In the matter of

Telecom Notice of Consultation CRTC 2019-57

Review of mobile wireless services

Final Submission

Canadian Wireless Telecommunications Association

July 15, 2020

Executive Summary

E1. Under policies supporting facilities-based competition, sustainable competition in the wireless retail market has developed, resulting in continuing growth in the number of wireless subscribers, increasing data consumption, declining prices and more choice for consumers. Equally important, continuing innovation and investment by Canada's facilities-based carriers is providing Canadians with even faster and higher quality networks, as well as broader coverage and even more reliable services. Given these positive outcomes, it makes no sense to reverse course and implement policies that prefer service-based competition, or introduce retail price controls.

E2. Regulatory intervention is justifiable only where there is a market failure and where the proposed intervention would result in a better outcome than the status quo. As the positive consumer outcomes listed in the preceding paragraph illustrates, there is no market failure that requires the Commission to depart from its long-standing and sound regulatory framework based on facilities –based competition or to implement retail price controls.

E3. Not only are such measures unnecessary, they would lead to worse outcomes for Canadians. The Commission has concluded on four different occasions since 2015 that mandating wholesale MVNO network access would have a negative impact on investment that outweighs any potential benefits. The record of this proceeding confirms those findings.

E4. The alleged benefits of mandating MVNO access are purely speculative. There is no credible evidence that having more MVNOs leads to lower prices or more sustainable competition. On the other hand, there is much evidence that such a mandate, under any of the models proposed in this proceeding, would undermine investment, risk widening the rural and urban digital divide, and threaten the timely the rollout of 5G networks.

E5. Mandating MVNO network access would also disproportionately harm the regional facilities-based new entrants; the very companies who have been credited with helping raise the competitive intensity and lowering prices in the Canadian wireless market.

E6. With respect to retail price regulation, such a measure is a drastic, highly-intrusive and exceedingly rare form of regulatory intervention. In the case of wireless services, we are not aware of any country that has regulated the retail rates charged by non-state-owned carriers. Nor have the proponents of retail price regulation identified an example of retail rate regulation in any other country or any valid reason why the Commission should intervene and make Canada a global outlier. On the contrary, a competitive market offering a wide-range of wireless plans to suit Canadians' needs and budgets has developed in Canada without the need for regulatory intervention.

E7. In addition to being unprecedented, the proposals put forward in this proceeding for retail price regulation are unrealistic and have been constructed without any economic analysis of their feasibility or impact. Rather, their proponents have based their proposals on consumer surveys which, on close inspection, do not support their arguments that the proposed plans are necessary to meet the needs of Canadians.

E8. As Canada emerges from the health and financial crisis caused by COVID-19, the wireless industry will play an important role in Canada's economic recovery. The demand for high-quality, reliable wireless services will continue to grow. The need for 5G to serve as the platform for innovation and economic prosperity will be more important than ever. But the wireless industry can only fulfill this role if the Commission maintains a regulatory environment that encourages significant investment in Canada's mobile wireless future.

E9. The record of this proceeding supports the Commission's historical approach of not deviating from facilities-based competition as the foundation for achieving the Commission's and government's policy objectives of sustainable competition, reasonable prices, innovative services and continued investment in high-quality telecommunication services in all regions of the country. Such approach not only fulfills the policy objectives set forth in s.7 of the *Telecommunications Act*, it is also satisfies the policy directions to the Commission made in 2006 and 2019.

Introduction

1. Pursuant to the procedure outlined in Telecom Notice of Consultation CRTC 2019-57-3, CWTA provides its final written comments to the proceeding.

2. In setting out the scope of the Consultation, the Commission stated that its focus "is to ensure that its mobile wireless service regulatory framework facilitates <u>sustainable competition</u> that provides <u>reasonable prices</u> and innovative services, as well as <u>continued investment</u> in high-quality mobile wireless networks in all regions of the country."[1] (emphasis added).

3. Some interveners to this proceeding have argued that the current regulatory framework is not meeting the above objectives and that the Commission should intervene in the wireless retail market by (i) mandating wholesale MVNO network access, and/or (ii) mandating the establishment of one or more wireless service plans with regulated retail pricing. Both of these suggested measures are unwarranted and not supported by the evidence in this proceeding.

4. Regulatory intervention is justifiable only where there is a market failure and where the intervention would result in a better outcome than the status quo. There is no market failure that requires the Commission to depart from its long-standing and sound preference for facilities-based competition or to regulate the retail price of wireless services.

---

[1] Telecom Notice of Consultation CRTC 2019-57 ("Notice of Consultation"), at paragraph 22.

5. Not only are such measures unnecessary, they would lead to worse outcomes for the market and Canadians. In particular, they would disproportionately harm the regional facilities-based new entrants ("Regional Providers"), the very companies who have been credited with helping raise the competitive intensity and lowering prices in the Canadian wireless market, and impair investment in Canada's wireless infrastructure; infrastructure that is critical to extending connectivity to underserved areas, introducing 5G to Canada, and enabling Canada's economic recovery from the impact of the COVID-19 pandemic.

6. Under policies supporting facilities-based competition, sustainable competition in the wireless retail market has developed, resulting in continuing growth in the number of wireless subscribers, increasing data consumption, declining prices and offering more choice for consumers. Equally important, continuing innovation and investment by Canada's facilities-based carriers is providing Canadians with even faster and higher quality networks, as well as broader coverage and even more reliable services. Given this positive momentum, it makes no sense to reverse course and implement policies that prefer service-based competition, such as mandating MVNO wholesale access, or introduce retail price controls.

PART 1: NO MARKET FAILURE REQUIRING A DEVIATION FROM FACILITIES-BASED COMPETITION MODEL OR RETAIL PRICE REGULATION

A. Facilities-based Competition is Working

7. The record of this proceeding shows that, under long-standing and sound policies that support facilities-based competition, sustainable competition in the wireless retail market continues to grow. Whether one looks at signs of rivalrous behavior, market share, price reductions and larger data allotments, adoption rates, data usage, innovation, investment, or coverage and performance, the evidence shows that facilities-based competition is producing positive outcomes for Canadians.

Rivalrous Behaviour

8. The Commission has stated that evidence of rivalrous behaviour is important when assessing the competitiveness of the market, and that rivalrous behaviour is not limited to falling prices, but also includes "vigorous and aggressive marketing activities, or an expanding scope of activities by competitors in terms of products, services and geographic boundaries".[2]

9. All of these factors are present in Canada's retail wireless market. Evidence of this intense competition includes:

[2] CRTC 94-19, Review of Regulatory Framework

a) Wireless providers are continually introducing new and innovative service offerings, including price discounts, data bonuses, bill and device credits, and additional line discounts; all in an effort to win new subscribers;
b) From January 2017 to May 2019 there were more than 14,000 individual price reductions made to hardware and service plans sold by wireless carriers;[3]
c) The frequency of new offerings and rivalry between carriers have prompted independent websites like Mobilesyrup, whistleout.ca and planhub.ca to regularly publish updates to wireless service plan offerings and promotions;
d) Since 2015, each year five to six million wireless customers have switched providers, with six million, or 17% of the Canadian market, switching in 2019;[4]

- Wireless providers have launched new brands, such as Lucky Mobile and Fizz, with innovative service offerings that target consumers seeking lower priced services;
- Xplornet has launched a new LTE wireless service in Manitoba under the brand Xplore Mobile, providing Manitobans a 4th facilities-based wireless service provider from which to choose; and

e) All wireless providers spend significant amounts on marketing and advertising campaigns and retail locations in an effort to differentiate their services.

10. Facilities-based providers do not compete on price alone. They also compete on quality and coverage, a key element that service-based competition does not provide. To do so, facilities-based providers continually invest in improving and expanding their wireless networks so they can enter new markets and offer improved quality of services. For example, Regional Providers have expanded their LTE coverage from 31% to 75% since 2015[5], with Freedom launching in twenty new cities, towns and remote communities in B.C., Alberta and Ontario in eighteen months, providing more choice and the benefits of increased competition to over 1.4 million additional Canadians.

11. Vigorous competition is also evidenced in the comments by wireless providers and financial analysts over the past 2 years:

- *January 2019: "On the competitive marketplace around wireless, I would say that Q4, once again, was an intensive competitive period for the industry. It started early in the quarter and it just kept going on a regular and consistent basis in terms of competition and competitive offers setting up" – Rogers CEO Joe Natale, Rogers Q418 Conference Call, January 24, 2019;*[6]

---

[3] Bell Mobility, May 15, 2019 submission, para. 87.
[4] Transcript, Hearing February 26, 2020, Volume 7, Rogers para. 9312.
[5] Transcript, Hearing February 19, 2020, Bell Mobility at para. 1814.
[6] https://1vjoxz2ghhkclty8c1wjich1-wpengine.netdna-ssl.com/wp-content/uploads/2018/03/Rogers-Communications-Q418-Call-Transcript-1.pdf at p.13.

- *April 2019: "[W]e believe the slower ARPU growth trend…reflect a more competitive market that will likely intensify further as we go through 2019." ScotiaBank;*[7]

- *September 2019: "…. the recent back to school period has been one of the most competitive periods in the past decade driven by facility based competitors such as Shaw/Freedom, Quebecor/ Videotron and Eastlink." Scotiabank;* [8] *and*

b) January 2020: "Our recent channel checks and discussions with management lead us to conclude that competitive intensity in the Canadian wireless market remains intense, and above historical norms…. This intensity has continued and arguably even accelerated during the holiday season." TD Securities[9]

Less Concentration - More Competition

12. The retail wireless market in Canada is less concentrated than the wireless markets in all but two developed countries; Denmark and Sweden.[10] While increasing market concentration is occurring in markets like the U.S., the reverse is occurring in Canada. Canadians in each province are now served by at least four wireless carriers. When one includes flanker brands and MVNOs, there are approximately 20 wireless brands in Canada, each striving to differentiate themselves from one another by offering a wide variety of wireless plans at different price points.

13. Much of this increase in competition has been driven by the Regional Providers who, encouraged by government policies that recognize the importance of facilities-based competition, have made, and continue to make, significant investments in acquiring spectrum and building and expanding their wireless networks. These investments, and the resulting ownership of their own network infrastructure, have enabled Regional Providers to offer innovative and competitive service plans with positive results.

14. In the past five years, Videotron's customer base has almost doubled to 1.3 million, while in just a few years Freedom has grown its customer base to over 1.7 million.[11] More importantly, in 2019, Freedom and Videotron accounted for 33% of net new customer additions.[12] As noted by Shaw, it would not have been able to offer its most innovative and disruptive service plan, the Big Gig plan, had it not owned its own network.[13] Service-based competition cannot replicate this level of innovation.

---

[7] Scotiabank, *Daily Edge: Q1: Good Execution on Churn, but ARPU and Subs Were Lower Than Expected,* April 18. 2019, p.1
[8] Scotiabank, *Daily Edge: Liberal Party Promises to Reduce Wireless Pricing,* September 23, 2019, p.1.
[9] TD Securities, *Industry Insights: Intense Competition Equals Lower Estimates/Targets*, January 3, 2020, p.1.
[10] Transcript, Hearing February 20, 2020, TELUS, testimony of Dr. Crandall at para. 3636. The expert witness for the Manitoba Coalition also acknowledged that the Canadian wireless industry is not an outlier in terms of concentration – at Transcript, Hearing February 24, 2020 para. 6836.
[11] CWTA statistics compiled from company public records.
[12] Transcript, Hearing February 26, 2020, Rogers at para. 9313.
[13] Transcript, Hearing February 18, 2020, Shaw at para. 643 .

15. While much has been made by some intervenors regarding the number of MVNOs in countries such as Australia, what is overlooked is that their market share is often no greater than the market share of the Regional Providers in Canada. For example, the cumulative market share of MVNOs in Australia is approximately 13%[14], which is almost the same as that of the Regional Providers.

16. In addition, while MNOs in some countries largely use voluntary MVNO arrangements to target niche markets and gain market share for their networks, Canadian carriers have made a greater use of flanker brands to compete for more cost-conscious subscribers. As a result, as shown in Figure 1 below, when one considers the cumulative market share of independent MVNOs and flanker brands, the market share of these entities is much higher in Canada than most other countries.

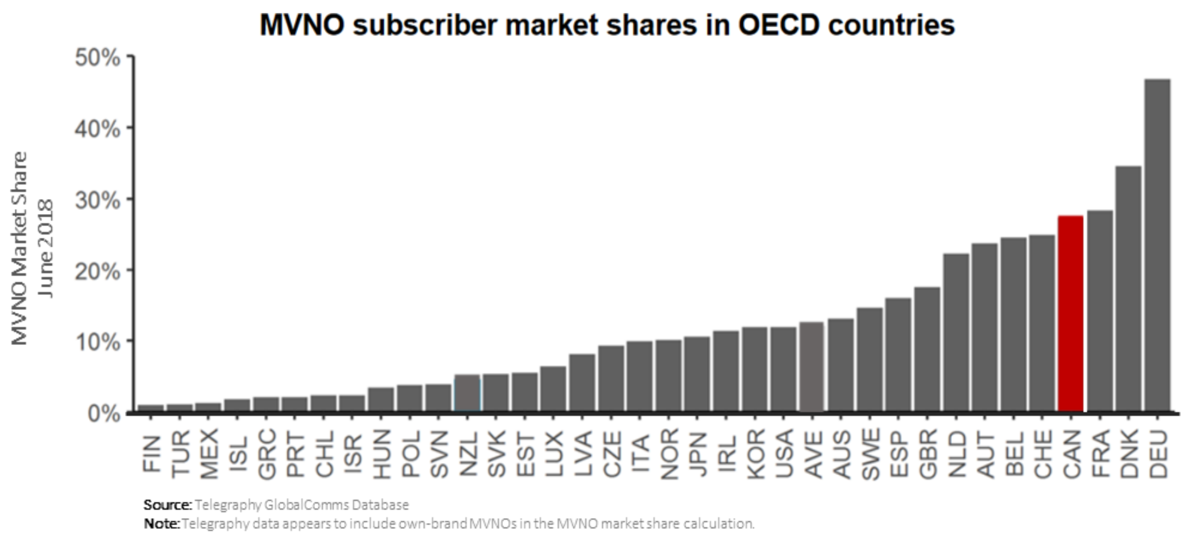


Figure 1: MVNO subscriber market shares (OECD)[15]

17. During the public hearings in February, the Commission raised a concern that Canadians may lack awareness of flanker brands. These comments were based on results of the January 2020 survey conducted on behalf of the Commission. With respect, we do not think that the survey results support such concerns.

18. For example, of respondents who said they do not use a flanker brand and would not consider switching to one, only 5% said it was because they were "unfamiliar with flankers". When one includes respondents who do use a flanker brand or would consider switching to one, only 2% of all survey respondents claimed unfamiliarity with flanker brands.

[14] See Figure 1 below.

[15] CWTA May 15, 2029 intervention para. 41, reproducing chart from *Competitive effects of MVNOs and assessment of regulated MVNO access*, NERA Economic Consulting, 26 October 2018 page 7, figure 4

19. The visibility and success of flanker brands is reflected in the market share that flanker brands have been able to acquire. For example, TELUS testified that its flanker brand, Public Mobile, is its fastest growing brand.[16]

Lower Prices and Larger Service Baskets

20. The retail wireless market has seen frequent and significant declines in prices, as well as larger data plans at no additional cost and the elimination of overage fees for many new plans. Importantly, these reductions have been the result of competition between facilities-based wireless providers, and did not require regulatory intervention.

21. Examples of price declines and larger service baskets include:

   a) The Commission's Communication Service Pricing in Canada report which shows that prices for mobile service plans in the service baskets measured declined from 2016-2018 by an average of 28%, with plans in the unlimited talk and text and 5GB data category declining by an average of 35%;[17]
   b) The Commission's 2019 Communications Monitoring Report shows that the price per GB of wireless data declined by 56% from 2015 to 2018;[18]
   c) Starting in June 2019, the national wireless providers each announced unlimited data plans with no overage fees. These plans came after Freedom launched its Big Gig plans in 2018 which also offer large data allotments and no overage fees.[19] Under these plans, users receive a large allotment of high-speed data (e.g. 10GB, 20GB), and the speed is reduced after they exceed that allotment[20] in a given month, but they incur no data overage fees.
   d) The entry-level unlimited data plans with 10GB of high-speed data are available from \$50 to \$75 per month. This represents a huge increase in value when compared to Innovation, Science and Economic Development Canada's (ISED) 2018 pricing study which stated that as of mid-2018, on average, a \$75 plan only provided 2GB of data;[21]
   e) The 2019 Wall Report, commissioned by ISED, and released following the public hearings in this proceeding, notes dramatic price reductions between May 2019 and September 2019 with average price reductions in the 1GB, 2GB and 5GB service baskets falling 42%, 29% and 25% over a four month period;[22] and

---

[16] Transcript, Hearing February 20, 2020, para. 3826
[17] https://crtc.gc.ca/eng/publications/reports/policymonitoring/2019/cmr2.htm#a1.0
[18] 2019 CRTC Communications Monitoring Report: "The increase in data demand and usage from 2014 to 2018 vastly outpaced the revenues derived from data service, which resulted in lower revenues per GB per month. The average revenue per 1GB of data usage per month has been declining since this metric was first reported in 2015" (p.264)
[19] Other providers that offer plans that do not charge overage fees include SaskTel, Lucky Mobile and Chatr Wireless.
[20] Plus any bonus data allotment that may be part of a promotion or other offer.
[21] https://www.ic.gc.ca/eic/site/693.nsf/eng/00169.html - uses data collected in June/July 2018.
[22] https://www.ic.gc.ca/eic/site/693.nsf/eng/00182.html, Section 3.5. See also Bell Mobility Response to Undertaking – Bell Mobility (CRTC) 19Feb20-2 TNC 2019-57

f) In addition to unlimited data plans, wireless carriers continue to introduce new and innovative offerings, such as double the data with no price increase, large bonus data allotments (e.g. 100GB) that can be used throughout the year, other forms of data overage protection, and new forms of device financing.

Significant Investment in Wireless Network Infrastructure

22. Canada's telecommunication policy has long recognized the importance of investment in wireless network infrastructure and facilities-based competition as the best way to encourage such investment. Only through significant investment by Canada's facilities-based wireless operators can Canadians be assured robust, secure, world-class wireless networks that satisfy their increasing demands for wireless connectivity and allow them to maximize their participation in the digital economy. Canada's facilities-based wireless providers have embraced the challenge of building, and continuing to expand and upgrade, such networks, consistent with the government's policy.

23. Canada's facilities-based wireless providers have invested close to $70 billion in wireless infrastructure and acquiring spectrum rights[23], with annual capital expenditures in the last couple of years averaging approximately $3 billion per year. This does not include the additional billions of dollars spent on the roll-out of fibre which supports wireless connectivity but is mostly accounted for as a wireline capital expense. In addition, over $1 billion a year is being spent by facilities-based providers on research and development to help create the latest innovations in telecommunications.[24] As a result of these investments, Canadians enjoy world-class wireless networks which consistently rank amongst the best performing and most expansive networks in the world.

24. It has been suggested by some intervenors that Canadian wireless providers invest a smaller proportion of their revenues in network infrastructure than their international counterparts.[25] This argument is based on capital intensity ratios which can be misleading when used to compare level of investment between countries. In particular, capital intensity does not include spectrum costs. For example, over the last six years, Rogers spent $6.1 billion in traditional wireless capital expenditures and another $6 billion in spectrum costs. In contrast, Australia's largest wireless provider, Telstra, spent approximately CA$1.3 billion over the same six-year period.[26]

[23] https://www.cwta.ca/facts-figures/ - based on data from Nordicity, CRTC, CWTA and BAML.
[24] Research Infosource Inc: Canada's Top 100 Corporate R&D Spenders 2018, as cited in CWTA May 15, 2019 submission at para.49.
[25] Transcript, Hearing February 24, 2020, Volume 5, Manitoba Coalition at para 6845. Also Manitoba Coalition, Further Comments.
[26] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para. 9490

25. A recent study by Christensen Associates looking at the key cost drivers of wireless services in Canada found that the cost of "Capacity" (low-band) spectrum in Canada was 424% higher than the cost for a group of benchmark countries consisting of Japan, Germany, France, UK, Italy, and Australia, and 65% more expensive than in the U.S.. [27] For "Coverage" (mid-band) spectrum, costs in Canada were 201% higher than the benchmark countries and 556% higher than the United States.[28] A new report by PwC also shows that "Canadian telecos have historically played their part in ensuring a healthy industry by investing 40% more on CapEx as a percentage of revenue versus comparison countries."[29]

26. In addition to omitting spectrum costs, most international capital intensity comparisons do not include the capital expenditures made by the Regional Providers. These new entrants have spent aggressively to expand their networks and gain subscribers. For example, Freedom Mobile's capital intensity is approximately 55% [30]

27. A better investment comparison is the amount invested per subscriber. The above-cited Christensen Associates study found that capital expenditures per subscriber in Canada were 48% higher than a group of benchmark countries consisting of Japan, Germany, France, UK, Italy, Australia) and slightly less (10%) than the United States.[31]

28. This is consistent with the findings of Dr. Crandall which show that Canada's wireless carriers consistently invest close to twice as much per subscriber as their European counterparts, which "is reflected in more rapid deployment of LTE than in Europe."[32]

Superior Quality and Coverage

29. As a result of the aforementioned investments, Canada's mobile wireless networks have long been regarded as world-class, with download speeds now ranked fastest in the world and more than twice as fast as countries such as the U.S., U.K., Germany, France and Italy.[33] Canada's wireless networks performance is not limited to urban centres. According to Opensignal, despite having a population spread across a vast area, network coverage and performance in Canada's rural areas is also among the best in the world.[34]

[27] Christensen Associates, *Key Cost Drivers of Wireless Services in Canada*, January 9, 2020, p1 ("Key Cost Drivers"). Submitted as evidence by TELUS as Attachment 1 to Response to Undertaking TELUS(CRTC)20Feb20-9.
[28] *Ibid.* p.1.
[29] PwC, *The importance of a healthy telecommunications industry to Canada's high tech success*, July 2020, p.4. https://www.pwc.com/ca/en/communications/publications/761378-the-importance-of-a-healthy-telecommunications-industry-to-canadas-high-tech-success.pdf
[30] Transcript, Hearing February 18, 2020, Volume 1, Shaw at para. 651.
[31] Key Cost Drivers, p.1.
[32] Dr. Crandall, *An Analysis of the Performance of the Canadian Mobile Wireless Industry*, para.46 – filed as Appendix A to TELUS intervention dated May15, 2019.
[33] https://www.opensignal.com/reports/2020/05/global-state-of-the-mobile-network as cited in CWTA Response to RFI Letter of May 15, 2020, para. 7.
[34] CWTA Further Comments, November 22, 2019, para. 21, citing *The state of rural Canada's Mobile Network Experience,* Opensignal.

30. Opensignal observed that network performance in rural Canada, while understandably slower than in urban centres, "still outperforms the average speeds of many countries in the world including the USA".[35] In fact, Opensignal states that "[i]f rural Canada were a country, it would rank 12th in our Download Speed Experience ranking, with our rural Canadian users on average seeing faster 4G download speeds than our users in Sweden, New Zealand, France, and 73 of the other countries we reported on."[36]

31. Despite the impressive reach and performance of Canada's wireless networks, there is still more work to be done. Increasing the capacity of our wireless networks to deal with the increasing demand for wireless data, expanding networks to reach underserved rural communities, and deploying 5G wireless technologies demands continuing massive private sector investments from facilities-based wireless providers.

High Consumer Satisfaction

32. Some intervenors submitted results of consumer surveys as evidence of wide-spread consumer dissatisfaction, but most of the surveys were not random or representative of the Canadian or target populations. For example, the Province of British Columbia survey is not a randomly drawn sample of British Columbians. In soliciting participation, the B.C. government expressly sought out participation from people who had complaints about the wireless industry (e.g. statements such as "ever had a charge on your cellphone bill you thought was unfair?"). This prompted news stories with lead-ins like, "If you have a complaint about your cellphone bill, the B.C. government wants to hear it."[37] Rather than it being a random, representative survey of citizens' perceptions of the wireless industry, it is a survey of people, about 0.3% of the population of the province, who have self-selected themselves as having a complaint.

33. In contrast, the Commission conducted a randomized, representative survey[38] that provided a much more accurate picture of Canadians' experiences and perceptions of the wireless industry.

34. In the CRTC survey, only 56% of respondents who had not switched service providers thought it would be very easy or somewhat easy. In contrast, of those who had actually switched providers, 81% said it was easy or somewhat easy. Facts and experience are more meaningful than perceptions.

---

[35] *Ibid.* para. 22.
[36] *Ibid.* para. 22.
[37] https://globalnews.ca/news/5331444/british-columbia-public-feedback-cellphone-bills/
[38] https://crtc.gc.ca/eng/publications/reports/por/ph/por.html. This is survey should not be confused with the non-randomized, unscientific online survey also conducted by the CRTC. Due to its lack of scientific methodology this latter survey should be disregarded.

35. When it comes to Canadians' experiences with their cell phone provider, the CRTC survey found that 83% of Canadians are satisfied with their provider. Interestingly, respondents with lower household incomes (under $40k) reported a higher level of satisfaction (86%) than those reporting a household income of $100k and above (80%). Fewer than one in five Canadians are somewhat or very dissatisfied with their cell phone provider. These are clearly not the responses one would expect if, as some interveners have suggested, facilities-based competition is failing Canadians.

Leading the Response to the COVID-19 Pandemic and Enabling Economic Recovery

36. As COVID-19 spread across Canada, Canadian businesses, government offices, health care providers and schools were forced to close or substantially restrict physical access and move most of their services online. Due to years of investment in network infrastructure and operations, Canada's networks showed incredible resiliency in the face of intensified traffic and altered usage patterns.

37. This pandemic has not only highlighted the importance of high-quality, resilient telecom services, it has illustrated how crucial policies based on facilities-based competition are to enabling such positive outcomes. If policies such as mandated MVNO wholesale access or regulated prices had been in place, facilities-based providers would not have had the same capacity or resources to respond to the crisis. Their networks would likely have suffered in terms of quality and/or coverage. They would have been unable to add more capacity to deal with unanticipated surges in demand. Equally important, MVNOs, dependent on the networks of their provider, would not have been able to offer additional help to Canadians during this crisis.

38. The pandemic has also put a brighter spotlight on the need for new and improved broadband capabilities in rural and other underserved communities. As a result of the investments made by facilities-based network operators, Canada's network performance and coverage in rural Canada is superior to most other countries. But there is more work that needs to be done. Facilities-based network operators are a fundamental part of solving this important public policy challenge, but they can only do so if there is a regulatory environment that makes possible the level of investment necessary to expand and upgrade network infrastructure. These capital investments are in addition to the billions of dollars that network operators will be required to invest to secure rights to mid-band and high-band spectrum that will be made available by ISED over the next three years.

B. Correcting Inaccurate Claims by Advocates of Regulatory Intervention

39. Despite ample evidence that there is no market failure requiring the Commission to deviate from its long-standing facilities-based competition model, several intervenors have suggested otherwise, arguing for the Commission to adopt new regulatory policies aimed purely at reducing wireless prices. While acknowledging that Canada's wireless networks are among the best in the world and that prices are declining, their arguments for regulatory change are largely based on one or more of the following assertions: (i) prices in Canada are higher than in other jurisdictions; (ii) prices are not dropping as quickly as in other jurisdictions; (iii) Canada has lower penetration rates and data usage as a result of high price; (iv) Canadians spend a higher percentage of their disposable income on wireless services; and (v) Canadian wireless providers make extraordinary profits. The evidence in this proceeding shows that none of these assertions are accurate.

Canadian Prices are Comparable to Peer Countries

40. To support their claim that prices in Canada are unjustifiably higher than in other jurisdictions, intervenors such as the Manitoba Coalition cite various international price comparison studies. However, most international price comparison studies are misleading as a result of faulty methodology and/or a reliance on limited or outdated data.

41. Among the methodological problems, most studies consist of "apples-to-oranges" comparisons that assume that every plan is identical so long as they share one attribute in common (e.g. data allotment). They ignore the differences in quality and coverage, as well as the differences between countries in the cost of delivering wireless services. The price of wireless plans cannot be properly compared without considering elements such as network performance and plan attributes, as well as the impact that labour costs, country size and population density, climate, spectrum costs, and currency exchanges have on retail price.

42. Price comparisons also assume that consumers only purchase one service plan when consumers in some countries purchase more than one plan to address issues like network coverage limitations and roaming fees. These studies also assume that consumers do not shop around for the best available plan or for promotions. They often also ignore the wireless plans offered by non-national service providers.

43. A variety of these flaws are present in the studies cited by intervenors in this proceeding[39]:

Nordicity/Wall Report (commissioned by ISED)[40]

- Relies on artificial levels (or baskets) that do not reflect plans made available by service providers to meet consumer demand
- Uses whatever plan meets or exceeds basket criteria thus often comparing drastically different plans
- Only surveys 6 Canadian cities, 4 U.S. cities, and 1 city from other countries
- Methodology substantially overstates prices in Canada[41]
- Even where it identifies a legitimate difference in price it makes no effort to identify factors that explain the differences
- As Nordicity stated in its 2016 study, which employed the same methodology, because of the limited sample size, "the prices cited for Canada, US or the international jurisdictions are not meant to be statistically representative of the individual countries as a whole."[42] Also listed are number of other caveats including the fact they did not take into account any factors that could explain for differences in prices

Rewheel

- Ignores all plan differences except monthly data allowance
- Ignores all network quality and country cost differences (e.g. a plan that only provides 3Mb/s speed is considered the same as one that provides 50Mb/s)
- Omits family and prepaid plans
- Ignores price elements including multiple plan requirements and activation fees
- Unclear how they treat plans that include device fees
- Fails to adjust for purchasing power parity (PPP)
- Includes taxes
- A detailed study published by the International Center for Law & Economics (ICLE) concluded that the Rewheel study is "…a careless mish-mash of data points from which no reliable conclusion can be drawn."[43]

[39] All of these studies are referenced in Klass & Winseck, *Competition in Canadian mobile wireless markets: Pricing problems and wholesale solutions*, filed as Attachment A to the May 15, 2019 intervention by the Manitoba Coalition.
[40] See also CWTA Further Comments, November 22, 2019 paras 47-57 for further discussion on the problems with international price comparisons.
[41] See also Bell Mobility Response to Undertaking – Bell Mobility (CRTC) 19Feb20-2 TNC 2019-57.
[42] https://crtc.gc.ca/eng/publications/reports/compar/compar2016.htm#Caveats – see Caveats to the Interpretation of the Findings of this Study.
[43] Fruits, Hurwitz, Manne, Morris and Stapp, *A Review of the Empirical Evidence on the Effects of Market Concentration and Mergers in the Wireless Communications Industry*, International Center for Law & Economics, p.29 https://laweconcenter.org/wp-content/uploads/2019/09/ICLE-Telco_Merger_Lit_Review_Jud_Rpt_FINAL.pdf

Tefficient

- Has stopped including Canada in its comparisons citing delays in getting up-to-date pricing information
- Had typically been using prices for Canada that were a year or more older than the prices for other jurisdictions

OECD Broadband Portal

- Data is from May 2017
- Looks at the prices from only 2 carriers
- Unclear how they treat plans that include device subsidy
- Includes taxes

International Telecommunications Union (ITU)

- Uses 2017 data
- Compares only 2 service baskets - "handset-based prepaid service plans that include at least 500mb" and "mobile broadband laptop-based service plans that include at least 1GB of data"

Federal Communications Commission

- Uses 2017 data
- Does not consider flanker brand or regional provider plans
- Findings are distorted by using the "mean" plan available, disregarding cheaper plans that are available to customers
- Claims to use a hedonic pricing model that accounts for some factors affecting price, but factors considered are limited to quality, income, and urban population density.

Telecommunications Policy 2019

- Uses data from 2015
- Looks at prices in one city per country
- Considers some factors like service quality, but does not consider other factors that impact cost of delivering service

44. To be useful, a price comparison study must not only use current and representative pricing information, it must also consider external factors that have an impact on price. Even the Manitoba Coalition's expert acknowledges that such an approach, referred to as a hedonic or regressive study, is the more reliable methodology.[44] Unfortunately, the Manitoba Coalition's example of a hedonic study is a report published in Telecommunications Policy 2019 that

[44] Klass & Winseck at p.47.

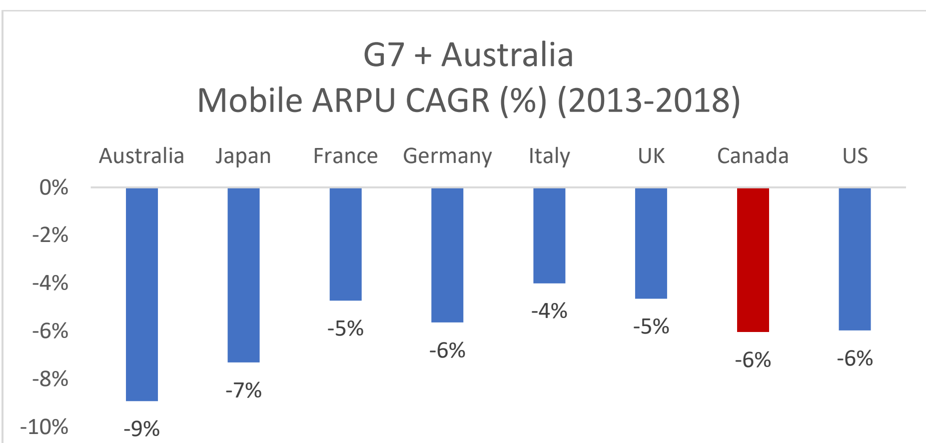
considers a very limited set of factors and uses data that is almost five years old. Fortunately, there is a more current and robust hedonic study available.

45. The study, titled *A Comparison of Mobile Wireless Value Proposition*[45], was commissioned by U.S. industry association, CTIA, and conducted by NERA Economic Consulting. It was designed to show how the U.S. compares against international peers when it comes to the value mobile wireless users receive upon purchase and use of wireless services. It examined a total of 1,544 rate plans of 213 mobile operators in 36 countries of the Organization for Economic Co-operation and Development (OECD) and, in addition to price, took into consideration network quality and country attributes such as size, rate of urbanization, and labour rates, all of which affect the cost of delivering wireless services.

46. Based on all of those factors, the study shows that Canadians get "*more bang for the buck"* with prices in Canada being approximately 4.7% lower than the average price that other G7 countries and Australia would charge for the same value proposition.[46] The study also ranked Canada has having the highest value proposition among "Leading Democracies", identified as Canada, U.S., Germany, Austria, New Zealand, United Kingdom, Ireland, Netherlands and Australia.[47]

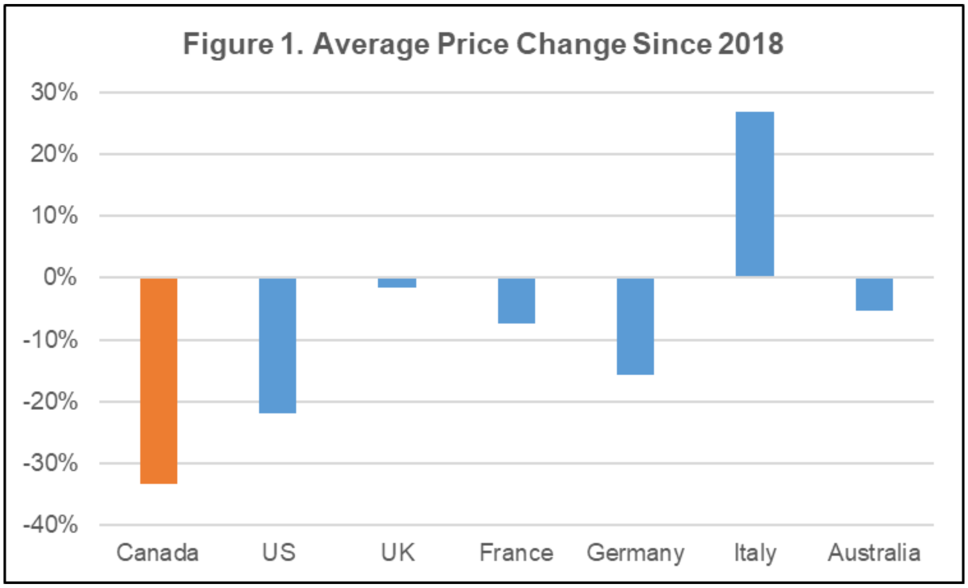
Prices in Canada are falling at similar or faster rates than peer countries

47. While acknowledging that prices are declining in Canada, some intervenors have argued that prices are not falling as fast as in other countries. On the contrary, compound annual growth rate for ARPU for Canada from 2013-2018 is in-line with that of peer countries:[48]



[45] https://www.nera.com/content/dam/nera/publications/2020/CTIA%20Final%20Study.pdf. Submitted as evidence to the proceeding by TELUS pursuant to Response to Undertaking TELUS(CRTC)20Feb20-11.
[46] *Ibid.* p.20
[47] *Ibid.* p.25. See also Dr. Dippon, NERA Economic Consulting, *An Accurate Price Comparison of Communications Services in Canada and Select Foreign Jurisdictions* – Exhibit B to TELUS intervention May 15, 2019.
[48] Chart reproduced from Rogers' Response to Undertakings, Rogers (CRTC)26Feb2020-3, p.4

48. In addition, since 2018, the average price for 1GB, 2GB and 5G service plans has fallen substantially more in Canada than in peer countries:[49]



49. A related claim is that the unlimited data plans offered by Canadian carriers are inferior to unlimited plans offered in countries such as the U.S.. Yet the facts show the opposite to be true. For example, entry-level unlimited plans in Canada are less expensive than entry-level unlimited plans offered by the major wireless carriers in the U.S.. In addition, while Canadian customers of unlimited plans are provided high-speed data for a minimum of 10GB per month, entry-level plans in the U.S. are subject to throttling of speed at any time (i.e. from the first MB used). Finally, while the Canadian unlimited plans are comparable in price, they are vastly superior in quality of service; with Canadian networks providing downloads speeds over twice as fast as those in the United States.[50]

50. The superiority of unlimited data plans in Canada is supported by the findings of a recent study by PwC. In comparing unlimited data plans across the G7 countries based on speed, access to 4G, latency, and price per GB, PwC found that Canada ranked first.[51] The value and cost savings

---

[49] Chart reproduced from Bell Mobility's Response to Undertakings, Bell Mobility (CRTC)19Feb20-2 p.2. In the same Response to Undertaking Bell also notes that the data used in the chart is taken from the 2019 Wall Report and that it appears that the report substantially overstates prices in Canada.

[50] OpenSignal, *The State of Mobile Network Experience 2020: One Year into the 5G Era*. May 2020 - https://www.opensignal.com/sites/opensignal-com/files/data/reports/pdf-only/data-2020-05/state_of_mobile_experience_may_2020_opensignal_3_0.pdf, p7. and p.9 – Canada download speed 59.9 Mbps vs U.S. at 26.7 Mbps. The Download Speed Experience observed by Opensignal in Germany, France, USA, Italy and the UK was 51.8% to 61.6% slower than in Canada.

[51] PwC, *Addendum, Impact of Unlimited Data Plans on Affordability*, (PWC Addendum)January 2020, at p.4, Figure 2 and p.7, Figure 10. Consumers in Italy and France do not have access to unlimited plans. Report submitted as evidence by TELUS pursuant to Response to Undertaking TELUS(CRTC)20Feb20-11.

of unlimited data plans in Canada is further enhanced by the elimination of overage fees. In the same report, PwC estimated that by 2020, Canadians will pay approximately 80% less in overages compared to 2018 levels.[52] PwC further estimates that the price per GB of data will fall 50% by 2020 when compared to 2018 levels and 38% when compared to 2019 levels.[53]

Canadian penetration rates are not lagging

51. With respect to mobile wireless penetration, it has been argued that Canada has a low wireless penetration rate compared to other countries. However, one must be careful when referencing penetration rate data. Many statistics base penetration rate on the number of SIMs. As users in many foreign jurisdictions acquire more than one SIM card in order to avoid termination or roaming charges, or to account for differences in network coverage between carriers, SIM-based penetration rate statistics can be misleading. When only unique subscribers are considered, Canada compares favourably with the U.S. and the E.U., with Canada having 0.78 unique subscribers per capita and the U.S. and the E.U. having 0.85 and 0.86, respectively.[54]

52. In addition, the number of wireless subscribers in Canada continues to increase rapidly. In the last five years, Canada has added five million wireless customers, increasing its penetration rate by 10%.[55] There were close to 1.5 million net additional subscribers added in 2019 alone, bringing the total number of wireless subscribers in Canada to approximately 33.2 million by the end of 2019.[56] In other words, the penetration rate in Canada is close to 90%, or greater than 100% of Canadians aged ten years or older.

53. Not only is the wireless penetration rate in Canada growing year-over-year, the increase is being driven largely by the lowest income quintile. According to the CRTC Communications Monitoring Report 2019, the lowest income quintile penetration grew 6.4% between 2016-2017 compared to the highest income quintile which grew by 0.5% over the same period.[57] This increase in penetration, as well as the overall penetration rate increase, was fostered by facilities-based competition and did not require additional regulatory intervention.

Cost is not the main reason for not using mobile wireless services

54. Some intervenors have argued that the main reason some Canadians do not use mobile wireless services is because of the cost. Again, the evidence does not support this assertion. Using data from Statistics Canada's 2018 Internet Use Survey, Communic@tions Management Inc. found

---

[52] *Ibid.,* at p.3 and p.9.
[53] *Ibid.,* at p.4 and p.9.
[54] Dr. Crandall, *An Analysis of the Performance of the Canadian Mobile Wireless Industry*, para. 35. – filed as Appendix A to TELUS intervention dated May15, 2019
[55] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para. 9324.
[56] https://www.cwta.ca/wp-content/uploads/2020/04/Sub-Stats-2019-Quarter-4-EN-Web-2.pdf
[57] CRTC, *Communications Monitoring Report 2019*, Table 1.3 Canadian landline and mobile service subscribers per 100 households, by income quintile, 2013- 2017 at p. 51.

that, of those surveyed who did not have a smartphone, “no need or no interest” was cited as the reason approximately three times more than “cost of the service or device” across all age groups. [58] The report found that less than 5% of the total population aged 15+ do not have a smartphone, with age being the key factor determining technology adoption.[59]

55. Evidence that cost is not the only driver of mobile wireless adoption is also found in the surveys submitted by intervenors advocating for regulatory intervention to lower prices. The Manitoba Coalition cited the results of an on-line survey and multiple in-person engagement sessions consisting of groups ranging from 6 to 41 participants, each one representing a different category of people, such as: newcomers to Canada; students, seniors and rural; and limited income persons.

56. The on-line survey was conducted by PRA Inc. and is based on responses from 1000 Manitobans.[60] Of those surveyed, 94% had a cell or smartphone. [61] Like the Communic@tions Management Inc. study cited above, the PRA survey found that the likelihood of having a cell/smart phone decreases as age increases.[62] The survey also found that 91% of individuals in the lowest income group had a cell/smartphone compared to 98% of those in the highest income group; a difference that PRA states is “outside the criteria for statistical significance.”[63]

57. Of the 6% of respondents who did not have a cell/smartphone, less than half (49%), or 3% of all respondents, cited cost of monthly plan for the reason for not having a device.[64] This is compared to over half (53%) who said they “don’t need it” and 31% who cited the cost of the device.[65] It is important to note, as this survey reveals, that when Canadians talk about the cost of using mobile wireless services, the cost of the device, which the wireless carriers have little control over, is a big part of the equation.

58. With respect to the participants in the engagement sessions conducted by the Manitoba Coalition, while affordability of wireless devices and plans was a topic discussed in the “Consumers with Limited Income” and “Newcomers to Canada” groups, all participants in the “Consumers with Limited Income” and “Students, Seniors and Rural Consumers” sessions had mobile devices and, of the 41 participants in the “Newcomers to Canada” group, two did not have a mobile device but intended to get one. Topics other than affordability, such as wireless access in rural areas were key themes raised by participants, with affordability not even mentioned as a key concern by the “Students, Seniors and Rural Consumer” group.

[58] Communic@tions Management Inc., *Cellphones, smartphones and the Canadian Consumer*, February 2020, p.15-16.
[59] *Ibid.* p.17.
[60] PRA Inc., *Report on the Telecommunications Survey of Manitobans*, October 8, 2019.
[61] *Ibid.* p7.
[62] *Ibid.* p7.
[63] *Ibid.* p7.
[64] *Ibid.* p.11.
[65] *Ibid.* p.11. Respondents could cite more than one reason.

59. As these results show, the Commission should not assume that price is the only, or even primary, driver of mobile wireless adoption. Other factors, such as lack of interest or digital literacy, often related to age, and the cost of mobile devices play a significant role.

Wireless plans are affordable

60. The Commission should be careful not to confuse the issue of affordability with a general desire to pay less. Consumer survey responses indicating that most consumers would like to receive the same or more services for less money should come as no surprise. Who doesn't want to pay less for any good or service? But wanting to pay less for something does not make it unaffordable.

61. The Commission must not make decisions based on impressions or desires. It must make its decisions on facts, and the record of this proceeding shows that the cost of wireless services is decreasing, that more and more Canadians are subscribing to wireless services, and that many current subscribers have elected to increase their monthly bill because of new wireless plans that offer even more for their dollar. We would not be seeing these positive trends if wireless service plans were unaffordable.

62. As referenced above, the price of wireless services has been steadily declining in recent years. The cost per GB of data in Canada is down by over 50% since 2015 while the Consumer Price Index has increased by almost 10% during that period.[66] In addition, the January to July StatsCan Index Value highlighted a decrease of nearly 8% for cellular services, versus an increase of up to 15% in the average cost of food, shelter and transportation.[67] In other words, while the cost of most goods and services continue to increase, the opposite is happening with wireless services.

63. With respect to affordability, a recent study by PwC looked at total expenditures and its non-discretionary, wireless, and discretionary expenditure components across all income quintiles in Canada from 2010 to 2017. It found that total expenditure and its component expenditures increased across all income quintiles. [68] Most importantly, it found that of the component expenditures, discretionary expenditures increased the most for all income quintiles, including the lowest quintile, which makes "evident that wireless expenditure did not impose an unreasonable burden on the average Canadian households' non-discretionary expenditure across income quintiles from 2010 to 2017 to the extent that it did not require the average household to cut back on the non-discretionary expenditure." [69]

64. In considering a second measure of affordability, PwC concluded that Canada meets the Alliance for Affordable Internet (A4AI) telecom affordability metric which requires 1GB of data to cost

[66] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para. 9316.
[67] Transcript, Hearing February 20, 2020, Volume 3, TELUS at para. 3607.
[68] PwC, *Understanding affordability of consumer mobile wireless services in Canada*, (PwC Understanding Affordability) December 2019, p.10. Filed as evidence pursuant to Response to Undertaking TELUS(CRTC)20Feb20-11.
[69] *Ibid*. p.10.

less than 2.0% of monthly average income of all income quintiles.[70] PwC also found that the average household spends approximately 1.6% of their household income on mobile wireless services, as compared to 2.6% for the U.S. and 2.1% for Australia.[71]

65. Finally, PwC examined how the use of wireless products has reduced consumer expenditures on other products and services, such as landline, postal, photo, audio and video ("wireless-substituted products") and the impact this has on Canadian households' cumulative expenditures on wireless and wireless-substituted products. It found that because of the utility of wireless products, the average Canadian household's cumulative expenditure on wireless and wireless-substituted products declined slightly from 2010-2017, while the cumulative expenditure as a share of adjusted household disposable income declined by a CAGR of 2.2%.[72] In other words, the use of mobile wireless increases disposable income for Canadians.

66. In PwC's Addendum[73] to the study cited above, it concluded that the introduction of unlimited data plans is also expected to drive increased affordability for the average Canadian consumer, by reducing the cost per GB of data by 50% from 2018 levels by the end of 2020, and reduce mobile ARPU as a percentage of adjusted disposable income by 6% in 2020.

Canadians' consumption of mobile data continues to increase significantly

67. Some intervenors have argued that data usage in Canada is below its peers, an indication that prices in Canada are too high and that Canada's retail wireless market is not competitive. What they fail to mention is that differences in data usage between countries can be the result of a variety of factors. Wireless is but one type of connectivity and consumer usage patterns will differ between countries depending on what forms of connectivity are available. Canada is fortunate to have high-quality and widely available wireline and wireless broadband, as well as a high level of public wi-fi. Wireline and public wi-fi connectivity is less widely available and/or of lower quality in many other countries. For example, Australia has high-quality wireless networks, but its nationalized wireline broadband network has been plagued with problems and ranks 63rd in the world.[74] For this reason Australian users may rely more on mobile connectivity, and thus consume more mobile data.

68. In addition, Canadians' consumption of mobile data is steadily increasing. The Commission's Communications Monitoring Report 2019 shows that average data use increased by 23.4% from 2017 to 2018 to an average of 2.5GB per month. More recent reports from wireless service providers show continuing growth in data consumption:

---

[70] *Ibid.* p.5, p.7, p.10, and p.27-28. Filed as evidence pursuant to Response to Undertaking TELUS(CRTC)20Feb20-11.
[71] *Ibid.* p.8 and p.30.
[72] *Ibid.* p.6.
[73] PwC. *Addendum, Impact of Unlimited Data Plans on Affordability,* January 2020 at p.4 and 9, and page 8.
[74] Ookla Global Speed Index, May 2020 https://www.speedtest.net/global-index

a) October 2019: Rogers reported that subscribers to its Infinite plans are using 50% more data, while subscribers to flanker brand, Fido's, Data Overage Protection plans were using 14% more data;
b) November 1, 2019: Bell reported that average mobile data use among subscribers was up to 3.1 GB per month, an increase of 15% YoY – and a 24% increase over the Canadian average reported by the CRTC;
c) November 7, 2019: TELUS reported increased data usage of approximately 50% for subscribers of its Peace of Mind plans; and
d) January 8, 2020: Rogers stated in a meeting with analysts that subscribers to it unlimited plans are using an average of 7GB to 8GB per month.

PwC estimates that in 2020 the average Canadian consumer will consume nearly twice as much data as they did in 2018.[75]

Wireless industry does not generate extraordinary profits

69. The final main argument made by intervenors seeking regulatory intervention is that Canadian wireless providers enjoy unreasonably high profits, and that this is an indication of a lack of competition and prices that are too high. On the contrary, the facts show that the wireless industry in Canada does not generate extraordinary profits.

70. In its first 25 years of existence, Rogers wireless business did not earn a return on its $15B investment in network and spectrum made during that period.[76] Since February 2014 it has invested $12B and its debt has increased by $6B.

71. Since the time Shaw acquired Wind for $1.6B in March 2016 and rebranded it as Freedom Mobile, it has invested approximately $4B in wireless.[77] With its focus on expanding its network and growing subscribers, Freedom has a capital intensity ratio of approximately 55% of service revenue, not including almost $500 million in spectrum purchases. In other words, it "invests more money than [it] makes". [78]

72. TELUS also provided financial data showing that for the period from 2014 to 2019 its consolidated free cash flow after accrued dividends and accrued spectrum was -$6B.[79]

73. Those who argue that Canadian wireless providers generate extraordinary profits typically focus on the EBITDA margins of facilities-based carriers. EBITDA[80] is not an appropriate indicator of profit. It excludes key costs like capital expenditures, interest and income taxes, and spectrum

[75] PwC. *Addendum, Impact of Unlimited Data Plans on Affordability,* January 2020 at p.4 and 9, and page p.7.
[76] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para.9311.
[77] Transcript, Hearing February 18, 2020, Volume 1, Shaw at para. 651.
[78] *Ibid.* para. 652.
[79] TELUS, Response to Undertaking TELUS (CRTC)20Feb20-12.
[80] EBITDA is an acronym for earnings before interest, taxes, depreciation and amortization.

purchases. As Rogers indicated at the public hearings, these costs represent up to 50% of its expenditures.[81]

74. Due to the higher levels of capital investment required to build and maintain Canada's high-quality wireless networks, as well as higher spectrum costs, it is not surprising that the Canadian wireless industry needs to generate higher EBITDA margins than some other countries.[82] But again, a higher EBITDA margin does not mean higher net profits.

75. A more appropriate metric for measuring the financial performance of the wireless industry is return on invested capital (ROIC). ROIC is a profitability ratio that measures the percentage return that a company earns on invested capital. The average ROIC for the last five years for Bell, Rogers, and TELUS was 5.6%, 5.1% and 5% respectively.[83] This is comparable to the ROIC of carriers in other peer countries.[84] Over the same period of time the Canada Pension Plan, known for taking a fairly conservative investment approach and avoiding undue risk, generated a ROIC of 10.1%.[85]

C. Part 1 - Summary

76. There is no market failure that requires the Commission to depart from its long-standing and sound preference for facilities-based competition or to intervene to regulate the retail price of wireless services. The record of this proceeding establishes that the Canadian government's long-standing preference for facilities-based competition, founded on the understanding that it is the only market structure capable of delivering sustainable competition and encouraging the level of investment in network infrastructure that is necessary to deliver high-quality networks and broad coverage, remains sound. Whether one looks at signs of rivalrous behavior, market share, price reductions and larger data allotments, adoption rates, data usage, innovation, investment, or coverage and performance, the evidence shows that facilities-based competition is producing positive outcomes for Canadians.

[81] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para.9327.

[82] See Christensen, *Key Cost Drivers*, cited above for breakdown of cost drivers in Canada compared to other countries, including capex, labour costs, spectrum costs, and a harsher operating environment based on temperature, snowfall, service area, population density, and urban population density.

[83] Rogers Response to Undertaking, Rogers(CRTC)26Feb2020-12.

[84] PwC, *Understanding the likely impacts of MVNOs in Canada, Part 1: Impacts on the Canadian telecom industry and economy,* p.3. PwC calculates that ROIC for telecommunications companies in Canada is lower than the U.S. and Australia, and only marginally higher than Europe. https://www.pwc.com/ca/en/communications/publications/761378-understanding-the-impacts-of-mvnos-in-canada-part-1.pdf

[85] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para. 9326.

PART 2: MANDATED MVNO ACCESS AND/OR PRICE REGULATION: WORSE OUTCOMES FOR CANADIANS

77. As outlined in Part 1, there is no market failure necessitating the Commission deviate from its long-standing support of a facilities-based competition model. In Part 2 we explain that the imposition of mandated wholesale MVNO access and/or retail price regulation suggested by some intervenors would lead to worse, not better, outcomes for Canadians.

A. Mandating Wholesale MVNO Access – The risks outweigh the alleged benefits

78. The Commission has concluded on four different occasions since 2015 that mandating wholesale MNVO network access would have a negative impact on investment that outweighs any potential benefits. The record of this proceeding confirms those findings.

79. The alleged benefits of mandated MVNO access are purely speculative. There is no credible evidence that having more MVNOs in a market or mandating MVNOs leads to lower prices.[86] In addition, the idea that mandated MVNO regimes are widely employed elsewhere is unfounded. Regulatory intervention to mandate MVNO access has been used sparingly[87] and the trend is for less, not more, of such mandates.[88] Imposing an MVNO mandate would put Canada out of step with the rest of the world and risk undermining Canada's enviable position of having increasing facilities-based competition and high levels of investment.

80. To be clear, CWTA does not oppose the existence of MVNOs. However, MVNOs can only have a positive impact if they occur naturally and not through regulatory mandate. In markets with niche segments that are underserved, an MVNO and MNO are sometimes able to develop a mutually beneficial arrangement to provide network access to the MVNO for the purpose of serving the niche market. This has occurred in Canada with MVNOs such as 7-Eleven Speak Out, PC Mobile, Petro-Canada Mobility, Zoomer, DCI wireless and Good2Go Mobile. Mandating MVNO access removes the incentive for MVNOs to innovate and target underserved market niches, and instead puts the benefits of facilities-based competition at risk.

---

[86] *Report on Developments in the Regulation of Wholesale Services for MVNOs in the Rest of the World*, Richard Feasey, Appendix 2 to Rogers Communications Canada initial intervention dated May 15, 2019, para 12: "..MVNOs have had no statistically significant impact on retail prices, particularly low cost tariffs, despite the many claims of potential MVNOs to the contrary." See also NERA Economic Consulting as cited in CWTA May 15, 2019 intervention at paragraph 43.

[87] See evidence of Robert Madelin and Richard Feasey as refrenced in CWTA Further Comments dated November 22, 2019 at para 60.

[88] Transcript, Hearing February 26, 2020, Volume 7, Dr. Feasey at para. 9337.

Negative Impact on Investment

81. The negative impact of mandated MVNO access on investment in wireless infrastructure is well-documented in this proceeding, including in the evidence provided by:

a) Jonathan Addelstein, former Commissioner of the U.S. Federal Communications Commission, who stated that such a mandate "is clearly not warranted when three facilities-based competitors are present, with a fourth ascendant. It is particularly dangerous and ill-advised at the outset of a major new generation of service like 5G that requires large investments…"[89]

b) Dr. Robert Crandall, who concludes that short-term benefits of mandating MVNO access would be "small or nonexistent" while the "cost to the Canadian economy from reduced investment and innovation in the communications sector and related industries would loom large for decades as the European Union is discovering", [90]

c) Dr. Christian Dippon, who similarly concludes that mandated MVNO access would reduce investment and innovation and that the negative impact in investment would not be offset by investments by wholesale access seekers,[91] and

d) Charles Rivers Associates, which concluded that mandating MVNO access "does not improve wireless market outcomes (such as penetration) but has been shown to reduce wireless capex intensity by 17% in the short run and 32.6% in the long run."[92]

82. The negative impact on investment was also acknowledged by the Competition Bureau's expert, Dr. Tasneem Chipty of Matrix Economics who, in her report to the Bureau, stated:

> Economic principles suggest that forcing incumbents to allow competitors to use their infrastructure would likely reduce the incumbent's investment incentives. An MNO's decision to invest in infrastructure is inherently risky – it does not know in advance whether demand will be sufficient to cover the cost of its investment.[93]

83. Dr. Chipty expanded upon the risks of mandating MVNO wholesale access:

> As another academic article explains: "After the incumbent has invested in an asset, entrants can wait to see if an innovation is successful before they enter. Therefore, the incumbent will find its profits reduced in good states by entrants seeking access. Risk-sharing is therefore asymmetric, with the incumbent bearing all of the down side risk but the incumbent and entrant sharing the upside risk. However, the incumbent has made irreversible investments and so must bear the opportunity cost of capital in both good and bad states." As a result, mandating MVNO access may reduce the MNO's incentive to invest in infrastructure by reducing the net expected returns of its prospective infrastructure investments. This kind of erosion of investment incentives would be particularly harmful on the eve of 5G, where incumbents are posed to make significant infrastructure investments.[94]

[89] Appendix B to Bell Mobility's intervention in this proceeding dated May 15, 2019.
[90] Appendix A to TELUS's intervention in this proceeding dated May 15, 2019, para. 64.
[91] Appendix C to TELUS's intervention in this proceeding dated May 15, 2019, para. 84.
[92] Charles River Associates, *The Value of High Quality Networks,* Appendix A to Bell Mobility intervention dated May 15, 2019.
[93] Report Study the State of Competition in the Retail Wireless Marketplace and the Benefits of Additional Competition among Wireless Service Providers, Dr. Tasneem Chipty, Matrix Economics, November 22, 2019 (the "Matrix Report"), paragraph 67
[94] Matrix Report, paragraph 68

84. As Rogers testified, it must spend approximately $1.3B in capital each year to ensure that its network has the capacity to meet the ever-increasing customer demand for mobile data.[95] As the industry enters the 5G era, Rogers, along with other network operators, must spend huge amounts of capital on network equipment and spectrum to roll-out 5G to Canadians. Mandating MVNO wholesale access would result in significantly less revenue from operations, and less money available to expand networks and introduce 5G.

85. It is important to note that all of the MVNO models proposed to the Commission in this proceeding, including the model proposed by the Competition Bureau, would have a negative impact on investment. Accounting for the capital expenditures of only Bell, Rogers, TELUS and Freedom, an "average" expected impact of the types of MVNO mandate that have been tried elsewhere is estimated to have an annual negative impact on wireless capital expenditures of $600 million (or 17%) in the short-run, and in excess of $1 billion (or 36%) in the long-run.[96] As Bell notes, this estimate is based on examples of MVNO mandates where "the Commission must assume that every one of these regulators attempted to appropriately balance investment with other objectives."[97]

86. Cogeco has also proposed a MVNO model that would provide mandated network access for what it calls Hybrid Mobile Network Operators (HMNO). While Cogeco claims this model addresses concerns regarding the negative impact on investment, it does not. Its model provides no obligation on an HMNO to invest in wireless infrastructure, nor is there any incentive to do so.[98]

Harm to Regional Providers

87. Mandated wholesale MVNO access would not only have a negative impact on investment, it would disproportionately harm Regional Providers and disrupt the robust competition in the wireless industry.

88. Regional Providers have played an important role in increasing the intensity of competition in Canada's wireless industry. With more facilities-based wireless providers, all of which are heavily investing in their own networks and vigorously competing for subscribers through innovative service offerings and subscription plans, consumers are reaping the benefits of increasing network quality and coverage, as well as declining prices and greater value.

89. As Dr. Eric Emch states, Regional Providers are more vulnerable to mandated MVNO access because MVNOs and Regional Providers tend to target a similar group of consumers and, because Regional Providers generally have lower margins and higher investment intensity than the larger

[95] Transcript, Hearing February 26, 2020, Volume 7, Rogers at para. 9346.
[96] Bell Mobility Response to Undertaking, Bell Mobility (CRTC) 19Feb20-1.
[97] *Ibid.*
[98] See further discussion in CWTA Further Comments dated November 22, 2019 at paras. 68-70.

facilities-based wireless providers, they are more vulnerable to losing subscribers to MVNOs.[99] As a result, mandated MVNO access risks reducing the Regional Providers' ability to invest in continued network expansion and in deploying 5G technologies. Given the positive impact Regional Providers have had on wireless competition in Canada, imposing regulatory interventions that would likely weaken their role is unjustified and will "undermine a decade of investment in spectrum licenses and network build-out"[100].

90. Having considered the merits of a broad-based mandated MVNO access regime,[101] the Competition Bureau was unable to find conclusive evidence that a broad-based mandated MVNO access regime will result in increased competition and lower prices in the Canadian wireless market.[102] In addition, for an MVNO to have an impact in the market comparable to the Regional Providers, the Bureau concluded that an MVNO would have to obtain a market share of 20%; something the Bureau considers unlikely. Also, any success in capturing meaningful market share would be disproportionately at the expense of the Regional Providers; the very companies that the Bureau has singled out as having a crucial role in raising the competitive intensity and lowering prices in the Canadian wireless market.

91. In making its recommendation, the Competition Bureau stressed the importance of not imposing an ill-designed mandated MVNO access regime that would stifle the growth of the Regional Providers:

> Were it to be the case that wireless disruptors were still not showing promise, it might be justifiable to pursue a broader MVNO policy; however, in the Bureau's view at this time <u>the risks associated with such a policy are too high for it to be warranted</u>.[103]

92. It is important to note that the impact of the Regional Providers has continued to grow beyond the time frame of the Competition Bureau's study. They continue to invest heavily in upgrading and expanding their wireless networks, and are capturing more than their proportional share of net new wireless subscribers. If a broad-based MVNO mandate did not make sense at the time of the Competition Bureau's submission, it makes even less sense now.

93. What the Competition Bureau's findings and recent developments in the market show is that Regional Providers are still in the process of establishing themselves in the market, and more time must be given by the Commission before the full benefit of their activities can be measured. In particular, the Commission should not implement any policy that could threaten the momentum

---

[99] Shaw Communications' intervention in this proceeding, May 15, 2019 – *The evolution of facilities-based competition in Canada: Recent gains and regulatory risks*, Eric Emch, PhD, Bates White Economic Consulting. Section VII.A.
[100] Scotiabank, Converging Networks, *Wireless Results Rule Out the Need for MVNOs.* November 11, 2019, page 4.
[101] For example, as advocated for by Teksavvy, CNOC, Manitoba Coalition, the Coalition for Cheaper Wireless, Open Media and CIPPIC.
[102] The Bureau notes in paragraph 331 of its report that "…mandated MVNO policy applied broadly risks undermining the steps taken by wireless disruptors, without much certainty that the MVNO policy will significantly decrease prices."
[103] Bureau Report, paragraph 265.

of the Regional Providers and the contribution they are making to enhancing sustainable competition and lowering prices in the wireless market.

94. While the Competition Bureau's "facilities-based" MVNO proposal is designed to mitigate the negative impact on investment that is present with all mandated MVNO proposals, it is important to note that the Bureau's proposal is missing many important details. When asked by the Commission for further details, such as eligibility criteria, coverage area, sunset period, and obligations such as financial commitments and penalties, the Bureau responded that those details could be best worked out in a subsequent proceeding.[104] As Chairperson Scott remarked during the Bureau's public testimony, "the devil's in the details"[105], and the full impact of the Bureau's proposal cannot adequately be measured without knowing those details.

B. Retail Price Regulation – Unnecessary and Economically Indefensible

Unnecessary and Unprecedented

95. A competitive market offering a wide-range of wireless plans to suit Canadians' needs and budgets has developed in Canada without the need for any regulatory intervention. This includes low-cost talk-and-text, as well as low-cost talk, text and data plans. During the public hearings in this proceeding, the Commission submitted as evidence a list of occasional-use plans offered by wireless service providers under $15.[106] In addition to these plans, there are many more plans available at levels such as $20 and $25 per month which provide even more services and higher data allowances.[107]

96. A number of intervenors, including the Manitoba Coalition, the Coalition for Cheaper Wireless Services (CCWS) and Open Media/CIPPIC, are asking the Commission to regulate the retail price of wireless service plans. Their proposals for government-mandated monthly wireless plans can be summarized as follows:

Manitoba Coalition[108]

a) $25-$35
b) Unlimited Canada-wide talk/text, 2GB of data
c) Including device[109]
d) Available to all Canadians (i.e. no means test)
e) No overage charges
f) Some throttling permitted beyond 2GB but must still be able to make use of data

[104] Transcript, Hearing February 18, 2020, Volume 1, paras. 443, 446, 468, 551 and 573.
[105] *Ibid.* p,550.
[106] CRTC Exhibit 2.
[107] E.g. Fizz - $27 unlimited talk/text (Quebec) and 1GB; Freedom Mobile $24 unlimited nationwide talk and unlimited global text and 1.5GB.
[108] Transcript, Hearing February 24, 2020, Volume 5. Description of proposed plan starting at para. 7070.
[109] The inclusion of a device was not raised in the public hearing but was included in the Manitoba Coalition's written submission as reflected in CRTC Exhibit 3.

g) Post-paid with no credit check
h) Details subject to modification following broader consultation with consumers "on the topic of what works for them"[110]
i) Continued monitoring on a go forward basis

Coalition for Cheaper Wireless Service (PIAC, ACORN, NPF, and CARP)[111]

- Maximum $30
- Unlimited Canada-wide talk/text, 4GB of data at LTE speed
- BYOD, no credit check
- Available to low income Canadians who fall below the Low-Income Cut-off-After Tax or LICO-AT (approximately the bottom quintile of income earner in Canada) and seniors 65+ on fixed income
- A third party, paid for by the wireless providers, would administer eligibility
- Ongoing review and monitoring of plan by the Commission

Open Media & CIPPIC[112]

- $20
- Unlimited talk/text and 4GB of data
- Available to all Canadians (i.e. no means test)

97. Retail price regulation is a drastic, highly-intrusive and exceedingly rare form of regulatory intervention. In the case of wireless services, we are not aware of any country that has regulated the retail rates charged by non-state-owned carriers. Nor have the proponents of retail price regulation identified an example of retail rate regulation in any other country or any valid reason why the Commission should intervene and make Canada a global outlier.

Proposals are Unrealistic

98. In addition to being unprecedented, the above proposals are commercially unreasonable. First, the proponents of these proposals claim that they are based on the needs of Canadians as determined by their surveys and consumer engagements. For example, the Manitoba Coalition indicates that its proposal reflects the feedback it received from several engagement sessions and reflects a plan that "works for" consumers. CCWS bases its proposal on the results of an Environics survey that asks, among other things, whether a 4GB plan "would meet your needs".

99. Yet when one looks closer at the survey results one sees a different picture. When the Manitoba Coalition conducted its engagement sessions, it asked individuals what they would pay for a plan that offered unlimited local calls, unlimited local text messages, 1GB of data, and no device. In

[110] *Ibid.* para 7096.
[111] Transcript, Hearing February 25, 2020, Volume 6. Description of plan starting at para. 8142.
[112] Transcript, Hearing February 28, 2020, Volume 9. Description of plan starting at para. 12834.

the "consumers with limited income" group, 5 of 6 said $30, with one person suggesting a lower price because it didn't have international texting. In the "students, seniors and rural consumers" group, 5 of 8 said they would pay $30 or more for such a plan. Plans such as this are already available in the market from a variety of brands, often at lower prices or with more data.

100. Similarly, when Environics asked individuals with incomes under $40,000 if a 4GB plan costing between $25-30 would meet their needs, 54% said "totally" while 30% said "somewhat". This is almost the exact same result as when the same income group was asked whether a plan offering 500MB and 3G speed (which Environics suggests was representative of a low-cost plan in the current market – even though there are plans at that price point that offer the same or more data at 4G speeds) would meet their needs; with 50% responding "totally" and 30% saying "somewhat". It is upon this statistically insignificant difference of 4% that CCWS is resting its proposition that no less than a 4GB plan will meet the needs of Canadians; an amount that far exceeds the average Canadians' data usage.

101. Not only are the proposed plans not representative of the cited surveys and consumer engagements, they have been constructed without any economic analysis of their feasibility or impact. As Bell Mobility highlights in its Further Comments, the price proposed by CCWS is about one-half of what it would cost to acquire such level of services under the existing wholesale roaming rates.[113] Nor does it account for other costs of service delivery such as retail employees and physical locations, customer service, billing etc..[114] The same is true with the OpenMedia/CIPPIC proposed plan. If the Manitoba Coalition proposal includes the cost of device it runs into the same cost exceeding price problem. On the other hand, if it is a BYOD plan then regulatory intervention is unnecessary as plans already exist in the market that provide such levels of service at similar prices.

102. It is not only national wireless providers who have indicated that such plans are priced below cost. Regional Providers, such as Eastlink, testified that the proposed 4GB plans are not economically feasible.[115] When asked about Eastlink's response, Ms. Tribe from OpenMedia responded that they are not proposing that Eastlink would have to offer such a plan, that only national providers would have to.[116] Such response reveals how little thought has gone into OpenMedia/CIPPIC's proposal as, even if the mandate did not extend to regional providers, they would be faced with competitors who are offering plans at such rates. They would have to try to match those rates, which is likely not economically viable, or forego a large part of the subscriber base. Like a broad-based MVNO mandate, retail price regulation stands to disproportionately harm the Regional Providers, and reverse the trend of less market concentration as the Regional Providers lose subscribers to other network operators.

[113] Bell Mobility, Further Comments para 190.
[114] *Ibid.* para 191.
[115] Transcript, Hearing February 21, 2020 paragraph 5576.
[116] Transcript, Hearing February 28, 2020 paragraph 12989.

103. Even TekSavvy, in advocating for a wholesale MVNO access mandate, acknowledges that it is unreasonable to expect a service provider to sell services at below cost. When pressed by Commissioner MacDonald as to whether TekSavvy, as a prospective MVNO, would commit to offering low-cost occasional use plans, TekSavvy responded: "…there's no business case for us to be able to offer low-cost plans where rates are too high, we can't sell the [sic] below our fixed cost."[117] In other words, TekSavvy agrees that it is not reasonable to expect service providers to subsidize the cost of a wireless plan.

Not a Targeted Response

104. Beyond being economically unfeasible, the proposed plans are not a targeted response and would impact the entire mobile wireless market. "Low-cost" is not a specific product market and the Commission cannot regulate prices for one segment of the market, or one type of plan, without distorting the rest of the market.

105. For example, the Open Media & CIPPIC proposal provides for 4GB of data at a price that is below cost. That amount of data is more than the average Canadian uses in a month. Rather than trying to address a specific alleged market failure, the plan attempts to regulate the majority of the market. In addition, wireless providers would have to find additional revenue to offset the subsidy this plan requires, which would likely result in increased prices for other plans, or cutting by network operators of expenditures in operations and network infrastructure.

106. If prices for other plans increase, the Commission will have effectively mandated a price increase for Canadians who wish to use the larger amounts of wireless data. If wireless operators have to cut expenditures they would be unable to continue to invest at historic levels to expand and enhance their wireless networks. Many network projects, including 5G rollout, would be deferred, likely resulting in a widening of the digital divide between Canadians living in urban and rural areas, and Canadian businesses falling behind competitors in other jurisdictions.

Government Has Set Two-Year Target

107. During the most recent federal election, the Liberal party included in its campaign platform a promise to reduce the price of mobile wireless services. This targeted price reduction had already been achieved as a result of facilities-based competition and without government intervention. In March 2020[118], the government clarified its expectations by stating that within 2 years, it expects to see the national wireless providers reduce prices on BYOD wireless service plans that include 2GB, 4GB and 6GB of data, as well as unlimited talk/text, by 25%. If this target is not met, the government states that it will take action with further regulatory tools.

[117] Transcript Volume 4 February 21 para. 6159.
[118] https://www.canada.ca/en/innovation-science-economic-development/news/2020/03/government-of-canada-takes-action-to-offer-more-affordable-options-for-wireless-services.html

108. Using the benchmark set by the government for then current prices, a 25% reduction equates to the following prices for each of the three targeted wireless plans:

a) 2GB - $37.50
b) 4GB - $41.25
c) 6GB - $45.00

109. The target prices for the 2GB and 4GB plans are higher than the prices proposed by advocates of retail price regulation. In particular, the government target price for 4GB is 37.5% higher than the CCWS proposal, and a whopping 106.25% higher than the proposal by Open Media and CIPPIC. The disparity between the government's targets and the intervenors' proposed plans is further evidence of the unreasonableness of the intervenors' proposals.

110. The approach taken by the government is a clear signal that allowing the current facilities-based competition model to continue its steady downward pricing trend is preferable to retail price regulation. The government also recognized that it would be unreasonable to expect a 25% price reduction on mid-range plans without providing a transition period and allowing wireless carriers to determine how best to arrive at these targets. The absence of a transition period risks unintended consequences, including creating an imbalance between prices and the government's other objectives of encouraging investment and the expansion of high-quality telecommunications services to underserved communities.

The Role of Provincial Social Assistance

111. The discussion about the cost of living is a serious one. There are individuals and households in Canada who struggle to pay for basic needs such as food, clothing and shelter. Provincial and territorial governments across the country have acknowledged their responsibility for assisting Canadians in financial need. They do so by providing financial, employment, educational and other assistance. They do not implement disproportionate measures such as regulating the prices for one particular service.

112. The record in this proceeding shows that the Commission has successfully met its objective of ensuring reasonable prices for wireless services while maintaining a regulatory environment that encourages ongoing investment in wireless infrastructure. It has done so through policies that support facilities-based competition; which has led to steadily decreasing prices and resulted in increasing gains in the number of wireless subscribers, particularly among low income Canadians.

113. It would be unwise for the Commission to interfere with this positive momentum created by facilities-based providers competing vigorously with one another. Retail rate regulation would not only negatively impact the cost of other wireless plans and/or wireless providers' capacity to invest in wireless infrastructure, it would stifle competition amongst wireless providers by removing their flexibility to regularly adjust prices to attract new subscribers. Determining the

necessity of a government-mandated program to assist Canadians facing financial difficulty in acquiring wireless services and a mobile device should be left to the jurisdiction of applicable provincial/territorial governments and their respective social assistance programs.

Absence of Legal Authority to Regulate Rates

114. The Commission has a long-standing policy of forbearance with respect to the regulation of rates for mobile wireless services.[119] There is no evidence in the record of this proceeding that the conditions of forbearance have changed sufficiently to warrant the Commission to intervene with respect to mobile wireless service rates. In fact, the opposite is true. The number of competitors has increased, with Regional Providers expanding into new markets and capturing market share from the national providers. In addition, prices and the cost per GB of data have steadily declined. Therefore, pursuant to subsection 34(2) of the *Telecommunications Act* (the "Act"), the Commission must continue to forbear from regulating rates.

115. CCWS and the Manitoba Coalition have argued that section 24 of the Act can be used to regulate rates, as it was relied upon by the Commission to establish the Wireless Code. This is incorrect. Rate regulation powers are provided under ss. 25 and 27(1) of the Act. The Wireless Code imposes obligations on wireless providers to inform consumers of rates for roaming and overages, it does not set such rates.

Part 2 - Summary

116. Neither mandated wholesale MVNO access nor retail rate regulation will result in benefits that outweigh their costs. The alleged benefits of mandated MVNO access are not supported by the evidence in this proceeding. Retail rate regulation in the wireless industry is unprecedented and the regulated rate proposals made during this proceeding are unrealistic and economically unfeasible.

117. As shown in Part 1, there is no market failure necessitating a departure from the facilities-based model that is steadily delivering positive consumer outcomes. The costs of either an MVNO mandate or retail price regulation far outweigh any alleged benefits. They would result in a drastic reduction in investment at a time when the expansion of wireless networks to underserved communities, increasing capacity to meet the increasing demand for wireless services and mobile data, and the groundbreaking innovations of 5G all require massive, long-term investments by Canada's facilities-based network operators.

118. In addition to the negative impact on investment, mandating MVNO access would disproportionately harm the Regional Providers who have made an important contribution to increasing the competitive intensity in the wireless market and lowering prices. They have been

[119] CRTC Decision 2012-556.

able to serve this role only by making significant long-term investments in building network infrastructure. Mandating MVNO access or implementing retail price controls would undermine years of investment made by Regional Providers in building networks and acquiring spectrum.

119. Not only would such measures undermine investments already made by existing Regional Providers, it would make it very difficult to attract new facilities-based entrants in the future. For example, if a current network operator were to exit the market because a mandated MVNO access policy renders its business model unsustainable, even the reversal of such mandate may not be enough to attract new facilities-based entrants to the market. Potential entrants may view the regulatory risk as being too high to warrant the massive investments that would be required.

120. The record supports the Commission's historical approach of being careful not to deviate from facilities-based competition as the foundation for achieving the Commission's and government's policy objectives.

PART 3: THE IMPORTANCE OF WIRELESS INFRASTRUCTURE TO CANADA'S ECONOMIC RECOVERY

121. Canada's wireless industry is a catalyst for Canada's economy. In 2018 it contributed $42.8 billion to Canada's economy and generated 327,000 full-time equivalent jobs.[120] The introduction of 5G in Canada is estimated to deliver an incremental $40 billion in GDP by 2026 and generate a further 250,000 full-time jobs. However, these economic benefits will not be realized without continued investment by Canada's facilities-based wireless network operators. It is estimated that $26 billion in capital investment is required to introduce 5G in Canada, with billions more being necessary for acquiring additional spectrum rights.

122. During the first months of the COVID-19 pandemic, Canada's facilities-based network operators worked tirelessly to maintain network operations in the face of drastic shifts in traffic volume and usage patterns. They made additional investments in capacity and took extra steps to ensure that essential services were accessible to Canadians. They also offered relief to customers to ease the transition to their new circumstances, and made financial and in-kind donations to charities and vulnerable communities.[121]

123. While some of the restrictions imposed on Canadian businesses and individuals are being eased, the COVID-19 virus remains amongst us. It is still early days, and the full impact and duration of the pandemic remains unknown. What we do know is that it has already had a devastating effect on Canadians and the Canadian economy. In the government of Canada's recent 'fiscal snapshot" the government estimates that Canada's economy will shrink by 6.8% in 2020 and 5.5 million Canadians either lost their job or had their work hours reduced between February and April.

[120] https://www.cwta.ca/wp-content/uploads/2020/01/The-Benefits-of-the-Wireless-Telecommunications-Industry-to-the-Canadian.pdf

[121] https://www.cwta.ca/blog/2020/04/20/the-telecom-industry-responds-to-covid-19/

Government revenues are also expected to drop by over 20%. The economic contraction from COVID-19 is the worst this country has seen since the Great Depression and is expected to be more than twice what was experienced during the global financial crisis in 2009-10.[122]

124. While the latest quarterly results have yet to be released by most Canada's network operators, it is safe to assume that they will reveal the economic challenges that they are facing as a result of the pandemic. Now is not the time for the Commission to impose unnecessary regulations such as mandating wholesale MVNO access or retail price regulation that would only further heighten these challenges.

125. A report published today by PwC[123] concludes that mandating MVNO access would necessitate estimated annual cuts by network operators of $5B in operating expenditures and $3B in capital expenditures by 2025. PwC calculates that the impacts of such cuts to network operators would include significant cuts in wireless and wireline networks, 24,000 fewer jobs, the closure of 850 retail stores, and less capacity to donate to charitable causes. The estimated impact to the Canadian economy in 2025 would be $10B reduction in GDP, $2.5B reduction in tax revenue, approximately 94,000 jobs lost throughout the supply chain, and a widening of the rural and urban digital divide.

126. As Canada emerges from this health and financial crisis, the wireless industry will be an important catalyst for the country's economic recovery. The demand for high-quality, reliable networks will continue to grow. The need for 5G to serve as a platform for innovation and economic prosperity is more important than ever. But the wireless industry can properly fulfill this role if the Commission maintains a regulatory environment that encourages significant investments in Canada's mobile wireless future. Failing to do so would not only reduce facilities-based network operators' capacity to invest, it would be a setback to Canada's economic recovery, widen the digital divide and reduce Canada's competitiveness with the rest of the world.

PART 4: POLICY OBJECTIVES

127. The existing regulatory framework for the mobile wireless industry, based upon a facilities-based competition model, is achieving, and will continue to achieve, the objectives set out in s.7 of the *Telecommunications Act* and both the 2006 Policy Direction and the 2019 Policy Direction.

[122] https://www.cbc.ca/news/politics/fiscal-snapshot-morneau-highlights-2020-1.5642115

[123] PwC, *Understanding the likely impacts of MVNOs in Canada, Part 1: Impacts on the Canadian telecom industry and economy.* Cited findings on p.4. https://www.pwc.com/ca/en/communications/publications/761378-understanding-the-impacts-of-mvnos-in-canada-part-1.pdf

<u>Section 7 of the Telecommunications Act</u>

ss.7(a): "to facilitate the orderly development throughout Canada of a telecommunications system that serves to safeguard, enrich and strengthen the social and economic fabric of Canada and its regions"

128. The record of this proceeding shows that facilities-based competition has been instrumental in strengthening Canada's economy and connecting Canadians dispersed over a vast geography. With the demand for mobile wireless services increasing each year, mandated MVNO access and/or retail price controls risks negatively impacting networks operators' ability to keep up with the demand. Most notably such measures will discourage investment, putting at risk or delaying the expansion of wireless services into underserved regions of the country and the introduction innovative wireless services, such as 5G, which will be crucial to restarting economic growth in Canada.

129. The critical importance of facilities-based competition to this objective has been further demonstrated by the efforts of facilities-based network operators and their world-class networks in sustaining economic and social activity across the country during the COVID-19 pandemic. The resiliency of our networks and the capacity of networks operators to response to a crisis such as COVID-19 would have been impaired under a mandated MVNO access regime or with retail price controls. Such measures would diminish Canada's ability to respond to a future crisis.

ss.7(b): "to render reliable and affordable telecommunications services of high quality accessible to Canadians in both urban and rural areas in all regions of Canada"

130. Facilities-based competition is widely recognized as the best form of competition for delivering quality, coverage and affordable prices. As a result of robust competition between facilities-based service providers, Canada has amongst the world's best performing and furthest reaching networks, with rural performance and availability that exceeds that of most other countries. Intense competition among national and regional facilities-based competitors has also resulted in the steady decline in prices of wireless services. The continuation of these positive outcomes will largely depend upon maintaining a regulatory environment that encourages high levels of investment by wireless network operators. Mandated MVNO access and/or retail price controls would discourage investment, which would widen the urban and rural digital divide, risk delaying 5G projects, and threaten Canada's leadership in network reliability and quality. It would also disproportionately harm the Regional Providers who are playing an important role in increasing the competitive intensity of the wireless market.

ss.7(c): "to enhance the efficiency and competitiveness, at the national and international levels, of Canadian telecommunications" and ss.7(e): "to promote foster increased reliance on market

forces for the provision of telecommunications services and to ensure regulation, where required, is efficient and effective"

131. Mandating MVNO access and/or introducing retail price controls is less efficient than facilities-based competition and does not increase, but detracts from, a reliance on market forces. Mandated MVNO access represents an artificial interference in the market and that would promote inefficient MNVOs, whose business model is dependent on regulated access. Retail price controls are anti-competitive and will reduce the ability of wireless service providers to offer Canadians choice and innovative services. Both of these measures would represent a significant departure from increased reliance on market forces.

132. Neither mandated MVNO access nor retail price controls is required, nor are they efficient and effective. The evidence of this proceeding shows there is no market failure which requires such regulatory interventions. Moreover, the inefficiency of such measures is demonstrated by their negative consequences, including the negative impact on investment and the disproportionate harm to Regional Providers, far outweighing any alleged benefits. Nor is there convincing evidence that either measure would be effective. The evidence from other jurisdictions shows that there is no correlation between the number of MNVOs and lower prices, while the proposed retail price regulations are unrealistic and economically unrealistic.

ss.7(d): "to promote the ownership and control of Canadian carriers by Canadians" and ss.7(e): "to promote the use of Canadian transmission facilities for telecommunications within Canada and between Canada and points outside Canada"

133. Mandating MVNO access would not promote either of the objectives in ss.7(d) or ss.7(e). Canada's world-class wireless networks have been built by Canadians, for Canadians. Mandated MVNO access would allow large foreign companies to take advantage of regulated access to Canada's network infrastructure without having to make any significant investments in Canada or consider the welfare of Canadians. They could enter the market when the conditions of regulated access are favourable to them, and abandon their Canadian customers with little risk, if the conditions change. These companies would be relying on Canada's facilities-based carriers to effectively subsidize their businesses through the massive investments that Canadian companies have and will continue to make in Canada's network infrastructure. Not only do they not have to build cell sites or acquire spectrum, they can use Canada's network operators' RAN infrastructure and then route traffic to their own facilities outside of Canada.

ss.7(g): "to stimulate research and development in Canada in the field of telecommunications and to encourage innovation in the provision of telecommunications services"

134. Facilities-based competition fosters the introduction of innovations that will improve network coverage and performance, and the introduction of new services to customers. Facilities-based service providers work closely with equipment and technology suppliers to conduct research and

development in Canada. They also partner with educational institutions to perform cutting-edge research in Canada.[124] These activities make Canada's facilities-based network operators among the largest spenders on research and development in Canada.[125] The degree of innovation led by facilities-based providers is likely to grow exponentially with the roll-out of 5G as wider spectrum holdings and industry partnerships will allow providers to focus on specific vertical industries in which to differentiate their offerings from one another.

135. MVNOs cannot offer much in the way of innovation. They do not invest in spectrum or build networks, nor do they partner with the wireless supply chain. They cannot differentiate themselves from the networks on which they depend for access. Rather than stimulating research and development, and encouraging innovation, mandating MVNO access and/or regulating retail prices will stifle such activities. They will reduce the capacity of network operators to engage in research and development, and will reduce the pace of innovation.

ss.7(h): "to respond to the economic and social requirements of users of telecommunications services"

136. Facilities-based competition in Canada has resulted in constantly evolving service offerings and prices to meet the changing needs of Canadians. The recent launch of unlimited data plans, with their elimination of overage fees, is but one example of facilities-based providers responding to the changing habits and needs of consumers. Facilities-based providers have also introduced innovative services such as text with 9-1-1, video relay services, and wireless public alerting. The massive investments made by facilities-based providers have also ensured that Canadians are benefiting from world-class networks that are among the top-ranked in the world.

137. MVNOs are unable to respond to the needs of Canadians to the same degree. They are dependent on the networks that they access and their business model is wholly-dependent on regulated access.

ss.7(i) "to contribute to the protection of the privacy of persons"

138. Privacy and security of personal information is of utmost importance to facilities-based service providers, and is an area in which they compete with one another through the introduction of new technologies and services that protect customers and their data. They employ teams of privacy and security experts and work with agencies of the federal government to share the latest information and best practices. It is unlikely that MVNOs will have the ability to protect their customer's privacy and security to the same degree as facilities-based providers.

[124] Recent examples includes Bell investment to create an advanced 5G research centre at Western University - https://mobilesyrup.com/2020/06/11/bell-partners-western-university-launch-5g-smart-campus/ - and Rogers partnering with University of Waterloo to build made-in-Canada 5G technology.

[125] Research Infosource Inc: Canada's Top 100 Corporate R&D Spenders 2018

Policy Direction - 2006[126]

139. In 2006 the federal government issued an order directing the Commission to implement the policy objectives set out in section 7 of the Act in accordance with the list of directives. Relevant directives are set out and discussed below. While the federal government issued a subsequent directive in 2019 (discussed below), the 2006 order remains in effect and must be read in concert with the 2019 order.

s.1(a)(i): "rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives"

140. As set out in the discussion of ss.7(c) of the Act above, both mandated MVNO access and retail price controls represent a huge departure from relying on market forces. To date, the Commission has employed light touch regulations with respect to the mobile wireless market while allowing competition among facilities-based service providers to deliver high-quality wireless services, innovation, intense competition, and affordable prices to Canadians.

s.1(a)(ii): "when relying on regulation, use measures that are efficient and proportionate to their purpose and that interfere with the operation of competitive market forces to the minimum extent necessary to meet the policy measures"

141. Mandated MVNO access and/or retail price controls are neither efficient nor proportionate to their purpose. As expressed by intervenors who support such measures, the sole purpose of these measures is to lower prices of wireless services. Yet the record of this proceeding shows that prices have been steadily declining under facilities-based competition, current prices are comparable to peer countries, and wireless services are affordable. Conversely, mandated MVNO access and retail price controls would have a significant negative impact on network providers' capacity to invest in the expansion and enhancement of Canada's wireless network infrastructure. By any definition, such measures are not efficient or proportionate considering that their purpose is already being fulfilled by the current regulatory framework based on a facilities-based competition model.

s.1(b)(ii): when relying regulation the Commission should use measures that "if they are of an economic nature, neither deter economically efficient competitive entry into the market nor promote economically inefficient entry"

142. Mandating MVNO access promotes inefficient market entry. The decision to enter the market for an MVNO will be entirely dependent on the terms of the regulated access, and not market forces. Moreover, both mandated MVNO access and retail price controls could discourage potential new

[126] Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives: https://laws.justice.gc.ca/eng/regulations/SOR-2006-355/page-1.html

facilities-based market entrants who might otherwise wish to invest in the building of Canada's telecommunications infrastructure. This dampening effect could outlast any reversal or sunset of an MVNO access mandate as the potential that such a measure could be reintroduced could be regarded as too great a risk.

s.1(b)(iii):): when relying regulation the Commission should use measures that "if they are not of an economic nature, to the greatest extent possible, are implemented in a symmetrical and competitively neutral manner"

143. Mandating MVNO access is not symmetrical or competitively neutral. It favours service-based providers who do not have a viable business model without regulatory intervention. It would harm facilities-based providers and, in particular, hurt the Regional Providers.

Policy Direction - 2019[127]

144. In 2019, the federal government issued a further order that provides further directions to the Commission that it should consider when making decisions.

s.1(a): "the Commission should consider how its decisions can promote competition, affordability, consumer interests, in particular the extent to which they"

(i) "encourage all forms of competition and investment"

145. Supporters of mandated MVNO access will argue that this subsection requires the Commission to abandon its current regulatory framework based on facilities-based competition and mandate MVNO access. It does no such thing. Mandated MVNO access does not encourage service-based competition; it imposes it. Rather than encouraging all forms of competition and investment, an MVNO mandate would discourage facilities-based competition and investment, particularly from new entrants. Conversely, the current regulatory framework encourages both facilities-based competition and MVNOs that have legitimate, market-based business plans.

(ii) "foster affordability and lower prices, particularly when telecommunications service providers exercise market power"

146. The evidence in this proceeding shows that the current regulatory framework based on facilities-based competition is delivering on affordability and lower prices. It has also fostered the growth of the Regional Providers who have helped make the Canadian wireless market amongst the least concentrated among developed countries, and in doing so have increased the level of competition in Canada, leading to a steady decline in prices. Mandating MVNO access would reduce, rather than increase, sustainable competition in the retail wireless market by harming Regional

[127] Order Issuing a Direction to the CRTC on Implementing the Canadian Telecommunications Policy Objectives to Promote Competition, Affordability, Consumer Interests and Innovation- https://laws.justice.gc.ca/eng/regulations/SOR-2019-227/

Providers. Finally, the evidence in the proceeding shows that there is no correlation between MVNOs, prices and competitive intensity.

(iii) "ensure that affordable access to high-quality telecommunications services is available in all regions of Canada, including rural areas"

147. Affordable access to affordable and high-quality mobile wireless services in all regions of Canada can only occur if there is a regulatory environment that encourages investment by network operators. The evidence in this proceeding shows how facilities-based competition has resulted in billions of dollars in investment that have made Canada's wireless networks among the best performing and widest-reaching networks in the world. But there is more work to be done. Connecting underserved communities while also introducing the latest wireless innovations to Canadians will require ongoing high levels of investment. Mandating MVNO access will decrease the investment capacity of network providers and will widen the urban and rural digital divide.

(iv) "enhance and protect the rights of consumers in their relationships with telecommunications service providers, including rights related to accessibility"

148. While the right of consumers is generally dealt with under the Wireless Code, which is outside the scope of this proceeding, and the Commission has launched a separate proceeding to deal with accessibility issues[128], it should be noted that it is the investments made by network operators that have introduced new services, such as text with 9-1-1 and video relay, that have enhanced consumers abilities to engage with wireless services. Mandating MVNO access would detract from network operators capacity to introduce new innovations and protections for consumers.[129]

(v) "reduce barriers to entry into the market and to competition for telecommunication service providers that are new, regional or smaller than the incumbent national service providers"

149. Mandated MVNO access will raise barriers to competition and investment for Regional Providers. MVNOs will compete directly with Regional Providers, reducing Regional Providers capacity to continue to invest at historic levels, thus lessening their ability to scale and capture more market share. This would reduce the level competitive intensity that Regional Providers have helped bring to the market.

(vi) "enable innovation in telecommunications services, including new technologies and differentiated service offerings"

150. As reference in the discussion of ss.7(g) of the Act above, innovation is the by-product of investment. Facilities-based competition encourages the level of investment necessary to

[128] CRTC 2020-178
[129] See also discussion of ss7(i) of the Act above.

continually bring new innovative services to the market. This includes both new technologies and differentiated services offerings. With 5G, the ability to offer differentiated service offerings will be key to each network operators success. Conversely, MVNOs are dependent on the network they access, and the wholesale fees they are charged. They do not invest in innovation. Advocates of mandated MVNO access have offered few examples of how MVNOs can be innovative, other than vague references to new ways to market services.

(vii) "stimulate investment in research and development and in other intangible assets that support the offer and provision of telecommunications services"

151. Mandated MVNO access and/or retail price controls will not stimulate investment in research and development. On the contrary, these measures will diminish the network operators capacity to invest in research and development, which will deprive the Canadian supply chain and research institutions of vital financial support for research and development projects. As mentioned in the discussion of ss.7(g) of the Act above, only facilities-based competition encourages investment in research and development as network operators compete to bring the latest innovations to the market.

*****End of Document*****