



**WE'RE DIFFERENT.
IN A GOOD WAY.**

TekSavvy Further Comments

concerning

Telecom Notice of Consultation CRTC 2019-57,
Review of mobile wireless services,
28 February 2019.

November 22, 2019

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A. Introduction

1. The Commission noted in TNC 2019-57¹ that there is widespread discontent with the state of the mobile market in Canada, due to a severe lack of mobile competition and correspondingly high consumer prices for mobile services, lack of choice in services and service providers, and a low level of innovation.²
2. As TekSavvy noted in our intervention,³ mobile competition in Canada is long overdue, and TekSavvy supports the Commission's preliminary view that it would be appropriate to mandate wholesale Mobile Virtual Network Operator (MVNO) access.⁴ The existing framework has resulted in extreme concentration of market power amongst the three largest Mobile Network Operators (MNOs)—*i.e.* Bell, TELUS, and Rogers⁵. Regional competition by a small number of historical wireline incumbents has entered into limited markets but has not and will not result in the kind of broader competition that is required to promote lower prices and innovative services to Canadians.
3. In summary, in these further comments TekSavvy argues:
 - Wholesale-based competition is the best way to bring down prices, improve affordability and services, and expand available choice in the mobile market.
 - TekSavvy has a proven track record creating competition for wireline broadband services, and we will bring that spirit to mobile services.
 - The mobile wireless market in Canada is not competitive, is highly concentrated, and is characterized by dominant players that abuse consumers and harm competitors with flanker brands.
 - Mandated MVNOs will not undermine investments in facilities. The dominant MNOs have such dramatically supernormal margins for wireless services that mandated MVNOs will not have a significant impact on incumbents' profitability, and the increased opportunities for competitors are expected to more than compensate for any reduced investment by incumbents, to the extent that they choose to invest less in facilities.

¹ *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57 and 2019-57-1, CRTC Reference 1011-NOC2019-0057, 28 February 2019, <https://crtc.gc.ca/eng/archive/2019/2019-57.htm><<https://crtc.gc.ca/eng/archive/2019/2019-57.htm> ["TNC 2019-57"].

² *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 28 February 2019, at para. 26, <https://crtc.gc.ca/eng/archive/2015/2015-326.htm> ["TNC 2019-57"].

³ TekSavvy's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647613>.

⁴ *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 28 February 2019, at para. 39, <https://crtc.gc.ca/eng/archive/2015/2015-326.htm> ["TNC 2019-57"].

⁵ Bell Canada ["Bell"], TELUS Communications Inc. ["TELUS"], and Rogers Communications Inc. ["Rogers"].

- A Full MVNO model is required in order to deliver on the 2019 Policy Direction's objectives of all forms of competition, lower prices, affordability, access in all regions of Canada, enhanced accessibility, and innovation.
 - There are fundamental imbalances in markets for telecommunications services, stemming from the vertical integration of entrenched incumbents with dominant market power, that are likely to be replicated in any wholesale-based competitive market for mobile services unless steps are taken to correct incentives by ensuring an equal playing field for all retail players.
4. In these comments, TekSavvy first surveys the existing market for mobile services in Canada to demonstrate that the evidence indicates a clear lack of competition and concentration of market power. We then establish that not only will MVNOs increase competition in the mobile market, but they will also benefit Canadians and address issues of affordability, availability, access, and innovation. Next, we provide evidence that the introduction of mandated MVNOs will not interfere with the ability of MNOs to invest; on the contrary, the presence of MVNOs in a market encourages investment. Next, we survey a number of ways in which a mandated MVNO regime has been proposed to be constrained or limited, at least some of which are inconsistent with the ultimate goal of broad competition in the mobile sector. Finally, noting the negative impacts of structural imbalances between incumbents and competitors in the wireline sector, we argue that without deliberate action to separate the retail and wholesale incentives of mobile carriers with dominant market power, the well-known problems persisting on wholesale wireline will only be reproduced in a wholesale wireless environment.
5. TekSavvy has also had the opportunity to review the further comments of the Canadian Network Operators Consortium (CNOC) and fully agrees with their submissions.

B. TekSavvy is ready to bring our track record of investment and delivering lower prices for consumers into the mobile market

6. Mandated wholesale services are regulated by the CRTC in order to provide Canadians with more choice for high-speed connectivity, driving competition that results in innovative service offerings and reasonable prices for consumers.
7. For over 20 years, TekSavvy has primarily offered retail services that rely on regulated wholesale inputs to provide wireline Internet and voice services, building up a base of customers in every province, and innovating in customer service and support. With the launch of an IPTV service in 2019,⁶ TekSavvy is able to offer a “triple play”, with voice and TV services on a broadband connection.
8. In October 2016, when the Commission reduced wholesale service rates in TO 2016-396⁷ after strongly condemning the incumbents' wholesale rate-fixing behaviour as “very

⁶ TekSavvy TV is provided by TekSavvy affiliate Hastings Cable Vision Ltd.

⁷ *Tariff notice applications concerning aggregated wholesale high-speed access services – Revised interim rates*, Telecom Order CRTC 2016-396, 6 October 2016, <https://crtc.gc.ca/eng/archive/2016/2016-396.htm> [“TO 2016-396”].

disturbing”⁸, TekSavvy quickly passed on savings from those lower wholesale rate to customers by reducing prices and increasing service speeds and bandwidth caps. In August 2019, when the Commission set final aggregated wholesale rates in TO 2019-288⁹, TekSavvy again quickly gave effect to the Commission’s goal of promoting innovative broadband services and affordable prices for consumers by lowering bills and upgrading packages for hundreds of thousands of customers.¹⁰

9. TekSavvy is currently undertaking an aggressive roll out schedule for completion of its fixed wireless network in southwestern Ontario, including core and RAN, based on standards-based LTE technology. This technology is fully compatible with the transition to 5G.
10. With the completion of its fixed wireless network rollout in April 2020, TekSavvy will be in a category of its own as a relatively large, partially facilities-based service provider with an extensive and loyal subscriber base. TekSavvy has made significant investments in its own national IP network, establishing points of presence in every province, including colocation, routers, servers, caching, and peering, and transit networks between those points of presence. TekSavvy has significantly invested millions of dollars in incumbents’ facilities as a large wholesale customer on eight incumbent carrier platforms. TekSavvy also invests significantly in traditional telecommunications facilities. In addition to its fixed wireless and LTE investments described above, TekSavvy is investing \$26 million to build fibre-to-the-home to connect 38,000 homes and businesses in Chatham-Kent. TekSavvy is a growing telecommunications company, employing approximately 800 employees, the largest private sector employer in Chatham, and continues to make substantial investments to develop our own internal systems and tools to serve customers.
11. However, it is important to understand the critical strategic connection between a competitor’s ability to compete on mobile and its overall ability to succeed as a competitive alternative for telecommunications and broadcasting services.
12. However, as people rely more on mobile services, as incumbent carriers increasingly bundle mobile services with other services, and as we approach the promise of unified networking enabled by 5G technology, it will be more important than ever for independent competitors like TekSavvy to be able to also offer mobile services. The importance of mobile competition for wireline service providers is underscored by the Australian experience where “allow[ing] fixed-line operators to have a presence in retail mobile

⁸ CRTC News Release, “CRTC finds proposed wholesale high-speed access rates unreasonable”, 6 October 2016, <https://www.canada.ca/en/radio-television-telecommunications/news/2016/10/crtc-finds-proposed-wholesale-high-speed-access-rates-unreasonable.html>.

⁹ *Follow-up to Telecom Orders 2016-396 and 2016-448 – Final rates for aggregated wholesale high-speed access services*, Telecom Order CRTC 2019-288 and 2019-288-1, <https://crtc.gc.ca/eng/archive/2019/2019-288.htm>, [together “TO 2019-288”].

¹⁰ TekSavvy News Release, “TekSavvy to Customers: ‘We lowered your Internet bill. Thank the CRTC.’”, 13 September 2019, <https://www.teksavvy.com/in-the-news/2019-press-releases/teksavvy-to-customers-we-lowered-your-internet-bill-thank-the-crtc/>.

markets without incurring the very significant expenses associated with setting up a mobile network” was “the primary rationale” for some MVNOs.¹¹

13. Specifically, we anticipate that without the ability to offer wireless services to our current wireline customers, the overall margins of wireline wholesale-based providers are likely to erode to unsustainable levels.
14. In short, even triple-play ISPs like TekSavvy will have difficulty competing with incumbent MNOs in the absence of mobility. The addition of mobility to TekSavvy’s existing service offering under a CRTC mandated Full MVNO wholesale access regime is essential for its long-term competitiveness as a service provider. It is critical that this mandated regime would allow competitors like TekSavvy to access incumbent MNOs’ networks across the country. TekSavvy would then have the potential to favourably impact both the fixed and mobile wireless markets in terms of innovative service offerings, competitive pricing, and quality of customer service not only in its core service areas but also across Canada.

C. A clear lack of competition and a concentration of market power in Canada harms Canadians

15. The consequences of the continued *laissez-faire* approach to regulating the Canadian mobile industry are not theoretical. The results of the current regulatory regime are real and can be found in quarterly equity analyst calls, Commission-authored reports of harmful sales practices, increased number of wireless issues in complaints to the CCTS year-over-year,¹² and the emergence of competition kabuki. Immense profits are being made while seniors are tricked by desperate sales people¹³ and as customers navigate service options that are designed to look like independent alternatives when, in reality, they’re all owned by the same three or four companies.
16. Notwithstanding recent shifts in industry trends, real lasting change in the mobile industry in Canada will require fundamental changes to the competitive framework. Moves like growing data allotments and the tapering of overage fees are not sustainable or meaningful competition, but deliberate moves to appease the regulator.
 - a. **Lack of competition, high prices, and obscene profits characterize the Canadian mobile market**
17. There is a broad consensus in the Canadian telecommunications industry, including independent service providers, industry associations, consumer groups, and the Competition Bureau¹⁴, that the current Canadian mobile market is not competitive, and

¹¹ TekSavvy Attachment 1, Ish Omar for Webb Henderson, “The Role of MVNOs in Australia’s Mobile Market”, 22 November 2019, at p. 16.

¹² CCTS, Annual Report 2015-16, at p. 11 (7,931 issues about wireless services); CCTS, Annual Report 2016-17, at p. 10 (8,543 issues about wireless services); and CCTS, Annual Report 2017-18, at p. 9 (12,757 issues about wireless services).

¹³ CRTC, “Report on Misleading or Aggressive Communications Retail Sales Practises”, 20 February 2019, at p. 11 https://crtc.gc.ca/pubs/2018_246-en.pdf.

¹⁴ Interventions from many small service providers, associations and Competition Bureau pointed out that the Canadian telecom industry is not competitive enough. *i.e.* Canadian Network

this has resulted in higher prices for consumers, lack of choice in service providers and service packages and lack of innovation in services.

18. The lack of market diversity and competition in the Canadian marketplace has resulted in higher prices, less innovation, and few choices for consumers. According to the annual *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions* (2018 Wall report for ISED and previous Nordicity reports for the ISED and the CRTC),¹⁵ Canada's average mobile Internet service prices are typically higher than leading benchmark countries USA, UK, France, Germany, Italy, Australia, and Japan.
19. In their submissions in this proceeding, citing the growth of their own flanker brands which are discussed further below, MNOs have argued that current market is sufficiently competitive, and consumers are switching away from MNO main brand wireless services indicating they appreciate more choice. Rogers claimed that there are now four strong and stable mobile wireless competitors in every province, providing Canadians with greater choice, better services, more value, and affordable prices¹⁶. Bell claimed that the market is competitive citing competition among carriers to offer the most affordable plans with large data buckets¹⁷ and the launch of yet another Bell flanker brand, Lucky Mobile. However, as indicated in the Communications Monitoring Report 2018 ("CMR 2018"), the mobile market continues to be dominated by the three national carriers.¹⁸ According to the CMR 2018 Report, those three national MNOs dominate the mobile marketplace with 90% of wireless subscriptions¹⁹. When regional operators are added to national operators' market shares, this figure increases to a stunning 97% market share. After 6 years' efforts by the Commission to develop competition (e.g. Telecom Regulatory Policy 2015-177),

Operators Consortium's (CNO) submission to TNC 2019-57: Market share of the national carriers remain unchanged and competition has not improved over the last five years in Canada telecommunication market. Competition Bureau submission to TNC 2019-57: The Bureau's most recent review of Canada's wireless services markets found that regional price differences are substantial and attributable to differences in competition. The British Columbia Broadband Association's (BCBA) submission to TNC 2019-57: The BCBA agrees with the Commission's assessment that mobile competition in Canada is not strong, and does not serve all Canadians. Additional supporting TNC 2019-57 submissions include those by the Coalition for Cheaper Wireless Services (CCWS), the Canadian Internet Policy & Public Interest Clinic (CIPPIC) and Open Media and Internet Society Canada Chapter (ISCC).

- 15 Innovation, Science and Economic Development Canada (ISED), "Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions – 2018 Edition", 29 August 2018, at p. 1, [https://www.ic.gc.ca/eic/site/693.nsf/vwapj/telecom2018e.pdf/\\$file/telecom2018e.pdf](https://www.ic.gc.ca/eic/site/693.nsf/vwapj/telecom2018e.pdf/$file/telecom2018e.pdf).
- 16 Rogers intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. ES-4, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647613>.
- 17 Bell Mobility intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 35, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647596>.
- 18 CRTC, "Communications Monitoring Report 2018", at p. 109, <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2018/>.
- 19 CRTC, "Communications Monitoring Report 2018", at p. 160, <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2018/>.

the national carriers lost only 2% of their subscriber market share by the end of 2017²⁰ and as a result, consumers prices have remained high while choice in services and service providers have remained low.

20. As measured by the HHI²¹ or any other commonly accepted definitions of market concentration, the Canadian mobile marketplace is clearly highly concentrated and, correspondingly, consumers pay higher rates and have less choice in services and service providers. According to Mergers Guidelines (2010) issued by the U.S. Department of Justice and the Federal Trade Commission, the markets are generally classified into the following three types:
- Unconcentrated Markets: HHI below 1,500;
 - Moderately Concentrated Markets: HHI between 1,500 and 2,500;
 - Highly Concentrated Markets: HHI above 2,500.
21. The HHI index for the Canadian telecommunications industry is highly concentrated for all provinces and territories based on 2016 data - as shown in the table below from Cogeco's submission. Even where there is generally seen to be more competition due to a relatively strong regional provider, such as in Quebec, Saskatchewan and, until recently, Manitoba, mobile markets are still highly concentrated.

²⁰ CRTC, "Communications Monitoring Report 2018", at p. 160, <https://crtc.gc.ca/eng/publications/reports/policymonitoring/2018/>.

²¹ Herfindahl-Hirschman Index (HHI) is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in a market and then summing the resulting numbers – Investopedia <https://www.investopedia.com>. A lower number (numbers typically below 1,000) indicates increased competition; and a higher number indicates a more concentrated market, thus less competition. The nationwide HHI in Canada for cellular competition was 2,771 in 2014 which indicates a tight oligopoly (DBECKS, "Canada's Oligopoly: How Canadians are Getting Ripped Off by Big Telecom", 20 June 2015, <https://frugalnexus.wordpress.com/2015/06/20/canadas-oligopoly-how-canadians-are-getting-ripped-off-by-big-telecom/>). PIAC, "Wireless Service in Canada: Why Canadians Deserve Better", 3 September 2014, https://www.piac.ca/wp-content/uploads/2014/11/aws_3_backgrounder_1_canadians_deserve_better_final-1.pdf).

Table 1: Wireless service subscriber market share by province and territory

PROVINCE/TERRITORY	WIRELESS SUBSCRIBER MARKET SHARE*					HHI**
	Bell Group (%)	TELUS (%)	Rogers (%)	Other (%)	Total (%)	
BRITISH COLUMBIA	20	41	38	1	100	3,526
ALBERTA	25	52	23	-	100	3,858
SASKATCHEWAN	17	13	5	65	100	4,708
MANITOBA	9	7	38	46	100	3,690
ONTARIO	30	21	47	2	100	3,554
QUEBEC	30	27	28	15	100	2,638
NEW BRUNSWICK	55	26	19	-	100	4,062
NOVA SCOTIA	53	34	13	-	100	4,134
PRINCE EDWARD ISLAND	56	31	13	-	100	4,266
NEWFOUNDLAND AND LABRADOR	69	28	2	1	100	5,550
THE NORTH	86	10	-	4	100	7,512
AVERAGE	41	26	21	12	100	2,939

* SOURCE: 2017 CMR CRTC: TABLE 5.5.8 WIRELESS SERVICE SUBSCRIBER MARKET SHARE BY PROVINCE AND TERRITORY (2016)

** TEKSAVVY CALCULATION

22. Where there is more competition in the mobile market, consumers benefit. In its May 2019 comments in this proceeding, the Competition Bureau highlighted findings from its 2017 statement regarding Bell's acquisition of MTS, noting that based on their analysis of data from 2014 to 2016,

that analysis showed that mobile wireless pricing in Saskatchewan, Thunder Bay, Quebec and Manitoba—all areas that had a strong regional competitor—was substantially lower than in the rest of Canada, where coordinated behaviour softened competition among Bell, Rogers and Telus.²²

...

Based on the Bureau's previous analysis of Bell/MTS and the analysis above it is likely that a large number of Canadians do not benefit from vigorous competition among wireless service carriers. As described, the principal evidence that supports that conclusion is the existence of substantial price differences across regions in Canada, which demonstrate the extent to which prices are increased when the national wireless carriers can effectively coordinate their pricing decisions.²³

²² The Competition Bureau's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 12, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647305>.

²³ Competition Bureau Canada's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 55, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647305>.

23. To illustrate, the Competition Bureau's submission cited the example of Bell's 10GB plan in Ontario and Saskatchewan priced at \$110 and \$60 per month respectively.²⁴
24. The Competition Bureau found in 2017 that Bell Canada's acquisition of MTS would likely lead to substantial lessening of competition due to unilateral and coordinated effects for mobile plans in Manitoba.²⁵ While the Bureau was satisfied at that time that Bell's consent agreement to divest MTS subscribers, assets, and dealer locations to TELUS and Xplornet, by July 2018, Bell MTS was already reducing services by cancelling unlimited data plans for new customers.²⁶
25. The profitability of Canada's national operators is significantly higher than that in other markets. For example, as reported in Rogers' most recently quarterly results, Q3 2019, its wireless adjusted EBITDA (Earnings before interest, tax, depreciation and amortization) was \$ 1,138,000,000, resulting in a margin of 49.0%.²⁷ Similarly, BCE's Q3 2019 wireless adjusted EBITDA was \$1,013,000,000, resulting in a margin of 43.1%,²⁸ and TELUS's Q3 2019 wireless adjusted EBITDA was \$970,000,000, resulting in a margin of 46.2%.²⁹
26. Nordicity's report for Cogeco quotes research by Hounqbonon et al. (2016):³⁰

investment in the wireless industry increases with competition as long as operators' profits (EBITDA) are between 37% and 40% of their revenues. It is apparent from the above, that the profit (EBITDA) margins of US and major Australian operators remained close to this threshold in 2016 and 2017. In contrast, Canadian National wireless carriers have consistently earned profits above 40%, i.e. well above the optimal threshold of 37%-40% according to the investment model introduced by Hounqbonon et al. (2016).³¹

²⁴ Competition Bureau Canada's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 19, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647305>.

²⁵ Competition Bureau Canada, "Competition Bureau statement regarding Bell's acquisition of MTS", 15 February 2017, <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04200.html>.

²⁶ CBC News, "Bell MTS cancels unlimited data plans for new customers", 11 July 2018, <https://www.cbc.ca/news/canada/manitoba/bell-mts-cancelling-unlimited-wireless-data-plans-1.4742013>.

²⁷ Rogers, "Rogers Communications Reports Third Quarter 2019 Results", 23 October 2019, <https://about.rogers.com/2019/10/23/rogers-communications-reports-third-quarter-2019-results/>.

²⁸ Bell, "Supplementary Financial Information Third Quarter 2019", 30 October 2019, <http://www.bce.ca/investors/financial-reporting/2019-Q3/2019-q3-supplementary-information.pdf>.

²⁹ TELUS, "Third Quarter, 2019 Supplemental Investor Information", 5 November 2019, https://assets.ctfassets.net/rz9m1rynx8pv/2UdbY08S3iFZ5TKnWIBxQ4/79ae7bcacfa756750d0f19835efd5939/TELUS_Q3_2019_investor_supplemental.pdf.

³⁰ Georges Vivien Hounqbonon, François Jeanjean, "What level of competition intensity maximises investment in the wireless industry", August 2016, pp. 774-790.

³¹ NGL Nordicity Group Limited, "Economic Impact Assessment (EIA) of Mandated Radio Access Network (RAN) to Hybrid Mobile Network Operators (HMNOs) - Facilities-Based Carriers", 12 September 2019, at p. 16.

b. Established incumbents use their dominant market power to harm consumers and to keep new competitors out of the market

27. Incumbent operators with dominant market power have acted in ways that harm consumers. For example, the Competition Bureau has already determined that the national MNOs coordinated price behaviour in the wireless market, resulting in higher prices for Canadians.³² More recently, the CRTC found that large telecommunications carriers engage in misleading and aggressive sales practices and abuse information asymmetries to their benefit and at the cost and harm to Canadian consumers. The CRTC stated in its report that “[misleading or aggressive sales practices] occur to an unacceptable degree; they are harming Canadian consumers, in particular vulnerable Canadians; and they are a serious concern for the CRTC.”³³
28. Incumbent operators with dominant market power have been able to systematically stymie the emergence of new competition that would provide consumers with choice and more affordable mobile services. While incumbents have argued that commercially negotiated MVNO agreements are sufficient to introduce competition in the Canadian marketplace, the fact is that there are no full MVNOs operating on any of the incumbents' networks in Canada because the incumbent operators have exercised their dominant market power to deny offering access to smaller service providers wishing to become full MVNOs.
29. The experience of Tucows, a publicly traded Internet services and telecoms firm based in Toronto, is instructive in demonstrating incumbents' anti-competitive behavior towards MVNOs. Tucows has tried to negotiate MVNO access with the MNOs for several years, without success to date.³⁴ TekSavvy agrees with Tucows that, with supernormal profits in an oligopoly, the MNOs will continue to prevent the MVNOs to access to their network in the future in the absence of mandated access to those carriers holding market power.
30. That reflects TekSavvy's experience with the incumbents for wireline broadband services. While the regulatory framework and rates have not yet been finalized for mandated wholesale access to fibre-to-the-home (FTTH) services,³⁵ in theory it ought to have been possible for competitors to negotiate with the incumbents for access to those networks and services. Those negotiated agreements have not in fact emerged; to the contrary, the incumbents have denied competitors negotiated access and have opposed and drawn out the regulatory process for years. Meanwhile, the same incumbents continue to draw out the process to finalize wholesale rates for the older fibre-to-the-node (FTTN) services as well. As CNOC points out, given the incumbents' various current appeals of the CRTC's

³² Competition Bureau Canada, “Competition Bureau statement regarding Bell's acquisition of MTS”, 15 February 2017, <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04200.html>.

³³ CRTC, “Report on Misleading or Aggressive Communications Retail Sales Practises”, 20 February 2019, at p. 2, https://crtc.gc.ca/pubs/2018_246-en.pdf.

³⁴ Tucows' intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 14 May 2019, at para. ES-4, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647394>.

³⁵ *Process flowing from the Review of wholesale wireline services and associated policies*, Telecom Regulatory Policy CRTC 2015-326, 22 July 2015, <https://crtc.gc.ca/eng/archive/2015/2015-326.htm> [“TRP 2015-326”].

final rates decision in that proceeding, it will have taken competitors at least sixteen years to obtain meaningful, stable access to the FTTN infrastructure.

31. In short, our experience on the wireline side has consistently shown that, comfortable with supernormal profits and market domination, the incumbents will resist all efforts to allow competitors to access their networks in any way that would allow meaningful, stable competition.
32. Moreover, incumbents like Bell have stated to their shareholders several times that wholesale is merely a regulatory obligation, and that they would not go in the business of offering wholesale voluntarily, demonstrating that Canadian MNOs are not willing to enter into commercial negotiations in reality. For example, with respect to the CRTC's process with respect to wholesale access to fibre-to-the-home services, BCE CEO George Cope stated in September 2017:

So obviously Bell's been very, very clear on position, we're spending our shareholders capital for fibre. Someone else wants to bid at their own Internet go rate ahead [sic], but we're not in the business of putting other people in business. The regulator will decide on what that price is and we'll obviously make sure we try to get the cost recovery and we'll see how that plays out.³⁶

33. In November 2018, Cope again detailed Bell's strategy of launching wireline services under the banner of their Virgin flanker brand in order to undermine its wholesale obligations and wholesale-based competitors, highlighting at the same time that Bell has no interest in evolving a wholesale market in the absence of a regulatory obligation:

Maher Yaghi – Desjardins Securities – Analyst: ...I wanted to ask you, when I look at last year versus this year, it seems like you are less competitive on the wholesale side, more competitive on the retail side. Can you talk about maybe just what is going on? Is Rogers more competitive on the wholesale end? When you look at the quality, the ARPU generation from an Internet load, how do you see it going forward?

George Cope – President and CEO: Yes. So, I would say, first of all, your observation about our focus is correct, our focus is on retail. And one of the reasons we launched the Virgin Internet brand is it is competing at a different price market that was there in the wholesale market, we might as well compete for that, and also compete at the retail price, not at the wholesale price. ... our focus is 100% on retail. The wholesale is a regulatory obligation, not a business strategy for us.

Yaghi: So, less focus on wholesale, but still decent revenue coming from that segment of the market. Why has it changed, in your view, going from, let's say, telco ISPs, telco-delivered ISPs to cable?

Cope: Well, I do not know why the—you would have to ask the cable companies on strategic focus. On our focus, it is the launch of the Virgin Internet brand to compete with wholesale, but we access the retail revenue stream. Canadians get the benefit of competition and we get the benefit of a revenue stream that would

³⁶ Bell, "BCE (BCE) CEO George Cope Presents at BMO's Annual Media and Telecom Conference (Transcript)", 12 September 2017, <https://seekingalpha.com/article/4106218-bce-bce-ceo-george-cope-presents-bmos-annual-media-telecom-conference-transcript?part=single>

be double what we would get through the wholesale market, and that is really our strategy there.

Basically, it is retail pricing for us and retail top line growth against wholesale growth, and as everyone knows, it is a regulatory requirement for wholesale, not a strategy of Bell's.³⁷ [emphasis added]

c. Recent service and price changes have only happened under threat of regulation and do not substitute for competition

34. The MNOs have argued that wireless prices are decreasing sufficiently without mandating MVNO³⁸. For example, Shaw³⁹ and Eastlink⁴⁰ pointed out that the pricing for mobile services have decreased substantially, especially between 2016 and 2018. In our submission, the incumbent network operators' price declines have been a tactical response to the new regulatory focus on competition and emphasis of consumer needs. In the absence of MVNO and other strong regulatory measures to create competition, those prices can be expected to rise. Some price declines are merely seasonal (e.g. Christmas season discounts) or offers from flanker brands which have been introduced for the occasion. Unlimited data plans recently introduced by incumbents are another example of tactical maneuvering by incumbents. According to Darren Entwistle, President and CEO of TELUS, during the most recent quarterly earnings call:

I think that's a great by-product component of the Peace of Mind offerings that have gone out there. And I think they really support the supposition that the necessity for government intervention in our industry is not just reduced dramatically, it's basically at odds on with what the reality is within the client experience.⁴¹

35. Similarly, Joseph Natale, President and CEO of Rogers, said:

³⁷ Bell, "Q3 2018 Results Conference Call", 1 November 2018, George Cope at pp. 17-18, <http://www.bce.ca/investors/financial-reporting/2018-Q3/2018-q3-transcript.pdf>.

³⁸ Bell's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at p. 6, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647596>; TELUS intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at p. 31, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647662>; Rogers' intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647492>.

³⁹ Shaw's responses to RFIs in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 5 April 2019.

⁴⁰ Bragg (Eastlink)'s responses to RFIs in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 12 September 2019, at p. 36.

⁴¹ TELUS, Q3 2019 Earnings conference transcript, 7 November 2019, Darren Entwistle at pp. 13, https://assets.ctfassets.net/rz9m1rynx8pv/668oubmx4qbjDK155lbtRf/c6e4bc35d092fbafc26fa0ca72e9b072/TELUS_Q3_2019_conference_call_transcript.pdf.

Government is very supportive of making sure we maintain thesis around investing in infrastructure in Canada, especially given rural Canada, the population density, and all the importance of making sure we connect Canadians. We're very much aligned on the topic of affordability. Our move to unlimited and everything else that we've been talking about regarding equipment financing is very much aligned on that front.⁴²

36. In short, while some retail prices have nominally decreased in the past two years, the regulatory climate in which the Commission has considered various forms of regulatory action in the mobile market has clearly been a significant disciplinary force. The real motivation for MNOs to decrease their prices or upgrade their services is to quell regulatory threat, not to actually offer competitive options to consumers.

37. These are not the only examples of such tactics as confirmed by the MNOs themselves in their communications with investors. In Rogers' second quarter investor call, Natale made similar comments that, on the regulatory front:

...One thing that some of the moves that we've made have done, especially around unlimited and equipment financing, it really demonstrates that we are perfectly aligned with the overall agenda for the government on the regulatory front with respect to making Wireless services more accessible and more affordable for Canadians.⁴³

38. In TELUS' second quarter investor call on August 2, 2019, Entwistle stated:

As we look back at the last 20 years, one of the things that's been most punitive to TELUS and the industry hasn't been robust competition. It's been regulatory intervention... When you look at the Peace of Mind plans, undeniably, as it relates to price, value and affordability, we stand tall within the global context in that regard. But it's not a situation that just ends with that parameter, where we compare favourably on value, price and affordability.⁴⁴

39. In addition, where prices decreases have been permanent, these have typically occurred in older bundles, not the newer, higher priced bundles which have been introduced to meet consumers' increased mobile bandwidth needs.⁴⁵

40. The lack of competition and the MNOs' dominant market power in the Canadian mobile market conflict with the competition goal of 2019 Policy Direction, to "encourage all forms

⁴² Rogers, Q3 2019 Earnings conference transcript, 23 October 2019, Joseph Natale at pp. 9-10, <https://1vjoxz2ghhkclty8c1wjich1-wpengine.netdna-ssl.com/wp-content/uploads/2019/02/RCI-Q3-Call-Transcript.pdf>.

⁴³ Rogers, Q2 2019 Earnings conference transcript, 23 July 2019, Joseph Natale at pp. 16, <https://1vjoxz2ghhkclty8c1wjich1-wpengine.netdna-ssl.com/wp-content/uploads/2019/02/RCI-Q219-Transcript.pdf>.

⁴⁴ Telus, Q2 2019 Earnings conference transcription, 3 August 2019, Darren Entwistle at pp. 8, https://assets.ctfassets.net/rz9m1rynx8pv/6DiWRtdm2IELaXDyYDJ74B/f062732abe40778b0b323dd66d90890d/TELUS_Q2_2019_transcript.pdf.

⁴⁵ 2018 Wall report for ISED and previous Nordicity reports for the ISED and the CRTC.

of competition and investment”.⁴⁶ In addition, leaving the wholesale wireless market to commercial negotiation is unrealistic, as the incumbents will refuse to accept wholesale access to their networks.

41. In absence of regulated conditions of access to roaming services, the independent service providers’ business model is fragile. In order to set the conditions for equitable and successful commercial negotiations between MNOs and independent service providers, it is necessary for the Commission to mandate a full MVNO regime as an option for MVNOs. This will lead to access to MNOs networks at fair market prices and set the stage for affordable services for consumers and choice in services and service providers in the mobile market.

d. Flanker brands are competition theatre, weaponized to harm true competitors

42. Incumbents exercise their dominant market power by using a variety of anti-competitive measures to limit competition including the use of flanker brands and bundling.

43. The incumbents in submissions to this consultation have argued that flanker brands are a competitive force in the current telecoms’ ecosystem and thus, the introduction of a mandated MVNO regime is not necessary to ensure competition.⁴⁷

44. In fact, the introduction and use of flanker brands in the mobile market has been an anti-competitive maneuver from the incumbent MNOs to create the illusion of competition while actually solidifying their own dominance of that market. In short, flanker brands are self-serving competition theatre aimed at staving off regulatory action that would enable real competition.

45. Management of the flanker brands including pricing, service offerings, customer service standards, is not independent of the corporate MNO brands. As Anthony Lacavera, the founder of WIND Mobile, stated:

flanker brands are not a real business for the incumbents. They enable the incumbents to keep a lid on any new entrant that might enter in the marketplace as a MVNO.⁴⁸

46. Typically, over time, flanker brands’ prices increase and/or service offering are downsized (or simply dropped) as part of the overall MNO corporate strategy to protect their in-house brands and overall corporate profitability. As shown in the 2018 Price Comparison report,

⁴⁶ *Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation, Order Issuing a Direction to the CRTC on, SOR/2019-227, 17 June 2019, <https://www.canlii.org/en/ca/laws/regu/sor-2019-227/latest/sor-2019-227.html>.*

⁴⁷ Bell’s response to RFI Q101 in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 12 September 2019; Roger’s response to RFI Q101 in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 12 September 2019.

⁴⁸ Financial Post, “Get rid of ‘fake competition’ from wireless flanker brands, Wind founder says”, 2 October 2019.

the average prices offered by incumbent flanker brands are increased closely to those of the incumbents' primary brands, while the regionals' price discounts relative to the incumbents' primary brands generally remained the same.⁴⁹

47. Incumbents also use bundling of wireline and wireless services to tie the customer in to contracts. Thus, a customer wanting to switch to an ISP or other competing service provider for individual services such as data services, cannot do so because this service is bundled with others, and subscribing to services individually as opposed to the bundle, would severely punish the customer financially. According to the study by Competition Bureau, two thirds of the respondents have their Internet services bundled with another service, and marketplace offers where Internet services are bundled with other services can have a significant impact on ISP choice among certain population groups.⁵⁰
48. It is important to note that, beginning in 2015 and 2016, the same carriers have extended flanker brands into the wireline broadband market as a strategic move against wireline competitors like TekSavvy.
49. In September 2018, BCE CEO George Cope discussed the strategic purpose of its flanker brand, reiterating that its main focus is to increase retail revenues, and telegraphing its intention to use that flanker brand to compete with wholesale with the ultimate goal of eliminating it, at which point “we just move away”:

We did launch the Virgin Internet brand a couple of years ago. That was very clearly driven in the competitive wholesale market... competes with discount brands. And so we are doing a much better business at the retail level there versus wholesaling at a much lower ARPU. ... You know you can imagine with that brand and with the depth that we've got in some of our markets in terms of that brand name, we think that ultimately is going to help us as well. And the economics of that are obviously, for us, significantly superior than a wholesale revenue. ... And the regulator has spoken that they want wholesale in the Internet space - so rather than push back, compete with it. Compete with a different brand. That, in time, becomes a better strategy for us. And then we just move away; and we haven't, for instance, done any filings at the regulator asking for lower prices for wholesale... and you'll see some... no one discloses, but you don't do a filing at the CRTC that's not disclosed unless its usually you are trying to lower the price.⁵¹
[emphasis added]

50. Similarly, when Videotron launched wireline services using the name of their Fizz flanker brand, Videotron CEO Jean-Francois Pruneau explained that their purpose was to attack competitors:

⁴⁹ Innovation, Science and Economic Development Canada (ISED), “Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions – 2018 Edition”, 29 August 2018, at p. 25, [https://www.ic.gc.ca/eic/site/693.nsf/vwapj/telecom2018e.pdf/\\$file/telecom2018e.pdf](https://www.ic.gc.ca/eic/site/693.nsf/vwapj/telecom2018e.pdf/$file/telecom2018e.pdf).

⁵⁰ Competition Bureau of Canada, “Delivering Choice: A Study of Competition in Canada’s Broadband Industry”, 7 August 2019, <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04470.html>.

⁵¹ BCE, 2018 BMO Capital Markets 19th Annual Media and Telecom Conference, 12 September 2018, George Cope at 7:21 to 8:00, <https://edge.media-server.com/mmc/p/urjmmkm4>.

“What we're aiming for with Fizz Internet is really... the resellers market,” said Pruneau. “They are getting traction thanks to CRTC with their new (wholesale) rates that are much lower than they were before.

“So, with Fizz Internet I believe we have the right weapon to fight the resellers essentially, and... if Fizz Internet works as well as Fizz Mobile, I think we're in very good shape for 2019.”⁵²

51. Incumbents are clearly drawing on their mobile playbooks, using flanker brands to create the illusion of competition while simultaneously consolidating their control of the market by: preferencing themselves (granting their flanker brands access to facilities and tools that they deny competitors on a commercial basis); fixing inflated regulated wholesale rates; and then using their flanker brands to undermine wholesale-based competitors by predatorily selling at prices lower than regulated wholesale rates.
52. Eliminating the incumbent owned flanker brands in both markets could be an interim step to protect wireline competition and to enable real competition through MVNOs in the Canadian wireless market.
- e. **Internationally, MVNOs effectively compete against dominant players to serve consumers in those countries**
53. As discussed in TekSavvy's first intervention in this proceeding, the diversity in Canada's telecommunications ecosystem lags behind that of other leading industrialized countries and in particular, the absence of full MVNOs and even the relative scarcity of partial MVNOs is a critical weakness in creating a competitive, innovative telecommunications market. In contrast, MVNOs are present in other comparable jurisdictions in a variety of forms and capture an overall market share of 11% to 34.6%.⁵³
54. TekSavvy has retained two experts to provide accounts of the wireless mobile markets in the United States and Australia. Some key findings are as follows:
 - Australia (“Webb Henderson study”):⁵⁴
 - Structural separation of the wireline network in Australia has created a different dynamic between incumbents and wholesale-based competitors. Structural separation has been applied as a regulatory remedy where infrastructure-based competition is inefficient.

⁵² Greg O'Brien, Cartt.ca, “Fizz Internet the ‘right weapon’ to beat back resellers, says Vidéotron”, 27 March 2019, <https://cartt.ca/article/fizz-internet-right-weapon-beat-back-resellers-says-vidéotron>.

⁵³ TekSavvy's intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 19, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647613>.

⁵⁴ TekSavvy Attachment 1, Ish Omar, “The role of MVNOs in Australia's mobile market”, 22 November 2019 at p. 16-18 [“Webb Henderson study”].

- MVNOs in Australia comprise 13 percent of the market share⁵⁵, despite that market otherwise being comparable to Canadian mobile market including being highly concentrated and dominated by three national incumbents.
- The organic growth of MVNOs in Australia is due to their emergence at an earlier stage and in a more favourable regulatory framework, starting with Virgin Mobile in 2000. Australia now has a very dynamic MVNO sector, with over 60 MVNOs (some of which are related due to consolidation).
- “Thick MVNOs”—MVNOs who use an MNO’s RAN to deliver mobile services but otherwise provides all other elements of the mobile value chain—allow for a greater level of competitive differentiation from “thin MVNOs” (such as flanker brands).
- The Australian market has a category of “Horizontally integrated MVNOs”, fixed-line Internet and telephony providers using the MVNO model to supply mobile telephony services that are often bundled with their fixed-line services”, the primary rationale for which is “to allow fixed-line operators to have a presence in retail mobile markets without incurring the very significant expenses associated with setting up a mobile network.”⁵⁶
- The Australian MVNO model provided the MNOs with a way to maximize the value of their fixed investments in networks by allowing each network to serve a greater and more diverse base of end-users than would otherwise be the case, competing nationally without inefficiently overbuilding their networks.⁵⁷
- The emergence of MVNOs in Australia has resulted in lower wireless pricing year-over-year, with Australia being a leader in mobile pricing affordability. Meanwhile, broadband performance is improving and there is no meaningful impact on the revenues of MNOs.
- United States (“Roetter study”):⁵⁸
 - The very large US mobile market operates under a light Federal Communications Commission (FCC) regulatory regime, in which the national MNOs exercise dominant market power in their negotiations with MVNOs. As a result, independent MVNOs pay higher than competitive market prices for access to MNO networks, and for the most part cannot operate as Full MVNOs.

⁵⁵ TekSavvy Attachment 1, Ish Omar, “The role of MVNOs in Australia’s mobile market”, at pp. 3, 8, 12, 33 [“Webb Henderson study”].

⁵⁶ TekSavvy Attachment 1, Ish Omar, “The role of MVNOs in Australia’s mobile market”, 22 November 2019, at p. 16-18 [“Webb Henderson study”].

⁵⁷ TekSavvy Attachment 1, Ish Omar, “The role of MVNOs in Australia’s mobile market”, 22 November 2019, at p. 8 [“Webb Henderson study”].

⁵⁸ TekSavvy Attachment 2, Martyn Roetter, “The Wireless Telecommunications Market in the US”, 22 November 2019 [“Roetter Study”].

- This environment has limited US MVNOs' ability to launch new services at affordable prices. Their overall market penetration has suffered, and MVNO market share has not developed to the same extent as in some other countries. This demonstrates that unless a regulator sets the right conditions and right wholesale rates, MVNOs will be stymied in developing a sustained competitive impact on the market.
- Despite the commercial challenges of MVNOs in the US, MVNOs have positively contributed to the marketplace, rating higher for customer service and quality of service than MNOs, and serving customers that would otherwise be neglected or poorly served by MNOs, in addition to delivering price discipline to the benefit of American consumers. Since MVNOs emerged in the US, the prevalence of two-year contracts has eroded, and service-device plans have been separated, bringing more transparency and new options to the marketplace.
- MVNOs in the United States have not negatively impacted MNOs' investments or performance. On the contrary, wholesale access has contributed to investor revenues and profits. Competitive MVNOs have attracted retail customers to their networks that MNOs themselves do not effectively address, increasing network utilization and hence revenues overall.

55. In addition, France provides a notable example of MVNOs emerging as a result of regulatory action in response to collusion by dominant carriers. The French telecommunications regulatory authority, ARCEP⁵⁹, placed the wholesale market under supervision, as well as other conditions following a finding of tacit collusion.⁶⁰ In 2008, the French competition authority found this limited oversight of the wholesale market had still not resulted in MVNOs obtaining terms and conditions that would allow them to be truly effective competitors. The authority made a number of recommendations, including ensuring wholesale access for full MVNOs, the removal of exclusivity clauses in contracts, a reduction in wholesale contract duration, and the supervision or removal of pre-emption clauses that limited the ability of an MVNO to sell its business or user-base.⁶¹

⁵⁹ The French telecommunications regulatory currently known as the Autorité de Régulation des Communications Électroniques et des Postes ("ARCEP") was previously known the Autorité de régulation des télécommunications ("ART"). They are both referred to here as ARCEP.

⁶⁰ Autorité de régulation des télécommunications, "*Analyse des marchés de gros de l'accès et du départ d'appel sur les réseaux publics mobiles*", February 2005, <https://www.arcep.fr/fileadmin/reprise/publications/c-publique/ccrc-mvno-210205.pdf>.

Due to doubts expressed by the European Commission, ARCEP did not finalize the preliminary finding of tacit collusion.

⁶¹ Le Conseil de la concurrence, "Avis n° 08-A-16 du 30 juillet 2008 relatif à la situation des opérateurs de réseaux mobiles virtuels (MVNO) sur le marché français de la téléphonie mobile", <https://www.autoritedelaconcurrence.fr/sites/default/files/commitments/08a16.pdf>.

D. MVNOs not only increase competition in the mobile market but also address the Commission’s goals of affordability, lower prices, availability, and innovation

56. The most effective way to introduce competition through mandated wholesale access on mobile is through Full MVNOs, which operate as much like an MNO as possible other than the radio networks and spectrum services they purchase from MNOs. In jurisdictions where they thrive, such as in the US, there are significant capex and opex demands on Full MVNOs including significant investments in their professional staff, innovation, and network equipment.⁶² In the global market, Full MVNOs have been able to develop a multi-faceted and long standing relationship directly with their subscriber base, control over the quality of services delivered, and customer ownership including subscriber databases. This multi-faceted relationship has enabled MVNOs to customize their services and service packages based on subscribers’ needs and fulfill market niches that MNOs either cannot or do not wish to fill, while playing an important price discipline role in the market.

57. The only way to bring down prices and meet the needs of Canadians in the mobile market is to enable wholesale regulation that enables competitors to promote innovative services and affordable prices for consumers. For wholesale competition to work, the regulator must put in place the key fundamental building blocks, including granting timely and fair access to bottleneck facilities and setting wholesale rates properly. Despite its significant challenges—including incumbents’ denying access to services, gaming regulatory processes, and manipulating consumers using flanker brands, all in order to exclude competitors—the wholesale model has worked on the wireline side to ensure Canadians have access to a range of service providers who are therefore an important force to discipline retail pricing, as noted by the Competition Bureau.⁶³ In introducing the 2019 Policy Direction, the government acknowledged that competition is the best way to reduce prices:

Competition is the best way to bring down the prices of telecommunications services. Domestically, wireless data plans in regions with strong competition are up to 32% cheaper than the national average. The Government of Canada will continue to monitor market dynamics and promote greater competition in the telecom sector to promote access to quality services at reasonable prices.⁶⁴

58. Alternative solutions that have been proposed in this proceeding by other stakeholders, including the HMNO model, as well as arguments against the Full MVNO model, such as

⁶² TekSavvy Attachment 1, Ish Omar, “The role of MVNOs in Australia’s mobile market”, 22 November 2019, at p. 10 [“Webb Henderson study”].

⁶³ Competition Bureau of Canada, “Delivering Choice: A Study of Competition in Canada’s Broadband Industry”, 7 August 2019, at p. 7, <https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04470.html>.

⁶⁴ Government of Canada, “Government directs CRTC to place consumer interests and innovation at the forefront of telecom decisions”, 18 June 2019, <https://www.canada.ca/en/innovation-science-economic-development/news/2019/06/government-directs-crtc-to-place-consumer-interests-and-innovation-at-the-forefront-of-telecom-decisions.html>.

the risk of reduced investment by Canadian incumbents and entry by foreign firms, are addressed below.

a. MVNOs will not interfere with market forces

59. The 2006 Policy Direction encourages the Commission to “interfere with the operation of competitive market forces to the minimum extent necessary” when relying on regulation.⁶⁵ In a highly oligopolistic market like telecommunications in which the incumbents possess dominant market power, such a hands-off regulatory approach simply maintains the dominance of incumbents. TekSavvy, along with other non-incumbent stakeholders was thankful that the 2019 Policy Direction took a different approach to the CRTC’s exercise of regulatory authority that promotes competition, affordability, consumer interests, and innovation⁶⁶.
60. The regulatory framework requires additional pro-competitive measures to ensure a competitive telecommunications market. As stated in TekSavvy’s previous submission in this proceeding, many of the problems we face today in the wholesale wireline regime stem from fundamentally flawed proceedings to set rates for wholesale wireline services that began in the aftermath of the 2006 Policy Direction. Not only did the CRTC reduce unnecessary regulatory burdens, but it also reduced the efficacy of necessary regulatory frameworks and the degree of regulatory oversight, including transparency and scrutiny. Instead, the CRTC has relied on incumbent costing data, leading to rates that have since been found to have been inflated by over 1300%⁶⁷ and resulted in numerous downstream problems.
61. In comparison with retail regulation, which has been proposed by some stakeholders in this proceeding, mandating wholesale access for full MVNOs will interfere with the operation of competitive market forces to a significantly lesser extent. Mandating full MVNOs requires minimal changes to the regulatory framework as independent service providers with full MVNO status would be required to operate their own facilities except for the radio access network (RAN). Moreover, mandated full MVNOs will enable all forms of competition and investment, consistent with the 2019 Policy Direction to “encourage all forms of competition and investment”.⁶⁸

⁶⁵ *Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives*, SOR/2006-355, 14 December 2006 [“2006 Policy Direction”].

⁶⁶ *Order Issuing a Direction to the CRTC on Implementing the Canadian, Telecommunications Policy Objectives to Promote Competition, Affordability, Consumers Interests and Innovation*, SOR/2019-227, 17 June 2019, [“2019 Policy Direction”].

⁶⁷ See *Tariff notice applications concerning aggregated wholesale high-speed access services – Revised interim rates*, Telecom Order CRTC 2016-396, 6 October 2016, <https://crtc.gc.ca/eng/archive/2016/2016-396.htm> [“TO 2016-396”] and *Follow-up to Telecom Orders 2016-396 and 2016-448 – Final rates for aggregated wholesale high-speed access services*, Telecom Order CRTC 2019-288 and 2019-288-1, <https://crtc.gc.ca/eng/archive/2019/2019-288.htm>, [together “TO 2019-288”].

⁶⁸ *Order Issuing a Direction to the CRTC on Implementing the Canadian, Telecommunications Policy Objectives to Promote Competition, Affordability, Consumers Interests and Innovation*, SOR/2019-227, 17 June 2019, [“2019 Policy Direction”].

b. MVNOs contribute to lower prices and more affordable services

62. The 2019 Policy Direction requires the Commission to “foster affordability and lower prices, particularly when telecommunications service providers exercise market power.”⁶⁹
63. As indicated previously in this submission, continued dominance by incumbent operators in the Canadian telecommunications marketplace have resulted in higher prices for consumers and less choice and innovation in service offerings relative to other markets. New competition from MVNOs would result in more affordable prices and a better choice in services and service providers. Incumbent wireless carriers have exercised their market power to coordinate prices and resist any forms of competition that could lower prices and foster affordability.
64. Even with lower, nominal prices in the mobile market, Canadian prices are still well above those of other OECD countries or comparable developed states, which result in an unaffordable mobile wireless market to the Canadian consumers. According to NERA’s report, ARPU in Canada was the highest among all comparable 22 developed states in 2017.⁷⁰ In contrast, Germany, France, Spain, and Denmark, all countries with relatively high numbers of MVNOs, have mobile broadband prices well below the European average.
65. MNOs have repeatedly argued, notably in the Dippon report for TELUS,⁷¹ that mobility prices in Canada are lower than in other industrial countries. However, the Competition Bureau found the Dippon flawed “in the data used in the study, which contain errors and, generally, are not representative of plans actually used by Canadians.”⁷² Amongst the flaws, the Bureau found the Dippon report “understates the actual prices and include plans from very small operators such as 7-Eleven, Primus and Petro-Canada notwithstanding the fact that the top three carriers accounted for nearly all the mobile subscriber share of all provinces except for Saskatchewan and Quebec in 2017.”⁷³

⁶⁹ Order Issuing a Direction to the CRTC on Implementing the Canadian, Telecommunications Policy Objectives to Promote Competition, Affordability, Consumers Interests and Innovation, SOR/2019-227, 17 June 2019, [“2019 Policy Direction”].

⁷⁰ NERA Economic Consulting, “Competition in the New Zealand Mobile Market”, 26 October 2018, at p. 18, https://comcom.govt.nz/_data/assets/pdf_file/0018/104247/Spark-NERA-Competition-in-the-NZ-mobile-market-Submission-on-the-Issues-Paper-26-October-2018.PDF.

⁷¹ Christian Dippon, NERA Economic Consulting, “An Accurate Price Comparison of Communications Services in Canada and Select Foreign Jurisdictions.”, 19 October 2018, https://www.nera.com/content/dam/nera/publications/2018/NERA_Price_Study_OnePager_Web.pdf.

⁷² The Competition Bureau’s intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 50-52, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647305>.

⁷³ The Competition Bureau’s intervention in *Review of mobile wireless services*, Telecom Notice of Consultation CRTC 2019-57, 15 May 2019, at para. 52, <https://services.crtc.gc.ca/pub/DocWebBroker/OpenDocument.aspx?DMID=3647305>.

66. The relatively high prices paid by Canadian consumers for mobile services and the importance of affordability for Canadians have been recognized as significant issues by all Canadian political parties.⁷⁴
67. Canada cannot attain the affordability and competition goals of the 2019 Policy Direction in the absence of a diversified telecommunications ecosystem that includes MVNOs. As noted by CNOC, mobile wireless usage levels in Canada are significantly lower than other international jurisdictions.⁷⁵ This would indicate that the relative unaffordability of mobile wireless services is affecting access to broadband services by Canadian consumers and innovation in services by service providers.
68. As illustrated by examples in jurisdictions with diverse mobility ecosystems, MVNOs play an important role in bringing price discipline to the mobile market, resulting in lower prices for consumers than might otherwise emerge in markets dominated by MNOs alone. For example, mobile prices in Australia in 2017-18 were 30% lower than they had been in 2014-15, driven by MVNOs both disciplining the retail prices of MNOs and offering low-cost entry-level mobile services in the \$10-\$20/month range.⁷⁶ In the US, the multinational network operator Altice operates as an MVNO on Sprint's network, providing Sprint in exchange with backhaul services. Altice offers low priced plans including unlimited data (throttled after 50GB) for \$30/month.⁷⁷
69. MVNOs also bring innovation and affordable services to specific customer niches.⁷⁸ One typical successful MVNO in the USA is Consumer Cellular. Consumer Cellular was founded in 1995. Their target market is seniors with fixed incomes. Consumer Cellular differentiates itself from MNOs by offering lower prices, usage alerts, and no overage fees if the minutes or web data allowance is exceeded.⁷⁹ Consumer Cellular has a relationship with the AARP (American Association of Retired Persons), offering AARP members special benefits for over 10 years.

⁷⁴ For example, the Liberal party election platform ("More affordable cell phone bills," 2019, https://2019.liberal.ca/wp-content/uploads/sites/292/2019/09/BG_EN_Cell-Phone-Bills.pdf) stated the following:

A re-elected Liberal government will take strong action to see cell phone bills come down by 25 per cent. This will save a family of four almost \$1,000 a year.

To achieve this, we will... Encourage competition by expanding the entry of Canadian Mobile Virtual Network Operators (MVNO) in the market.

⁷⁵ CNOC intervention to CRTC Telecom Notice of Consultation 2019-57, 15 May 2019, at p. 31.

⁷⁶ TekSavvy Attachment 1, Ish Omar for Webb Henderson, "The role of MVNOs in Australia's mobile market", 22 November 2019, at p. 10 ["Webb Henderson Study"].

⁷⁷ TekSavvy Attachment 2, Martyn Roetter, "The Wireless Telecommunications Market in the US", 22 November 2019, at p. 17, ["Roetter Study"]. See also "Wi-Fi first" MVNO Republic Wireless, which offers a talk and text plan for \$15/month.

⁷⁸ TekSavvy Attachment 2, Martyn Roetter, "The Wireless Telecommunications Market in the US", 22 November 2019, ["Roetter Study"].

⁷⁹ Consumer Cellular, "Low rates & great service are just the beginning," <https://www.consumercellular.com/WhyUs>.

70. Another example found in the USA is Canadian-owned, Ting Mobile, an independent MVNO from Tucows that provides services using Sprint and T-Mobile's network. Ting does not provide a specific plan to customers, instead, it bills the customers for the cheapest plan each month based on the customers' usage.⁸⁰ Customers can select a \$9 only plan with 100 minutes calls with no text or data usage.
71. MVNOs are better at providing personalized, innovative services to the customers in market niches that are unprofitable or simply too small for incumbents, such as groups with accessibility needs. One example is Audacious, a UK MVNO that is internationally-recognized for its innovation in mobiles services.⁸¹ Audacious provides a personalized service adapted to individual customer's hearing needs with its SIM-only mobile service. The service provides customers with a free sound check on their website to create a personal hearing profile. The SIM card ordered by the customer is then tailored to the individual customer's level of hearing.

c. MVNOs improve access to services in rural areas

72. In its submission to the Canadian Government's Innovation Agenda, the CRTC stated that 18% of Canadians—most in rural and remote areas—do not have access to download speeds of 10 Mbps.⁸²
73. Despite the wide-ranging geographic coverage, incumbent operators have not been able to meet the mobile wireless service needs of residential and business customers in rural and remote areas and along transportation corridors. The choice of service providers for these customers is typically limited to the incumbent's legacy mobile (2G or 3G) networks, legacy DSL service, and satellite service and, in some cases, local rural ISPs. As has been well-documented in various submissions, bandwidth costs for rural and remote subscribers are very high and the availability of services is limited. Given the dominant market position and in the absence of a pro-competitive regulatory framework, the ISPs servicing rural and remote areas have been unable to utilize capacity on the incumbents' networks to provide customers with enhanced mobile broadband service offerings at competitive market prices.
74. Independent service providers do not own significant rural spectrum at the same time as incumbent MNOs hold unused or an excess of spectrum. Moreover, incumbents build infrastructure in rural and remote areas but only provide basic service and limited package choices with high price tags. This conflicts with the 2019 Policy Direction to "ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas".⁸³

⁸⁰ Ting, "Only pay for what you use", <https://ting.com/rates>.

⁸¹ Audacious and Goshawk Ltd jointly won the award for most innovative MVNO at the 2019 MVNO World Congress. See <https://www.audacious.co.uk/>.

⁸² CRTC Submission to the Government of Canada's Innovation Agenda, 21 December 2016, <https://crtc.gc.ca/eng/publications/reports/rp161221/rp161221.htm>.

⁸³ Order Issuing a Direction to the CRTC on Implementing the Canadian, Telecommunications Policy Objectives to Promote Competition, Affordability, Consumers Interests and Innovation, SOR/2019-227, 17 June 2019, ["2019 Policy Direction"].

75. Mandated full MVNO in Canada would constitute an important part of a long-term solution to the problem of availability of mobile wireless networks in rural areas. Contrary to the claims of MNOs, the presence of MVNOs as competitors would encourage investment in regional and rural areas that would not otherwise develop. This is illustrated by the experience in the US market where Verizon Wireless launched their regional development plan, the LTE in Rural America Program (LRA program) in 2010.⁸⁴ Verizon allowed 21 small network operators in 15 states to develop LTE networks in their respective rural regions using Verizon-owned spectrum. Customers of these partners can roam on Verizon's primary network and in return, Verizon's customers can roam on the rural partner networks in the respective rural areas. There are no such initiatives found in Canadian market.
76. Small service providers such as TekSavvy are dedicated to serving rural and remote areas with innovative service packages and lower prices that meet the needs of their customers. Since 2013, TekSavvy has consistently invested to increase the size of its wireless and wireline facility-based network infrastructure to better serve its clients. TekSavvy initiated its fixed wireless access (FWA) strategy by rolling out broadband access to more than 2,000 rural households. TekSavvy offers Internet services in Southwestern Ontario over its own network facilities, and across Canada through wholesale network access services purchased from eight incumbent carriers. Along with other small independent service providers, TekSavvy would serve rural and remote customers with improved mobile wireless services under an MVNO regime that mandated access to incumbents' networks.
77. In the US, there are several MVNOs that already operate in rural areas to provide high speed broadband services, such as Ladybug Wireless and Never Throttled. While these MVNOs have evolved on a commercially negotiated basis in the much larger US market, no such commercially negotiated arrangements have emerged in Canada and, as such, a mandated framework is required to ensure similar results in the Canadian market.
78. In other jurisdictions, MVNOs serve subscribers who are otherwise neglected by MNOs.
79. Canadian subscribers pay substantially higher prices for mobile wireless services than subscribers in "best-in-class jurisdictions". As the same time, Canada remains a laggard in mobile adoption and data usage among the OECD countries.⁸⁵
80. In short, the full MVNO regime proposed by TekSavvy will enable more choice of services and service providers, lower prices and increased affordability of services, improved availability of services in rural and remote areas, and overall better treatment for subscribers.

E. Mandating MVNOs will not interfere with investment; on the contrary, the presence of MVNOs encourages investment

81. Having had the opportunity to review the further comments of CNOC, TekSavvy adopts CNOC's arguments as to why investments in mobile wireless infrastructure, including 5G

⁸⁴ RCR Wireless News, "LTE N.A. 2011: Verizon Wireless set for rural LTE launches in 2012," 9 November 2011, <https://www.rcrwireless.com/20111109/carriers/lte-n-a-2011-verizon-wireless-set-for-rural-lte-launches-in-2012>.

⁸⁵ OECD, Broadband Portal, 1.13, Mobile Data Usage per Mobile Broadband Subscription, 2017.

infrastructure, will not be negatively impacted by mandated wholesale access for full MVNOs to the networks of the national carriers. We are also concerned by the flaws identified in the Chen Rebuttal Report. We agree with Dr. Chen and with CNOC that the Commission should not give the expert reports of the national carriers significant weight.

82. Consistent with the 2019 Policy Direction, a mandated MVNO regime would:

enable innovation in telecommunications services, including new technologies and differentiated service offerings, and

stimulate investment in research and development and in other intangible assets that support the offer and provision of telecommunications services.

83. As stated in TekSavvy's original submission, a mandated Full MVNO regime will provide the greatest level of control to the MVNO and the fewest opportunities for the MNOs to introduce competitive barriers. It will be a strong economic incentive for the MVNOs to invest in facilities, systems, and intangible assets in order to control the quality of service and to be able to acquire and manage their own subscribers. While Full MVNO status offers more flexibility to the service provider than other models, such as the ability to innovate and capability of owning subscribers, a Full MVNO must invest in its own Evolved Packet Core (EPC) and IP Multimedia System (IMS) Core handling SIP-based services to control subscriber activation and service offerings.

84. MNOs have argued that investment, especially in rural areas, and research and development will be hindered if mandated MVNO is introduced.

85. On the contrary, as stated in the Delta economic group study for CNOC, a mandated wholesale MVNO access would stimulate investments by the national wireless carriers because of the increasing number of mobile wireless subscriptions.⁸⁶ Full MVNO status would also incentivize independent service providers to make substantial investments in their staff, innovation, systems, and equipment in order to attract and retain subscribers.

86. According to the expert study submitted by Cogeco, MNOs currently enjoy profit levels (43% EBITDA) which constitute a significant margin of 4.6 to 5.2 percentage points over levels typically found in competitive telecoms markets.⁸⁷ The study found that even if incumbents decrease investments in the face of competition, it is likely that this decrease will be more than offset by investments from new competitors.⁸⁸

⁸⁶ An Economic Analysis of Mandated Wholesale Access for MVNOs and Competition in the Mobile Wireless Telecommunications Industry in Canada, Zhiqi Chen, 2019, at p. 35.

⁸⁷ Economic Impact Assessment (EIA) of Mandated Radio Access Network (RAN) to Hybrid Mobile Network Operators (HMNOs) - Facilities-Based Carriers, NGL Nordicity Group Limited, 2019, at p. 15. We note that Nordicity's study examined the hybrid mobile network model (HMNO) which is a variation of the facilities-based MNVO regime proposed by TekSavvy and others, but profiled on cableco facilities. TekSavvy submits the results of facilities-based MVNO and HMNO regimes in terms of investment, competition, affordability would be substantially the same.

⁸⁸ Economic Impact Assessment (EIA) of Mandated Radio Access Network (RAN) to Hybrid Mobile Network Operators (HMNOs) - Facilities-Based Carriers, NGL Nordicity Group Limited, 2019.

87. This relationship holds as long as the incumbent EBITDA levels are in the range between 43% and 37%. As indicated earlier, most independent industry analysts do not believe that MVNOs will have a significant impact on incumbents' profitability. Moreover, as stated by NEREO consulting, MVNOs help MNOs to improve their EBITDA margins by reducing subscriber acquisition costs with only a slight reduction in ARPU.⁸⁹ Thus, it is reasonable to expect overall industry investment to continue at or above current levels if MVNOs are allowed to bring additional competition into the market.
88. Other industry analysts such as Drew McReynolds have concluded that MVNOs would not materially affect MNOs' EBITDA.⁹⁰ Thus, if profits are not substantially affected by new MVNO competition, then incumbents' investments would not be expected to substantially decrease.
89. TekSavvy notes that in Spain, the mandated MVNO regime, which has been in effect over the last 11 years, has not led to market instability and that incumbent MNOs have continued to invest in technology upgrades.⁹¹ Webb Henderson's study for TekSavvy shows that in Australia, the MVNO model provided MNOs with a way to maximize the value of their fixed investments in networks by allowing each network to serve a greater and more diverse base of end-users than would otherwise be the case. In addition, the report of the Analysis Group, submitted by Ice Wireless in response to Telecom Notice of Consultation CRTC 2017-259 concluded that mandated access to mobile networks would be unlikely to reduce investment by incumbents in markets where telecommunications and cable companies compete. That study also identified weaknesses and shortcomings in incumbent reports that suggested that investment would be negatively affected by increased competition in the mobile market in Canada.⁹² In short, industry research indicates that mandated wholesale access is unlikely to reduce investment in Canada.
90. In terms of innovation, Roetter's report submitted by TekSavvy shows that MVNOs have nevertheless been able to make valuable contributions to the portfolio of mobile services offered in the US market. They have done so through various combinations of innovative service features, and a well-informed focus in their marketing and customer service on otherwise inadequately served market segments. Moreover, Roetter finds that MVNOs have not had a negative impact on national MNOs' revenue or profits, and US MNOs have not been discouraged from investing.⁹³

⁸⁹ NEREO, "MVNO Business Essentials", <http://www.nereoconsulting.com/pdf/MVNOBusinessEssentials.pdf>.

⁹⁰ Drew Reynolds RBC, Capital Markets Fall 2019 Canadian Telecommunication Services report, at p. 9.

⁹¹ One Development We Connect Thailand, "MVNO Market – Spain", 1 October 2019, <http://www.weconnectthailand.com/insights/mvno-market-spain/>.

⁹² *Economic Review of Mandated Wholesale Access for Wi-Fi First Service Providers, Investment and Competition in the Mobile Wireless Telecommunications Industry in Canada*, Analysis Group, 2017, at pg. 33.

⁹³ TekSavvy Attachment 2, Martyn Roetter, "The Wireless Telecommunications Market in the US", 22 November 2019, at p. 21 ["Roetter Study"].

F. Full MVNO is an essential precondition to effective competition in the Canadian wireless market

91. A mandated regime allowing for Full MVNOs is necessary to meet the goals of competition, affordability, and innovation contained in the 2019 Policy Direction.⁹⁴ In this proceeding, parties have proposed various ways in which a mandated MVNO regime could be circumscribed either to limit who would be eligible to be an MVNO or to limit where MVNOs would be able to provide services. Each of those limitations must be evaluated against whether the resulting mobile market would meet the goals of competition, affordability, and innovation.
92. TekSavvy's recommendation for full mandated MVNO is supported by independent service providers and industry associations. Moreover, the Commission's preliminary view to mandate wholesale MVNO access is supported by a wide range of industry stakeholders in the Canadian telecoms industry including public interest groups.⁹⁵
93. The purpose of this proceeding must be to address long-standing deficiencies in competition pricing and competition across Canada, which have not been addressed by policy changes that have been implemented to date, including those that have boosted specific established regional incumbents. A new, innovative approach is needed that will allow broader competition in all regions.
- a. The proposed HMNO model would result in very narrow benefits to few providers and few consumers**
94. Cogeco proposed a limited MVNO model called HMNO that would limit eligible MVNOs to traditional facilities-based providers, as well as limiting where those companies could provide MVNO services to the areas around their own traditional facilities-based serving areas. In TekSavvy's submission, this proposal is self-serving and does not represent an industry solution. More importantly, however, it would not meet the needs of Canadians or deliver on the goals of the 2019 Policy Direction. Rather than increasing the diversity of competitors across Canada, it would give limited operational benefits to a vanishingly small number of established regional incumbents.
95. In contrast to the broad-based support for Full MVNO, the proposed HMNO model is supported only by the small number of businesses that would benefit from that specific model.

⁹⁴ Order Issuing a Direction to the CRTC on Implementing the Canadian, Telecommunications Policy Objectives to Promote Competition, Affordability, Consumers Interests and Innovation, SOR/2019-227, 17 June 2019, ["2019 Policy Direction"].

⁹⁵ For example, Full MVNO was supported in interventions and RFIs by CNOC, the Canadian Communications System Alliance (CCSA), Ice Wireless, SSi Micro, Ecotel, Distributel, and Data On Tap. Other interveners supported MVNOs generally (mandated wholesale access to wireless services): Tucows, TNW Wireless, Independent Telecommunications Providers Association (ITPA), Canadian Internet Policy & Public Interest Clinic (CIPPIC) and OpenMedia, Coalition for Cheaper Wireless Services (CCWS), Manitoba Coalition, and Canwisp.

b. Canadian MVNOs

96. Under the *Telecommunications Act*,⁹⁶ foreign-owned carriers can enter the market subject to certain limitations on the proportion of the Canadian market they would control. Entry by large foreign players such as MNOs (e.g. AT&T, Verizon, America Movil, Deutsche Telekom) or technology giants (e.g. Google, Amazon, Facebook) which are significantly larger than Canadian service providers, would have a significant market advantage if allowed entry under a full mandated MVNO regime.
97. A number of measures could be considered by the Commission for inclusion in the MVNO framework to effectively impede entry of these large foreign players into the Canadian market. We will address the issue of Canadian ownership requirements in our response to the Commission's Additional RFIs issued on 15 November 2019.
98. TekSavvy submits that the key principles of an MVNO mandated regime should first be adopted by the Commission, and discussion of the modalities of application including potential measures to impede foreign ownership be discussed in the February 2020 portion of the consultative process.

c. It is far too early to assess any appropriate sunset clause

99. Question 12 of the TNC 2019-57 asks, "Discuss what would be an appropriate phase-out process for a mandated wholesale MVNO access service. For example, should the service be phased out on a specific, pre-determined date, be subject to a trigger that initiates a phase-out period, or be subject to another process?"
100. TekSavvy submits that in light of the nature of the historic high levels of concentration in the telecommunications industry and the ongoing barriers to entry, there should not be a sunset clause. TekSavvy would propose instead a periodic review on a 5-year basis of the state of competition in the industry and corresponding review of the mandated MVNO access service regulations.

G. Structural or functional separation is necessary to level the playing field

101. TekSavvy supports CNOC's proposal that the Commission should consider functional or structural separation in addition to mandating wholesale access for full MVNOs. TekSavvy vehemently agrees with CNOC's further comments in this respect, especially CNOC's alarm regarding the intransigence of Canada's incumbents with respect to wholesale regulation, which is broken and causing significant harm to competitors and consumers.
102. The many barriers that competitors face on the wholesale wireline side are fundamentally a result of the structure of that wholesale market. In particular, incumbent carriers both control the inputs for wholesale competition and benefit in the retail market by limiting those inputs. Until incumbents and competitors each use the same wholesale inputs to provide retail services, carriers will continue to impose barriers on competitors, and Canada will not have an efficient and effective competitive market for communications services, either wireline or mobile. Structural or functional separation is a sweeping

⁹⁶ *Telecommunications Act*, S.C. 1993, c. 38, at s. 16.

change that could rebalance incentives to provide an equal playing field to all retail players and disincentives to preference one's retail business over wholesale business. If structural or functional separation is not possible, then there must be regulatory changes to address the negative end-user impact, and to reduce the disproportionate power of incumbents to propose and implement arbitrary measures in the wholesale market. There continues to be a negative impact on wholesale-based providers' end-users and real challenges for wholesale-based providers to be vigorous competitors in telecommunications markets. Without systemic change, the competitive wholesale industry in Canada and its end-users will suffer by a thousand paper cuts.

103. As noted in the Webb Henderson study, functional and structural separation have both been used in telecommunications markets to stimulate service-based competition in retail markets:

Like the entry of MVNOs, functional and structural separation creates a decoupling of retail and wholesale markets, with different entities operating at these different levels of the market. Under structural separation, infrastructure is owned and operated by a wholesale-only entity (e.g. NBN Co in Australia) that is not controlled by any retail telecoms operator, thereby reducing incentives for the wholesale-only entity to discriminate in favour of its own retail arm (or more broadly to discriminate between retailers). Functional separation allows for common ownership between wholesale and retail entities, although wholesale and retail activities must take place through distinct business units, with regulatory constraints applying to the interaction between the business units to minimise the wholesale business unit of the operator discriminating in favour of its own retail unit.⁹⁷

H. Conclusion

104. Mandating wholesale access to radio access networks by Full MVNOs to meet the regulatory policy objectives is a reasonable and common strategy in multiple markets around the world, and it will work in Canada to stimulate competition and bring benefits to consumers. At the end of the day, the MVNO model will produce the desired outcomes while reconciling the competing goals of the 2006 and 2019 Policy Directions.
105. Mandating wholesale access to radio access networks by Full MVNOs to meet the regulatory policy objectives is a reasonable and common strategy in multiple markets around the world, and it will work in Canada to stimulate competition and bring benefits to consumers. At the end of the day, the MVNO model will produce the desired outcomes while reconciling the competing goals of the 2006 and 2019 Policy Directions.
106. In these further comments in this proceeding, TekSavvy has shown that not only will consumers see the benefits of lower rates, more affordable services, increased choice, and innovative products, but MNOs will also have the ability to absorb the proposed changes, maintain very healthy profits, and continue investing in network infrastructure. Moreover, a climate in which healthy competitors can grow will also enjoy the benefits of increased investment by competitors in facilities and intangible assets.
107. As Canada's largest wholesale competitor with years of investing in telecommunications and successfully bringing the benefits of wholesale-based competition to consumers,

⁹⁷ TekSavvy Attachment 1, Ish Omar for Webb Henderson, "The role of MVNOs in Australia's mobile market", 22 November 2019, at p. 10 ["Webb Henderson Study"].

TekSavvy is very well positioned to be a Full MVNO. While our hope is that many competitors will succeed as MVNO-based service providers, in our submission TekSavvy will be a bellwether for a successful competitive environment.

108. However, TekSavvy also warns the Commission to take note of the ability of and tendency for dominant wireline incumbents with market power to manipulate the competitive environment, both by leveraging their control over innumerable inputs to pressure competitors, and by manipulating the rate setting process in attempts to ensure that fair rates are not set or, if they are, they never come into force. Establishing a new wholesale regime in the form of MVNO presents the Commission with an opportunity to rebalance incentives to provide an equal playing field to all retail players.
109. Finally, TekSavvy strongly encourages the Commission to consider functional or structural separation in addition to mandating wholesale access for full MVNOs, given the historical intransigence of Canada's incumbents with respect to wholesale regulation.

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