR Caroline Herbert

MANAGING DIRECTOR Richard Davey

Published in the United Kingdom by Law Business Research Ltd, London 87 Lancaster Road, London, W11 1QQ, UK © 2015 Law Business Research Ltd www.TheLawReviews.co.uk No photocopying: copyright licences do not apply. The information provided in this publication is general and may not apply in a specific situation, nor does it necessarily represent the views of authors' firms or their clients. Legal advice should always be sought before taking any legal action based on the information provided. The publishers accept no responsibility for any acts or omissions contained herein. Although the information provided is accurate as of October 2015, be advised that this is a developing area. Enquiries concerning reproduction should be sent to Law Business Research, at the address above. Enquiries concerning editorial content should be directed

to the Publisher - gideon.roberton@lbresearch.com

ISBN 978-1-909830-71-4

Printed in Great Britain by Encompass Print Solutions, Derbyshire Tel: 0844 2480 112

THE LAW REVIEWS

THE MERGERS AND ACQUISITIONS REVIEW

THE RESTRUCTURING REVIEW

THE PRIVATE COMPETITION ENFORCEMENT REVIEW

THE DISPUTE RESOLUTION REVIEW

THE EMPLOYMENT LAW REVIEW

THE PUBLIC COMPETITION ENFORCEMENT REVIEW

THE BANKING REGULATION REVIEW

THE INTERNATIONAL ARBITRATION REVIEW

THE MERGER CONTROL REVIEW

THE TECHNOLOGY, MEDIA AND TELECOMMUNICATIONS REVIEW

THE INWARD INVESTMENT AND INTERNATIONAL TAXATION REVIEW

THE CORPORATE GOVERNANCE REVIEW

THE CORPORATE IMMIGRATION REVIEW

THE INTERNATIONAL INVESTIGATIONS REVIEW

THE PROJECTS AND CONSTRUCTION REVIEW

THE INTERNATIONAL CAPITAL MARKETS REVIEW

THE REAL ESTATE LAW REVIEW

THE PRIVATE EQUITY REVIEW

THE ENERGY REGULATION AND MARKETS REVIEW

THE INTELLECTUAL PROPERTY REVIEW

THE ASSET MANAGEMENT REVIEW

THE PRIVATE WEALTH AND PRIVATE CLIENT REVIEW

THE MINING LAW REVIEW THE EXECUTIVE REMUNERATION REVIEW THE ANTI-BRIBERY AND ANTI-CORRUPTION REVIEW THE CARTELS AND LENIENCY REVIEW THE TAX DISPUTES AND LITIGATION REVIEW THE LIFE SCIENCES LAW REVIEW THE INSURANCE AND REINSURANCE LAW REVIEW THE GOVERNMENT PROCUREMENT REVIEW THE DOMINANCE AND MONOPOLIES REVIEW THE AVIATION LAW REVIEW THE FOREIGN INVESTMENT REGULATION REVIEW THE ASSET TRACING AND RECOVERY REVIEW THE INTERNATIONAL INSOLVENCY REVIEW THE OIL AND GAS LAW REVIEW THE FRANCHISE LAW REVIEW THE PRODUCT REGULATION AND LIABILITY REVIEW THE SHIPPING LAW REVIEW THE ACQUISITION AND LEVERAGED FINANCE REVIEW THE PRIVACY, DATA PROTECTION AND CYBERSECURITY LAW REVIEW THE PUBLIC-PRIVATE PARTNERSHIP LAW REVIEW THE TRANSPORT FINANCE LAW REVIEW THE SECURITIES LITIGATION REVIEW THE LENDING AND SECURED FINANCE REVIEW THE INTERNATIONAL TRADE LAW REVIEW www.TheLawReviews.co.uk

ACKNOWLEDGEMENTS

The publisher acknowledges and thanks the following law firms for their learned assistance throughout the preparation of this book:

ABOU JAOUDE & ASSOCIATES LAW FIRM

AJUMOGOBIA & OKEKE

ALI BUDIARDJO, NUGROHO, REKSODIPUTRO

BAKER & McKENZIE

CASTRO, BARROS, SOBRAL, GOMES ADVOGADOS

CLEARY GOTTLIEB STEEN & HAMILTON LLP

CMS

COELHO RIBEIRO & ASSOCIADOS

DESCHAMPS Y ASOCIADOS SC

ELVINGER, HOSS & PRUSSEN

GRATA LAW FIRM

KARATZAS & PARTNERS LAW FIRM

LATHAM & WATKINS LLP

NIEDERER KRAFT & FREY LTD

SETH DUA & ASSOCIATES

SHAY & PARTNERS

ÜNSAL GÜNDÜZ URÍA MENÉNDEZ WEBB HENDERSON YOON & YANG LLC ZHONG LUN LAW FIRM

CONTENTS

Editor's Preface	John P Janka	ii
List of Abbreviati	ons	ix
Chapter 1	COMPETITION LAW OVERVIEW Abbott B Lipsky, Jr and John D Colahan	1
Chapter 2	AUSTRALIA 1 Angus Henderson, Raymond Roca and Capucine Hague	6
Chapter 3	BRAZIL	0
Chapter 4	CANADA	1
Chapter 5	CHINA	8
Chapter 6	EU OVERVIEW7 Maurits J F M Dolmans, Francesco Maria Salerno and Federico Marini-Balestra	1
Chapter 7	FRANCE	9
Chapter 8	GERMANY	17

Chapter 9	GREECE
	I I I I I I I I I I I I I I I I I I I
Chapter 10	HONG KONG142 Simon Powell and Chi Ho Kwan
Chapter 11	INDIA
Chapter 12	INDONESIA 173 Agus Ahadi Deradjat and Kevin Omar Sidharta
Chapter 13	JAPAN
Chapter 14	KAZAKHSTAN 203 Yerzhan Yessimkhanov and Assel Kalmagambetova
Chapter 15	KOREA
Chapter 16	LEBANON
Chapter 17	LUXEMBOURG240 Linda Funck
Chapter 18	MEXICO
Chapter 19	NIGERIA
Chapter 20	POLAND

Chapter 21	PORTUGAL
-	Jaime Medeiros and Mónica Oliveira Costa
Chapter 22	RUSSIA
Chapter 23	SINGAPORE
Chapter 24	SPAIN
Chapter 25	SWITZERLAND
Chapter 26	TAIWAN
Chapter 27	TURKEY
Chapter 28	UNITED KINGDOM
Chapter 29	UNITED STATES
Chapter 30	UZBEKISTAN
Appendix 1	ABOUT THE AUTHORS 467
Appendix 2	CONTRIBUTING LAW FIRMS' CONTACT DETAILS 489

EDITOR'S PREFACE

This fully updated sixth edition of *The Technology, Media and Telecommunications Review* provides an overview of the evolving legal constructs relevant to both existing service providers and start-ups in 29 jurisdictions around the world. It is intended as a business-focused framework for beginning to examine evolving law and policy in the rapidly changing TMT sector.

The burgeoning demand for broadband service, and for radio spectrum-based communications in particular, continues to drive law and policy in the TMT sector. The disruptive effect of these new ways of communicating creates similar challenges around the world:

- *a* the need to facilitate the deployment of state-of-the-art communications infrastructure to all citizens;
- *b* the reality that access to the global capital market is essential to finance that infrastructure;
- *c* the need to use the limited radio spectrum more efficiently than before;
- *d* the delicate balance between allowing network operators to obtain a fair return on their assets and ensuring that those networks do not become bottlenecks that stifle innovation or consumer choice; and
- *e* the growing influence of the 'new media' conglomerates that result from increasing consolidation and convergence.

A global focus exists on making radio spectrum available for a host of new demands, such as the developing 'Internet of Things,' broadband service to aeroplanes and vessels, and the as yet undefined, next-generation wireless technology referred to as '5G'. This process involves 'refarming' existing bands, so that new services and technologies can access spectrum previously set aside for businesses that either never developed or no longer have the same spectrum needs. In many cases, an important first step will occur at the World Radiocommunication Conference in November 2015, in Geneva, Switzerland, where countries from around the world will participate in a process that sets the stage for these new applications. No doubt, this conference will lead to changes in long-standing radio spectrum allocations that have not kept up with advances in technology, and it should also address the flexible ways that new technologies allow many different services to coexist in the same segment of spectrum.

Many telecommunications networks once designed primarily for voice are now antiquated and not suitable for the interactive broadband applications that can extend economic benefits, educational opportunities and medical services throughout a nation. As a result, many governments are investing in or subsidising broadband networks to ensure that their citizens can participate in the global economy, and have universal access to the vital information, entertainment and educational services now delivered over broadband. Governments are also re-evaluating how to regulate broadband providers, whose networks have become essential to almost every citizen. Convergence, vertical integration and consolidation are also leading to increased focus on competition and, in some cases, to changes in the government bodies responsible for monitoring and managing competition in the TMT sector.

Changes in the TMT ecosystem, including the increased reliance by content providers on broadband for video distribution, have also led to a policy focus on 'network neutrality' – the goal of providing some type of stability for the provision of important communications services on which almost everyone relies, while also addressing the opportunities for mischief that can arise when market forces work unchecked. While the stated goals of that policy focus are laudable, the way in which resulting law and regulation are implemented can have profound effects on the balance of power in the sector, and raises important questions about who should bear the burden of expanding broadband networks to accommodate the capacity strains created by content providers.

These continuing developments around the world are described in the following chapters, as well as the developing liberalisation of foreign ownership restrictions, efforts to ensure consumer privacy and data protection, and measures to ensure national security and facilitate law enforcement. Many tensions exist among the policy goals that underlie the resulting changes in the law. Moreover, cultural and political considerations often drive different responses at the national and the regional level, even though the global TMT marketplace creates a common set of issues.

I would like to take the opportunity to thank all of the contributors for their insightful contributions to this publication and I hope you will find this global survey a useful starting point in your review and analysis of these fascinating developments in the TMT sector.

John P Janka

Latham & Watkins LLP Washington, DC October 2015

LIST OF ABBREVIATIONS

3G	Third-generation (mobile wireless technology)
4G	Fourth-generation (mobile wireless technology)
5G	Fifth-generation (mobile wireless technology)
ADSL	Asymmetric digital subscriber line
AMPS	Advanced mobile phone system
ARPU	Average revenue per user
BIAP	Broadband internet access provider
BWA	Broadband wireless access
CATV	Cable TV
CDMA	Code division multiple access
CMTS	Cellular mobile telephone system
DAB	Digital audio broadcasting
DECT	Digital enhanced cordless telecommunications
DDoS	Distributed denial-of-service
DoS	Denial-of-service
DSL	Digital subscriber line
DTH	Direct-to-home
DTTV	Digital terrestrial TV
DVB	Digital video broadcast
DVB-H	Digital video broadcast – handheld
DVB-T	Digital video broadcast – terrestrial
ECN	Electronic communications network
ECS	Electronic communications service
EDGE	Enhanced data rates for GSM evolution
FAC	Full allocated historical cost
FBO	Facilities-based operator
FCL	Fixed carrier licence
FTNS	Fixed telecommunications network services

FTTC	Fibre to the curb
FTTH	Fibre to the home
FTTN	Fibre to the node
FTTx	Fibre to the <i>x</i>
FWA	Fixed wireless access
Gb/s	Gigabits per second
GB/s	Gigabytes per second
GSM	Global system for mobile communications
HDTV	High-definition TV
HITS	Headend in the sky
HSPA	High-speed packet access
IaaS	Infrastructure as a service
IAC	Internet access provider
ICP	Internet content provider
ICT	Information and communications technology
IPTV	Internet protocol TV
IPv6	Internet protocol version 6
ISP	Internet service provider
kb/s	Kilobits per second
kB/s	Kilobytes per second
LAN	Local area network
LRIC	Long-run incremental cost
LTE	Long Term Evolution (4G technology for both GSM and
	CDMA cellular carriers)
Mb/s	Megabits per second
MB/s	Megabytes per second
MMDS	Multichannel multipoint distribution service
MMS	Multimedia messaging service
MNO	Mobile network operator
MSO	Multi-system operators
MVNO	Mobile virtual network operator
MWA	Mobile wireless access
NFC	Near field communication
NGA	Next-generation access
NIC	Network information centre
NRA	National regulatory authority
OTT	Over-the-top (providers)
PaaS	Platform as a service
PNETS	Public non-exclusive telecommunications service
PSTN	Public switched telephone network
RF	Radio frequency
SaaS	Software as a service
SBO	Services-based operator
SMS	Short message service
STD-PCOs	Subscriber trunk dialling–public call offices
UAS	Unified access services

UASL	Unified access services licence
UCL	Unified carrier licence
UHF	Ultra-high frequency
UMTS	Universal mobile telecommunications service
USO	Universal service obligation
UWB	Ultra-wideband
VDSL	Very high speed digital subscriber line
VHF	Very high frequency
VOD	Video on demand
VoB	Voice over broadband
VoIP	Voice over internet protocol
W-CDMA	Wideband code division multiple access
WiMAX	Worldwide interoperability for microwave access

Chapter 4

CANADA

Theo Ling, Ricard Pochkhanawala, Jonathan Tam and Andrew Chien¹

I OVERVIEW

This chapter covers the TMT legal and regulatory landscape in Canada, including issues that relate to access, competition, privacy and security.

II REGULATION

i The regulators

The primary regulators of TMT activities in Canada are Industry Canada – a department of the federal government – and the Canadian Radio-television and Telecommunications Commission (CRTC), which administers the telecommunications and broadcasting regimes in Canada. Other regulators and public bodies that play an important role in regulating various aspects of technology in Canada are Transport Canada, the Canadian Intellectual Property Office, the Department of Canadian Heritage, and the federal and provincial privacy commissioners and ombudspersons.

The Department of Industry Act² grants Industry Canada authority over all aspects of technology and telecommunications in Canada that have not been assigned to any other department, board or agency of the government, and which are not under the jurisdiction of provincial governments. In addition, the Telecommunications Act³ grants Industry Canada specific powers in relation to telecommunications, such as the power to establish technical standards in consultation with the CRTC and require the CRTC to

¹ Theo Ling is a partner, Ricard Pochkhanawala is a senior research lawyer, Jonathan Tam is an associate and Andrew Chien is a student-at-law at Baker & McKenzie.

² SC 1995, c 1.

³ SC 1993, c 38.

enforce them.⁴ Given this broad mandate, Industry Canada and its sub-entities introduce regulations that govern TMT activities, finance various initiatives in the TMT space, such as offering grants for science and technology research, and commission TMT-related studies and reports. Industry Canada is also responsible for the management of spectrum and the technical aspects of broadcasting in Canada.

The CRTC administers Canada's telecommunications, broadcasting and anti-spam regimes. It has broad powers to regulate the telecommunications industry in accordance with the policy set out in the Telecommunications Act, including the ability to order any person who offers or provides telecommunications services to comply with conditions it imposes, levy administrative monetary penalties, investigate and adjudicate disputes, and issue licences.

The CRTC also regulates and supervises the Canadian broadcasting system with a view to implementing the broadcasting and regulatory policy set out in the Broadcasting Act.⁵ This jurisdiction is subject to directions issued by the federal Cabinet to the CRTC, and the Radiocommunication Act,⁶ which confers on Industry Canada the authority, *inter alia*, to manage spectrum and administer a radio apparatus licensing regime.

Further, the CRTC enforces the provisions of Canada's anti-spam law (CASL)⁷ that relate to the transmission of commercial electronic messages, alteration of transmission data and installation of computer programs. The CRTC's powers to enforce these provisions include the ability to investigate complaints, levy administrative monetary penalties, enter into settlements with parties, and register regulations that establish exemptions and obligations under CASL.

ii Regulated activities

Different licences may be required to engage in various activities involving radio communications and telecommunications in Canada. These include:

- *a* radio licences or authorisations for installing, operating or possessing certain kinds of radio apparatus;
- *b* spectrum licences for utilising specified radio frequencies within a defined geographic area;
- *c* broadcasting licences for carrying on broadcasting undertakings; and
- *d* international telecommunications services licences for providing international telecommunications services.

⁴ Ibid, s 15.

⁵ SC 1991, c 11.

⁶ RSC 1985, c R-2.

⁷ An Act to Promote the Efficiency and Adaptability of the Canadian Economy by Regulating Certain Activities that Discourage Reliance on Electronic Means of Carrying out Commercial Activities, and to Amend the Canadian Radio-television and Telecommunications Commission Act, the Competition Act, the Personal Information Protection and Electronic Documents Act and the Telecommunications Act, SC 2010, c 23.

To obtain a radio licence, parties must obtain an online account on Canada's Assignment and Licensing System, create a Spectrum Direct web profile and submit an online radio licence application.

Industry Canada awards spectrum licences on a first-come, first-served basis where supply is expected to exceed demand or,⁸ where it does not, through a comparative review or auction.⁹ A spectrum auction typically occurs after a public consultation, a period for comment and replies, issuance of final policy decisions and an opportunity for the public to make submissions for clarification.¹⁰

A party must apply to Industry Canada for a broadcasting licence once it has a licence from the CRTC to operate an over-the-air broadcasting station in Canada and a spectrum licence.¹¹ A party must also apply to the CRTC for an international telecommunications services licence.

iii Ownership and market access restrictions

Ownership restrictions in Canada are generally set out in the Broadcasting Act, Radiocommunication Act, Telecommunications Act and Investment Canada Act.¹² The first three pieces of legislation are relevant to the TMT landscape, while the fourth applies broadly to all foreign investment in Canada. Specifically, the Broadcasting Act addresses issues surrounding broadcasting undertakings, while the Radiocommunication Act and the Telecommunications Act govern the Canadian communications sector.

Canadian policy on foreign control of broadcasting undertakings is set out in Section 3 of the Broadcasting Act, and generally requires that Canadians own and control broadcasting systems.¹³ To determine whether a licensee or potential licensee is Canadian, the CRTC has the power to review whether broadcasting undertakings are Canadian-owned and controlled.¹⁴

However, restrictions on foreign ownership of broadcasting systems were relaxed in 2012. Following amendments to the Telecommunications Act that took effect on 29 June 2012, an entity is considered to be Canadian-owned and controlled under Subsection 16(3) if at least 80 per cent of the members of the board of directors are individual Canadians; Canadians beneficially own, directly or indirectly, at least 80 per cent of the entity's voting interests; and the entity is not otherwise controlled by persons that are not Canadians.¹⁵

15 See footnote 2, s 16(3).

⁸ Canada, Industry Canada, Framework for Spectrum Auctions in Canada (Ottawa: Industry Canada, March 2011).

⁹ Canada, Industry Canada, Licensing Procedure for Spectrum Licences for Terrestrial Services, (Ottawa: Industry Canada, August 2013).

¹⁰ See footnote 7.

¹¹ Canada, Canadian Radio-television and Telecommunications Commission, How to Apply for a Broadcasting Licence (Ottawa: CRTC, February 2012).

¹² RSC 1985, c 28 (1st Supp).

¹³ See footnote 4, s 3.

¹⁴ Direction to the CRTC (Ineligibility of Non-Canadians), SOR/97-192, s 2-3.

An entity is also considered to be Canadian under the Telecommunications Act if it is a corporation where Canadians beneficially own and control more than 66.6 per cent of its voting shares.¹⁶ Satisfaction of these requirements allows the entity to operate as a telecommunications common carrier.

Another significant change to the Telecommunications Act in 2012 was the introduction of a new provision that deems any non-Canadian entity under the legislative authority of Parliament to be eligible to operate as a telecommunications common carrier if its annual revenues represent less than 10 per cent of Canada's total annual revenues from telecommunications services.¹⁷ Industry Canada indicated that the motivation behind this provision was to increase competition in the communication services market.

Generally, the Investment Canada Act (ICA) applies to all foreign investments in Canada, including in the communications sector. The ICA allows the government to review the acquisition of control of Canadian businesses by non-Canadians.¹⁸ If the investment is found not to be to the net benefit of Canada, the appropriate minister is empowered to block the acquisition.¹⁹ For example, the Minister of Industry blocked the sale of Manitoba Telecom Services' (MTS) Allstream (fibre optic) division to an Egyptian investment group, citing unspecified national security concerns.²⁰

iv Transfers of control and assignments

Transfers of control and assignments of licences are governed by both the CRTC and Industry Canada. Obtaining the consent of the relevant regulator is necessary to transfer licences relating to either broadcasting or telecommunications. Regardless of the industry, mergers and acquisitions also need to be approved by the Competition Bureau of Canada pursuant to the Competition Act.²¹

A change in the control of a broadcasting entity, or the transfer of its broadcasting licence, is subject to review by the CRTC.²² As part of the review process, the CRTC is required to post a notice of consultation on its website to solicit submissions when reviewing the transfer of ownership or the change in control of a broadcasting

16 Canadian Telecommunications Common Carrier Ownership and Control Regulations, SOR/94-667, s 5.

- 21 RSC 1985, c C-34, ss 91, 92.
- See footnote 4, s 9; Radio Regulations, 1986, SOR/86-982, s 11(4) (Radio Regulations); Broadcasting Distribution Regulations, SOR/97-555, s 4(4) (Broadcasting Distribution); Television Broadcasting Regulations, 1987, SOR/87-49, s 14(4); Specialty Services Regulations, 1990, SOR/90-106, s 10(4) (Specialty Services).

¹⁷ See footnote 2, s 16(2).

¹⁸ See footnote 11, s 14.

¹⁹ See footnote 11, s 16.

²⁰ Steven Chase & Rita Trichur, 'Ottawa rejects MTS Allstream takeover deal, citing unspecified security concerns', *The Globe and Mail* (7 October 2013): www.theglobeandmail.com.

undertaking.²³ In making its determination, the CRTC considers factors that may affect the benefits that Canadians receive, including anti-competitive action, investment in existing broadcasting initiatives and potential content changes.

For example, in a 2013 case, Astral Media Inc applied to transfer effective control of its broadcasting undertakings to BCE Inc.²⁴ After considering responses to the notice of consultation, and some of the above-mentioned factors, the CRTC approved the change of control six months later.²⁵

In addition to the CRTC review, the Competition Bureau of Canada reviews mergers and acquisitions to prevent anti-competitive action. Section 92 of the Competition Act sets out the situations in which the Competition Bureau will prevent a merger from occurring.²⁶ In the Merger Review Process Guidelines, the Competition Bureau provides the timelines for reviewing a potential merger, and factors it will take into account when deciding whether to approve a transaction.²⁷

An important factor not referred to in the Guidelines, as it relates to broadcasting and telecommunication services, is the CRTC's concurrent power to consider competition when allowing or disallowing licence transfers. Notably, the Competition Bureau has had to review certain acquisitions in light of CRTC approval of vertical integration in the broadcasting industry (see Section V, *infra*).

For example, on 2 May 2012, the Competition Bureau released a statement acknowledging the importance of the CRTC's power to allow vertical integration when considering BCE Inc's and Rogers Communications Inc's acquisition of Maple Leaf Sports & Entertainment.²⁸ In 2013, the Competition Bureau gave further credence to the CRTC's power when it allowed BCE Inc's acquisition of Astral Media Inc and specifically cited the CRTC's regulatory framework as an influential factor.²⁹

Conversely, telecommunications services and the transfer of spectrum licences are governed by Industry Canada. On 28 June 2013, Industry Canada released its Framework Relating to Transfers, Divisions and Subordinate Licensing of Spectrum Licences for Commercial Mobile Spectrum.³⁰ Bearing in mind the underlying policy

23 Canadian Radio-television and Telecommunications Rules of Practice and Procedure, SOR/2010-277, s 53.

24 Canada, Canadian Radio-television and Telecommunications Commission, Broadcasting Decision CRTC 2013-310 (Ottawa: CRTC, June 2013).

25 Ibid.

26 See footnote 20, s 92.

27 Canada, Competition Bureau, Merger Review Process Guidelines (Ottawa: Industry Canada, September 2015).

28 Canada, Competition Bureau, Competition Bureau Statement on Bell and Rogers' Acquisition of Maple Leaf Sports & Entertainment (Ottawa: Industry Canada, May 2012).

29 Canada, Competition Bureau, Competition Bureau Review of the Proposed Acquisition of Astral by Bell (Ottawa: Industry Canada, March 2013).

30 Canada, Industry Canada, Framework Relating to Transfers, Divisions and Subordinate Licensing of Spectrum Licences for Commercial Mobile Spectrum (Ottawa: CRTC, June 2013). objective of maximising benefits and providing quality service to Canadians, Industry Canada reviews spectrum licence transfers under this framework to control the allocation and use of spectrum. To achieve this, the framework estimates that a review of spectrum licence transfers may take up to 20 weeks.³¹

Based on the above-mentioned enabling statutes, regulations and statements surrounding the transfer of licences or control of undertakings, it should be expected that while each regulatory body has specific initiatives, there will be significant overlap respecting the control of anti-competitive action. When this overlap occurs, each regulatory body is typically careful to give weight to the other's policy decisions.

III TELECOMMUNICATIONS AND INTERNET ACCESS

i Internet and internet protocol regulation

Since the CRTC has the power to regulate all telecommunications services under the Telecommunications Act, traditional telephony communications, internet and IP-based services fall under its purview. Although these services are governed by the same legislation, the CRTC has developed policies and regulations tailored to internet services due to the significant differences between internet and traditional telephone services.

As part of its effort to develop tailored policies, the CRTC has engaged in public consultations to review the regulatory framework that applies to basic telecommunications services so that Canadians may meaningfully participate in the development of the digital economy.³² It is expected that from these public consultations, the CRTC will be able to identify issues important to stakeholders relating to basic telecommunications services in Canada, and to implement focused regulatory schemes to promote each sub-class of service (i.e., traditional telephony, internet and IP-based services) as required. For example, if the CRTC finds that broadband internet is a basic telecommunications service, then it will be in a position to implement regulations that promote its accessibility.

ii Universal service

The CRTC and Industry Canada's efforts to promote universal availability of telecommunications services have focused heavily on rural and remote areas in recent years. The CRTC's policy on telecommunications services is to maximise benefits to all Canadians. Typically, this has meant leaving development up to market forces. However, CRTC decisions have increasingly identified rural access to telecommunications as an important consideration. In a recent decision, the CRTC required the wholesale of telecommunications services from incumbent service providers to smaller, newer service

³¹ Ibid.

³² Canada, Canadian Radio-television and Telecommunications Commission, Telecom Notice of Consultation CRTC 2015-134 (Ottawa: CRTC, April 2015).

providers in an effort to promote accessibility of high-speed internet access and mobile wireless devices to rural areas.³³

With the same goal, the government has supported service providers expanding into high-cost remote areas through the use of a subsidy scheme. In the 2014 federal budget, the government committed C305 million over the next five years to extend and enhance broadband internet services for Canadians in rural and northern communities.³⁴

The consultation process may provide some insight on how private sector organisations and the government view issues associated with a possible reclassification of broadband internet as a basic service. Telecommunications businesses will need to keep informed of developments regarding this call for public input.

iii Restriction on the provision of service

The Telecommunications Act requires that rates for all telecommunications services be submitted by service providers to the CRTC for approval in the form of telecommunications tariffs.³⁵ Canadian carriers must file this tariff with the CRTC specifying the rate, the maximum or minimum rate, or both, to be charged for a specified service.³⁶

In practice, the CRTC generally does not reject the rates set out in a proposed telecommunications tariff. However, there are some notable exceptions. For example, in 2013, the CRTC's Wireless Code came into effect, capping international data roaming charges at C\$100 and data overage charges at C\$50 per month.³⁷ Otherwise, the CRTC's mechanism for adjusting prices charged to end-users is limited to the publication of policy decisions that promote competition, in an effort to drive telecommunications rates down.

A recent series of decisions, discussed in Section VI, *infra*, has opened up wholesale services to newer and smaller service providers, resulting in increased competition.³⁸ Decisions have also been released, as discussed in Section V, *infra*, limiting network providers' abilities to favour and control content accessed by their customers.³⁹

The CRTC has also been active with respect to the regulation of unsolicited phone calls, e-mails and texts. In 2008, the CRTC created the National Do-Not-Call

³³ See, e.g., Canada, Canadian Radio-television and Telecommunications Commission, Telecom Regulatory Policy CRTC 2015-326 (Ottawa: CRTC, July 2015).

³⁴ Canada, Ministry of Finance, *The Road to Balance: Creating Jobs and Opportunities*, James M Flaherty (Ottawa: Department of Finance Canada, February 2014).

³⁵ See footnote 2, s 25.

³⁶ Ibid.

³⁷ Canada, Canadian Radio-television and Telecommunications Commission, The Wireless Code, simplified (Ottawa: CRTC, November, 2014).

³⁸ See, e.g., Canadian Radio-television and Telecommunications Commission, Telecom Regulatory Policy CRTC 2015-177 (Ottawa: CRTC, May 2015).

³⁹ See, e.g., Canada, Canadian Radio-television and Telecommunications Commission, Telecom Regulatory Policy CRTC 2009-657 (Ottawa: CRTC, October 2009).

List pursuant to its powers under the Telecommunications Act to prevent unwanted telemarketing calls.⁴⁰ Following this, Canada passed new anti-spam legislation in 2014.⁴¹

iv Security

National interests, such as homeland security, law enforcement, network security and freedom of access to information and self-expression, have historically been balanced against the private interests of Canadians.

In general, law enforcement agencies are required to obtain prior judicial authorisation (i.e., a warrant) before they may order the production of, or otherwise obtain, private information. A judge considers whether the legal tests set forth in the statutory or regulatory provision that the law enforcement agency is relying upon to order the production of information have been met, and will only issue a warrant if that has been established.

An example of a statutory provision that permits law enforcement agencies to order the production of information with a warrant is Section 487.014 of the Criminal Code of Canada.⁴² Under this provision, a judge will issue a warrant to order the production of information where there are reasonable grounds to suspect that an offence has been or will be committed under the Criminal Code of Canada or any other Act of Parliament; and the document or data are in the person's possession or control and will afford evidence in respect of the commission of the offence.⁴³

Judges may prescribe additional limitations on productions orders, such as the time of day when the order can be carried out and restrictions on the scope of information that must be produced pursuant to the order. Limited exceptions to the general requirement to obtain prior judicial authorisation may be available if exigent circumstances make it impracticable to obtain a warrant.⁴⁴ The interpretation of the applicable legal tests and the exceptions thereto are subject to a substantive body of case law.

In addition, the powers of law enforcement authorities to order the production of data are subject to the Canadian Charter of Rights and Freedoms, which renders illegal any unreasonable searches and seizures.⁴⁵ The scope of this constitutional right is also subject to a substantive body of case law.

⁴⁰ Canadian Radio-television and Telecommunications Commission, National Do Not Call List: www.lnnte-dncl.gc.ca/index-eng.

⁴¹ Canadian Radio-television and Telecommunications Commission, Canada's Anti-Spam Legislation: www.fightspam.gc.ca/eic/site/030.nsf/eng/home.

⁴² RSC 1985, c C-46.

⁴³ Ibid, s 487.014(2); see also ss 487.015-487.017 establishing similar legal tests with respect to the production of tracing data, transmission data and tracking data.

⁴⁴ Ibid, s 487.11.

The Constitution Act, 1982, Schedule B to the Canada Act 1982 (UK), 1982, c 11, s 8.

In June 2015, the Anti-Terrorism Act, 2015 received royal assent.⁴⁶ The statute introduced a number of significant provisions related to security-related offences committed through the use of telecommunications. Specifically, it introduced new Criminal Code provisions prohibiting the advocacy or promotion, online or otherwise, of the commission of a terrorism offence.⁴⁷ It also empowers judges to order the deletion of terrorist propaganda where it is in electronic form.⁴⁸ Further, the Anti-Terrorism Act, 2015 includes information-sharing provisions that enhance the capacity of law enforcement organisations to share surveillance data, including the monitoring of online activity.⁴⁹

Regarding privacy laws, in 2000, the federal government enacted the Personal Information Protection and Electronic Documents Act (PIPEDA), which generally governs the use, collection and disclosure of individuals' personal information in the course of commercial activities by any organisation.⁵⁰ A number of provinces have enacted their own privacy legislation that is substantively similar to PIPEDA.⁵¹

In June 2015, the Digital Privacy Act enacted a number of amendments to PIPEDA, although several of the newly implemented provisions are not yet in force. These amendments include the imposition of reporting requirements for any organisation that experiences a breach in its security safeguards involving personal information, and a penalty of C\$100,000 for violating these notification requirements.⁵²

The Privacy Act governs the collection of personal information by government institutions.⁵³ Broadly speaking, government institutions are restricted from collecting personal information unless it relates directly to an operating program or the activity of the institution.

In addition to protecting privacy via legislation, Canada's Ministry of Public Safety published a Cyber Security Strategy that identified three pillars of cybersecurity: securing government systems; partnering to secure vital cyber systems outside the federal government; and helping Canadians to be secure online.⁵⁴

⁴⁶ Canada, Public Safety Canada, Harper government welcomes the Royal Assent of the Anti-terrorism Act, 2015 (Ottawa: PSC, June 2015).

⁴⁷ Canada, Bill C-51, An Act to enact the Security of Canada Information Sharing Act and the Secure Air Travel Act, to amend the Criminal Code, the Canadian Security Intelligence Service Act and the Immigration and Refugee Protection Act and to make related and consequential amendments to other Acts, 2nd Sess, 41st Parl, 2015.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Personal Information Protection and Electronic Documents Act, SC 2000, c 5.

⁵¹ See, e.g., Personal Information Protection Act, SBC 2003, c 63.

⁵² Canada, Bill S-4, An Act to amend the Personal Information Protection and Electronic Documents Act and to make a consequential amendment to another Act, 2nd Sess, 41st Parl, 2015.

⁵³ Privacy Act, RSC 1985, c P-21, s 4.

⁵⁴ Canada, Public Safety Canada, Canada's Cyber Security Strategy (Ottawa: PSC, 2010).

More recently, the 2015 federal budget outlined the start of new cybersecurity legislation and committed C\$36.4 million over five years to protect vital cyber systems.⁵⁵

The large number of laws, regulations, and resources that seek to protect privacy and information is evidence of its importance in Canadian society. As internet access becomes available to more and more Canadians, the joint concepts of privacy and information access remain at the forefront of Canadian policy and the country's legal agenda.

IV SPECTRUM POLICY

i Development

Spectrum policy has historically been guided by the Spectrum Policy Framework for Canada, which was first released by Industry Canada in 1992.⁵⁶ It provides a policy basis for planning and managing radio frequency spectrum based on provisions set out in the Radiocommunication Act.⁵⁷

Since 1992, the Framework has been adapted to the changing usage of radio frequency spectrum. In 2007, Industry Canada set out in the Framework a new policy objective to reflect its core objectives in a manner consistent with the Telecommunications Act⁵⁸ and the Radiocommunication Act. The policy objective purports 'to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource'.⁵⁹

This represents an important expansion of the seven core objectives enumerated in the 2002 edition of the Framework, which focused on a range of goals that included the orderly development and improvement of spectrum resources.⁶⁰

ii Flexible spectrum use

Over the past 20 years, Industry Canada has been revising and introducing new spectrum utilisation policies that address the flexibility of spectrum use.⁶¹ Most of these policies open spectrum frequencies to specific services or unlicensed devices, allowing for more flexible use of spectrum.⁶² Further to this goal, Industry Canada has taken action to

57 Footnote 5; ibid.

⁵⁵ Canada, Ministry of Finance, Strong Leadership: A Balanced-Budget, Low-Tax Plan for Jobs, Growth and Security, Joe Oliver (Ottawa: Department of Finance Canada, April 2015).

⁵⁶ Canada, Industry Canada, Spectrum Policy Framework for Canada (Ottawa: Industry Canada, June 2007) at 2.

⁵⁸ Footnote 2.

⁵⁹ Footnote 55 at 8.

⁶⁰ Canada, Industry Canada, SPFC – A Spectrum Policy Framework for Canada (Archived version 2002 edition) (Ottawa: Industry Canada, June 2002).

⁶¹ Canada, Industry Canada, Spectrum Management and Telecommunications – Spectrum Utilization Policies (SP) (Ottawa: Industry Canada, July 2011).

⁶² Ibid.

expand the channel size of certain frequency ranges and to repurpose spectrum dedicated to existing services. 63

Industry Canada regularly reviews and amends the spectrum utilisation policies to address changes in telecommunications use.⁶⁴ It is expected that Industry Canada will need to keep updating the spectrum utilisation policies to accommodate increases in the demand for spectrum among businesses.

iii Broadband and next-generation mobile spectrum use

To address growing spectrum demand for broadband services, Industry Canada has consulted the public on various occasions to determine, and to seek to address, its changing needs. This practice supports the underlying policy objective of maximising the benefits that Canadians receive from the use of spectrum.⁶⁵

For example, a policy released in 2012 entitled Policy and Technical Framework: Mobile Broadband Services (MBS) – 700 MHz, Broadband Radio Service (BRS) – 2500 MHz Band⁶⁶ addressed comments from the Canadian public that overwhelmingly identified a rapid increase in mobile broadband usage as an important need driving demand for increased spectrum requirements.⁶⁷ In response, Industry Canada adjusted the architecture of these bands such that specific portions were designated for broadband use.⁶⁸

Various other policies and decisions have been published to address the growing need for spectrum. It is expected that as the growth of broadband services continues, Industry Canada will publish new policies aimed at ensuring that there is sufficient spectrum for broadband services.

iv Spectrum auction and fees

Industry Canada auctions spectrum to the Canadian public according to the Framework for Spectrum Auctions in Canada, which considers two criteria: the demand for spectrum is expected to exceed supply; and whether use of an auction will fulfil government policy objectives.⁶⁹

 ⁶³ See, e.g., Canada, Industry Canada, Spectrum Management and Telecommunications
– Policy and Technical Framework: Mobile Broadband Services (MBS) – 700 MHz
Band, Broadband Radio Service (BRS) – 2500 MHz Band (Ottawa: Industry Canada, March 2012).

⁶⁴ Footnote 60.

⁶⁵ Footnote 55.

⁶⁶ Footnote 62.

⁶⁷ Ibid at para 18.

⁶⁸ Ibid.

⁶⁹ Footnote 7.

This practice has been employed since 1999 and is still followed today⁷⁰ (e.g., the sealed bid deadline for the 700MHz band took place at 12pm on 25 August).⁷¹ Once these auctions are complete, wireless spectrum licences are issued to successful bidders subject to certain restrictions.

For almost a decade, spectrum auctions have been an efficient method of controlling the distribution of this finite resource, and have been vital to telecommunications services in Canada. Recent amendments to the Telecommunications Act and Radiocommunication Act have empowered the CRTC to impose administrative monetary penalties for spectrum-related rule violations, demonstrating the importance of this spectrum-control process to the progress of Canadian communication services.⁷²

V MEDIA

i Restrictions on the provision of service

Service obligations and content restrictions in Canadian media are regulated by the Broadcasting Act.⁷³ Several regulations have been promulgated under the Broadcasting Act in accordance with its policy objective of having a strong Canadian presence in broadcasting.⁷⁴ Some of these regulations govern specific forms of media such as paid television, radio, specialty services and general television broadcasting. Other regulations are more general and relate to broadcast distribution, information and licence fees.⁷⁵

The Broadcasting Act requires anyone performing a broadcasting undertaking to obtain a licence.⁷⁶ Licensees are generally not permitted to distribute programming that contravenes the law, is obscene, contains abusive comment or pictorial representations that would likely expose an individual or group to hatred based on an enumerated ground, or contains false or misleading news.⁷⁷ Additionally, unless provided for under a condition of their licence, licensees must distribute a majority of Canadian programming services.⁷⁸ Some regulations address niche requirements. For example, the Specialty Services Regulations, 1990, includes provisions governing the advertisement of alcoholic beverages. A review of the subject matter, and possibly the content, of each regulation is

⁷⁰ Canada, Industry Canada, Spectrum Management and Telecommunications – Spectrum Auctions (Ottawa: Industry Canada, August 2015).

⁷¹ Canada, Industry Canada, Spectrum Management and Telecommunications – Table of Key Dates – Licensing Framework for Residual Spectrum Licenses in the 700 MHz and AWS-3 Bands (Ottawa: Industry Canada, July 2015).

⁷² Bill C-43, A second Act to implement certain provisions of the budget tabled in Parliament on 11 February 2014 and other measures, 2nd Sess, 41st Parl, 2014 (assented to 16 December 2014).

⁷³ Footnote 4, s 10.

⁷⁴ Ibid, s 3.

⁷⁵ Ibid.

⁷⁶ Ibid, s 32.

⁷⁷ See, e.g., Radio Regulations, footnote 21, s 3.

⁷⁸ Broadcasting Distribution, footnote 21, s 6.

therefore necessary to determine what provisions are applicable and to help businesses ensure compliance. $^{79}\,$

At first glance, it appears that network operators and content providers are regulated separately because different licences, with different requirements, are issued depending on the licensee's undertaking. Depending on what undertaking network operators and content providers are pursuing, they may or may not be subject to the same regulatory scheme.

However, with the CRTC's recent approval of vertical integration of networks and content services, it is becoming more common that network operators and content providers are regulated together.⁸⁰ Service obligations and content restrictions of both content providers and network operators are governed by the Broadcasting Act and its regulations. The requirements are similar across the regulations and, with the growth of vertical integration, it appears that network operators and content providers are more commonly regulated by the same regime.

On the other hand, there is legislation that clearly divides the service obligations between network operators and content providers. The Copyright Modernization Act allows owners of copyrighted material to send notice to network operators when they claim an infringement on their work.⁸¹ Following this, the network operator must forward notice to the electronic location identified by the claimant and retain records identifying the person at that electronic location.⁸² Content providers are not expressly obligated to send notices or remove materials under the Copyright Modernization Act as is the case in some other countries.⁸³

ii Internet-delivered video content

Internet video distribution is governed by a mix of the Broadcasting Act and the Telecommunications Act, both of which bestow regulatory power on the CRTC.⁸⁴ In the course of regulating internet video distribution, the CRTC has published various notices, orders, policies and decisions that affect how consumers can access content, and ISPs' power to control content.

Since 1998, the CRTC has recognised changes in video distribution from a broadcast-oriented distribution market to an internet-based one, as exemplified by its exemption order for new media broadcasting undertakings.⁸⁵ This order exempts any broadcast services delivered and accessed over the internet from Part II of the Broadcasting

⁷⁹ Specialty Services Regulations, footnote 21, s 4.

⁸⁰ Canada, Canadian Radio-television and Telecommunications Commission, Broadcasting Regulatory Policy CRTC 2011-601 (Ottawa: CRTC, 2011).

⁸¹ Copyright Modernization Act, SC 2012, c 20, s 41.25.

⁸² Ibid, s 41.26.

⁸³ See, e.g., 17 USC Section 512(c)(1)(C).

Footnote 4, s 5; footnote 2, s 8.

⁸⁵ Canada, Canadian Radio-television and Telecommunications Commission, Public Notice CRTC 1999-197 (Ottawa: CRTC, 1999).

Act in an effort to promote continued growth and development of new media industries in Canada. $^{86}\,$

More recently, internet video distribution has increased at such a pace that the CRTC has been paying renewed attention to ensuring that internet video distribution in Canada achieves the objectives of the Broadcasting Act. Two major topics of interest have arisen from their efforts: exclusivity and control.

In 2012, the CRTC precluded undertakings operating under an exemption order from providing exclusive access to television programming on the basis of a consumer's specific internet access service.⁸⁷ This policy change provided equal access to content distributed by internet videos regardless of service provider. While this does not give potential consumers an absolute right to access all video distributed on the internet, it does give all potential consumers an equal right to access the content, despite having different ISPs. In conjunction with newer policies that have increased competition and the affordability of internet services, the CRTC is aiming to improve access to all content distributed over the internet for Canadians.⁸⁸

In addition to regulating competition and access, the CRTC has released policies that deal with ISPs' ability to control content. In 2009, the CRTC considered the use of internet traffic management practices (ITMPs) as a means of controlling content.⁸⁹ The CRTC determined that ISPs should only implement ITMPs that limit discrimination and harm to people as much as reasonably possible.⁹⁰ Due to the increasing interest in this area, the CRTC is likely to consider the ramifications of ITMPs more closely, and it should be expected that ISPs will find it more difficult to control, and be compensated for, content that is transmitted over their networks.

The move from broadcast video distribution to internet video distribution has significantly affected the way that consumers access content and, in response, the CRTC has begun regulating ISPs. CRTC intervention has precluded ISPs from unfairly or unreasonably controlling content to secure compensation.

iii Mobile services

The growing demand for mobile media services has resulted in some changes to national policy, but there generally continues to be limited terrestrial broadcasting to mobile devices in Canada. Since the Spectrum Policy Framework for Canada was released in 2007, the CRTC has relied on market forces to the maximum extent feasible under the Telecommunications Act and to regulate where there is still a need to do so in a manner that interferes with market forces to the minimum extent necessary.⁹¹ While the CRTC has recognised that there is increasing demand for mobile media traffic and

⁸⁶ Ibid at para 10.

⁸⁷ Canada, Canadian Radio-television and Telecommunications Commission, Broadcasting Order CRTC 2012-409 (Ottawa: CRTC, 2012).

⁸⁸ See, e.g., footnote 32.

⁸⁹ Footnote 38.

⁹⁰ Ibid at para 43.

⁹¹ Footnote 55.

has reconsidered spectrum allocation to account of this trend, the CRTC has generally not advanced the expansion of the infrastructure required for terrestrial broadcasting to mobile devices through specific regulations and policies at this time.

VI THE YEAR IN REVIEW

The past year has been an active one for TMT in Canada. Three recent developments have changed the way that businesses approach the use of technology, and how media and telecommunications services are disseminated: the introduction of the new CASL; amendments to the Telecommunications Act; and recent CRTC policies and decisions.

i CASL⁹²

In July 2014, CASL came into force and imposed a new compliance regime on businesses that use electronic channels to promote themselves, their products or their services. CASL creates various consent, disclosure and other requirements with which businesses must comply to send commercial electronic messages to the Canadian public.⁹³

Certain sections of CASL came into force more recently on 15 January 2015. These sections introduce new rules that preclude installation of software onto any other person's electronic device without consent.⁹⁴

CASL has changed, and will continue to change, the landscape of electronic marketing and business communications in Canada. Businesses will need to review their policies to ensure compliance with the various aspects of CASL, particularly as individuals will be able to initiate civil action against companies that violate CASL after the transition period ends on 1 July 2017.⁹⁵

ii Amendments to the Telecommunications Act⁹⁶

As part of the government's 2014 budget implementation bill, certain amendments were made to the Telecommunications Act. These amendments expanded the CRTC's authority to regulate telecommunications service providers that are not Canadian carriers.⁹⁷ Previously, the CRTC imposed contractual obligations on Canadian carriers that provided infrastructure to non-Canadian carriers to indirectly regulate the foreign entities and further CRTC objectives. However, with these amendments, the CRTC can now order any person who offers or provides telecommunications services to comply with any of its conditions.⁹⁸

The amendments also allow the CRTC to impose administrative monetary penalties on any person who violates its decisions, policies or regulations, or the

93 Ibid, s 6.

⁹² Footnote 6.

⁹⁴ Footnote 6, s 8.

⁹⁵ Ibid, ss 47, 51-53.

⁹⁶ Footnote 71.

⁹⁷ Ibid, s 193.

⁹⁸ Ibid.

Telecommunications Act. For organisations, penalties for non-compliance can reach C\$10 million for first-time offenders and up to C\$15 million for subsequent contraventions.⁹⁹ Further to this change, the CRTC has published bulletins outlining how it intends to enforce against potential offenders and the method for calculating penalties.¹⁰⁰

iii CRTC policies and decisions

Some of the most important policy decisions that the CRTC has made in the past year involve the issue of competition and the wholesale of telecommunications services from established incumbents to newer, smaller providers. The CRTC addressed these issues in May and June 2015, and provided guidance on the respective regulatory frameworks for wholesale mobile wireless devices¹⁰¹ and wholesale high-speed access services.¹⁰²

In May, the CRTC sought to regulate the wireless market to ensure continued innovation and investment in high-quality telecommunications facilities while balancing sustainable competition that provides benefits to Canadian consumers.¹⁰³ It determined that wholesale MVNO access could be important in increasing consumer choice, but because MVNO access would likely discourage continued investment into infrastructure by wireless carriers, the CRTC did not mandate it.¹⁰⁴ On the other hand, the CRTC directed incumbent wireless companies (i.e., Bell Mobility, Rogers Communications and TELUS Communications) to provide wholesale roaming support to smaller carriers, as this service is vital to sustaining competition in the retail market.¹⁰⁵ As demand for telecommunications services increases, the CRTC will have to continue seeking to strike a balance between fostering competition and attracting investment in infrastructure.

In June 2015, the CRTC tackled a similar issue of wholesale high-speed access (HSA) services. In its policy decision, the CRTC explained the difference between aggregated wholesale HSA and disaggregated wholesale HSA services: namely, disaggregated wholesale HSA services require competitors to invest in infrastructure from central offices to end-customers, while aggregated wholesale HSA services do not.¹⁰⁶ The CRTC determined that competition between incumbent wireline service providers will continue to drive competition and, if it mandated wholesale rates that provide a reasonable rate of return, the CRTC is confident that incumbent providers will profit from further investment in wireline infrastructure.¹⁰⁷ The CRTC therefore

- 105 Ibid at paras 127, 129.
- 106 Footnote 32 at paras 55–57.
- 107 Ibid at paras 140–143.

⁹⁹ Ibid, s 201.

¹⁰⁰ Canada, Canadian Radio-television and Telecommunications Commission, Compliance and Enforcement and Telecom Information Bulletin CRTC 2015-111 (Ottawa: CRTC, March 2015).

¹⁰¹ Footnote 37.

¹⁰² Footnote 32.

¹⁰³ Footnote 37 at para 16.

¹⁰⁴ Ibid at paras 119–125.

requires incumbent wireline companies to provide disaggregated wholesale HSA services to competitors.

There remains a need for such policies to ensure that there are appropriate levels of competition and investment so Canadians have affordable and reliable access to telecommunications services. In a dynamic yet unpredictable communications and economic environment, Canadian regulators and industry participants will remain engaged and work with one another to address emerging issues that arise as technologies continue to evolve.

VII CONCLUSIONS AND OUTLOOK

In recent years, the landscape in Canada has shifted to account for new telecommunications technologies; as these technologies become more popular, the demand for resources such as spectrum will increase and the applicable regulations will evolve. Although the CRTC has committed to relying on market forces as the driving force behind the development of telecommunications in Canada, recent policy decisions indicate that some intervention may be required to fulfil the underlying goal of maximising benefits to Canadians.

Many of the CRTC's recent policies have encouraged increased competition in the telecommunications sector and, going forward, it should be expected that this will lead to the introduction of new competitors in the Canadian market. For example, the previously discussed CRTC policy decisions published in 2015 will likely result in more broadband high-speed access and wireless service resellers.¹⁰⁸ If the CRTC continues this trend of promoting competition and developing telecommunications infrastructure, the future of Canadian telecommunications will change quickly over the coming years. Both consumers and businesses should keep apprised of any new CRTC positions as it adapts to this quickly changing telecommunications landscape.

¹⁰⁸ Footnotes 32, 37.

Appendix 1

ABOUT THE AUTHORS

THEO LING

Baker & McKenzie

Theo Ling leads Baker & McKenzie's Canadian information technology and communications (IT/C) practice, and is recognised by clients for providing creative, pragmatic solutions on a global scale. Mr Ling's international commercial and regulatory practice is focused on technology-based issues and the interwoven computer, internet and communications industries.

Mr Ling is a member of the B&M's global IT/C practice group steering committee and chairs the global privacy and information management leadership team. Baker & McKenzie's global IT/C practice is top ranked by *Chambers Global* in the areas of technology and communications, data protection and outsourcing.

In addition to sharing his expertise as lead editor of the *Global Privacy Handbook*, Baker & McKenzie's highly regarded resource for international data privacy law and trends, Mr Ling manages BakerGPS (Global Privacy Strategy), a virtual information think-tank. He serves on the advisory council for Nymity, a leading privacy-research firm, and on the panel of experts for DataGuidance, a publisher of global data protection and privacy compliance information. Recently, Mr Ling served as co-chair of the International Association of Privacy Professionals' KnowledgeNet, the largest association of information privacy professionals in the world.

RICARD POCHKHANAWALA

Baker & McKenzie

Ricard Pochkhanawala is a senior research lawyer at Baker & McKenzie's Toronto office. He is a legal research specialist and has provided legal opinions on emerging issues in, *inter alia*, privacy law, data storage and cross-border data transfers.

JONATHAN TAM

Baker & McKenzie

Jonathan Tam is an associate at Baker & McKenzie's Toronto office. He advises in the areas of electronic commerce, privacy and data protection, IT and internet law, for clients carrying on business in Canada and on an international basis.

Mr Tam focuses on helping clients develop comprehensive compliance regimes that effectively manage the regulatory risks associated with local and global operations. His work includes advising on data flows and data handling, supporting the drafting and negotiation of contracts, coordinating multijurisdictional surveys and audits, researching the application of Canadian regulations to local activities and developing practical commercial interpretations of regulatory requirements.

ANDREW CHIEN

Baker & McKenzie

Andrew Chien is a student-at-law at Baker & McKenzie's Toronto office in the international commercial practice group.

BAKER & MCKENZIE

Barristers & Solicitors Brookfield Place Bay/Wellington Tower 181 Bay Street, Suite 2100 Toronto, Ontario M5J 2T3 Canada Tel: +1 416 863 1221 Fax: +1 416 863 6275 theodore.ling@bakermckenzie.com ricard.pochkhanawala@bakermckenzie.com jonathan.tam@bakermckenzie.com andrew.chien@bakermckenzie.com