Competition Policy Council

Communiqué

March 19, 2020

Mandated Competition or Free Ride?

Mandated Access to Telecommunications Facilities Risks Impairing Canada's Next Generation of Digital Infrastructure

Ad Hoc Report of the C.D. Howe Institute Competition Policy Council

The Council held an "ad hoc" meeting in February to discuss the issue of mandating access to telecommunications facilities. Specifically, the Council considered whether mandated access to broadband (i.e., high-speed internet) and wireless (i.e., cellular data) facilities would enhance or impair market efficiency. This issue was discussed in the context of challenges to the recent decision by the Canadian Radio-television and Telecommunications Commission (CRTC) concerning final rates for access to wireline high-speed access (HSA) broadband facilities and the ongoing wireless review, in which the CRTC will decide whether to mandate access for mobile virtual network operators (MVNOs).

The consensus of Council members present[1] was that competition in telecommunications services involves fast-paced technological change, long lead-time investment in facilities, multiple and highly differentiated service offerings, consumer demand for high-quality services, and rapidly evolving cost structures. All Council members were cognizant of the "enabling" impact of high-quality infrastructure for digital services on Canada's overall competitiveness. While certain Council members contended that mandated access would provide downward pressure on consumer prices, other members were concerned that short-run price reductions would come at the expense of long-term investment incentives for next-generation facilities. Council members agreed that setting rates for access at too low a level below facilities providers' required return on infrastructure investments would discourage future investments.

As for setting rates for mandated access, certain members contended that methodologies exist to allocate fixed costs of networks and establish efficient rates based on economic principles. But most Council members doubted that such conceptual approaches could be coherently and consistently "taken to the data" – particularly when different facilities providers operate differing mixes of products and platforms.

1 Various Council members recused themselves, declaring that they represent clients involved in current proceedings. Elisa Kearney, who co-chairs this Council, did not contribute to the substance of the discussion or the drafting of this communique.

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Most Council members agreed that regulators face a significant risk of "getting rates wrong" and were skeptical of the institutional competence of the CRTC to consistently identify the "right" regulated rates for mandating access. Certain Council members were concerned that regulators would act on political direction to reduce wireless prices rather than to enable durable competition by new service providers. These Council members worried that "regulation begets regulation" and, once embarking on mandated access, regulators would face ongoing pressure to vary rates – in particular, pushes by re-sellers for lower rates to sustain their business models. Many members were surprised by this federal government's express political direction regarding the CRTC's approach to mandated access, which they worry will compromise the regulator's independence and confidence in the predictability of communications regulation going forward.

Identifying efficient price levels would involve an analysis of costs facing telecommunications providers that is beyond the scope of this discussion. Nonetheless, certain Council members observed that prices for wireless services had already witnessed significant declines in the past years. Subsequent to the Council's meeting, the federal government has stated that its target is a 25 percent reduction from prices in early 2020. Nonetheless, certain members highlighted the lack of clarity for what price level the federal government views as economically efficient and doubted that the federal government has an empirical basis for its price reduction target. These members believed that the federal government has established its target arbitrarily and for political aims.

Notably, the Competition Bureau has proposed that the CRTC allow time-limited entry of facilities-based providers as MVNOs in other geographic markets where they currently lack facilities. Under the Bureau's proposal, such facilities-based competitors would be granted mandated access for a five-year period in other geographic markets but should be required to build facilities after that five-year horizon. Members generally doubted that this proposal would be viable. Members who support mandated access believed this measure would provide insufficient new competition to reduce prices. While other members viewed time-limited MVNO entry as less concerning than indefinite free-riding by pure MVNOs, they were sceptical that any "time-limited" commitment would be enforced. Specifically, they viewed a high likelihood that the CRTC would face great pressure to continue to permit mandated access after the five-year horizon.

Most Council members expressed concern that, with a high risk of "getting rates wrong," mandated access to telecommunications facilities could impair Canada's next generation of digital infrastructure. This is the majority view of the C.D. Howe Institute's Competition Council, which held an "ad hoc" meeting on February 18, 2020.

The Competition Policy Council comprises top-ranked academics and practitioners active in the field of competition policy. The Council provides analysis of emerging competition policy issues. Elisa Kearney, Partner, Competition and Foreign Investment Review and Litigation at Davies Ward Phillips & Vineberg LLP, acts as interim co-chair,[2] along with Grant Bishop, Associate Director, Research, at the C.D. Howe Institute. Professor Edward Iacobucci, Dean at the University of Toronto Faculty of Law and Competition Policy Scholar at the Institute, advises the program. The Council, whose members participate in their personal capacities, convenes a neutral forum to test competing visions and to share views on competition policy with practitioners, policymakers and the public.

At Issue: "Mandated Access" Questions Facing Canadian Policymakers

Two sets of proceedings, raise questions about whether mandated access to telecommunications facilities – specifically, to broadband and wireless facilities – will enhance or impair market efficiency. For both broadband and mobile wireless facilities, regulators face a long-standing tension between enabling new competitors by prescribing terms for access to incumbents' facilities and potential disincentive to new and innovative infrastructure in the future when new entrants can "free ride" on facilities-based providers prior investments.

For broadband, the CRTC issued Order CRTC 2019-288 (the "Broadband Decision") in August 2019.[3] This order established final rates for access to service providers' high-speed access (HSA) broadband facilities (i.e., setting prices at which resellers may buy aggregated wholesale access for retail to ultimate customers) and applied those final rates retroactively. The rates were set to "facilitate greater competition and promote innovative broadband services and more affordable prices for consumers."

Following the Broadband Decision, various facilities-based broadband providers have petitioned Cabinet to vary the CRTC's decision,[4] as well as initiated appeals to the Federal Court of Appeal.[5] In its petition, Bell Canada argues that a reversal of the Broadband Decision is necessary to "preserve

2 From October 2015 until his death on February 15, 2020, this Council was chaired by leading competition lawyer Adam Fanaki. The Institute and members of this Council were deeply grateful for his service, his friendship and his long record of contributions to competition policy in Canada and abroad.

3 Canadian Radio-television and Telecommunications Commission. Telecom Order CRTC 2019-288 (15 August 2019). Available online: https://crtc.gc.ca/eng/archive/2019/2019-288.htm.

4 Petitions to the Governor in Council concerning Telecom Order CRTC 2019-288. Available online: https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11568.html.

5 See: *Bragg Communications Inc. et al v. British Columbia Broadband Association* (19-A-58); and *Bell Canada et al v. British Columbia Broadband Association* (19-A-59).

incentives for network investment at a critical juncture in the investment cycle as Canada transitions to higher speed fibre and 5G wireless networks." Similarly, Telus argues that the CRTC has set mandated rates "so low as to threaten future investment in the infrastructure necessary to deliver quality broadband Internet to Canadians across the country."

Prior to the Broadband Decision, the Competition Bureau had contributed a study of the wholesale broadband market.[6] In this study, the Bureau both noted "the potential negative effects that a wholesale access regime can have on the incentive for facilities-based competitors to make the necessary investments to ensure that Canadians are served by world class networks" and stressed "the importance of setting wholesale access rates at the correct level to ensure that investment incentives are maintained, while at the same time ensuring sufficient scope for wholesale-based competitors to continue to offer competitive discipline in the marketplace."

For wireless services, a central issue in the CRTC's ongoing review of wireless services is the access by mobile virtual network operators (MVNOs).[7] As part of this review, the CRTC has received submissions from the Competition Bureau concerning the state of competition and impact of MVNOs. In its second submission,[8] the Bureau argued that Bell, Telus and Rogers (the "Big 3") possess market power at both the retail and wholesale level in most regions in Canada, but facilities-based regional competitors (i.e., who operate their own wireless networks) are increasingly disrupting the Canadian wireless landscape. The Bureau found that MVNOs are unlikely to deliver the benefits of sustained and vigorous competition that facilities-based wireless disruptors are capable of providing. The Bureau therefore recommended that the CRTC pursue a MVNO policy where Bell, Rogers and Telus would have to sell temporary access for their wireless networks to regional carriers who intend to invest and further expand their own networks.

CRTC proceedings commenced on February 18th to consider the Bureau's submission and the responses of various market participants concerning mandated access for MVNOs.[9] Various interveners

6 Competition Bureau. *Delivering Choice: A Study of Competition in Canada's Broadband Industry* (7 August 2019). Available online: https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04470.html#Sec00.

7 Canadian Radio-television and Telecommunications Commission. Telecom Notice of Consultation CRTC 2019-57: Review of mobile wireless services (28 February 2019). Available online: https://crtc.gc.ca/eng/archive/2019/2019-57.htm.

8 Competition Bureau. Executive summary of the Bureau's submission to the CRTC on mobile wireless services (25 November 2019). Available online: https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04505.html.

9 Telecom Notice of Consultation CRTC 2019-57-1: Notice of hearing – Review of mobile wireless services - Changes to procedure (28 October 2019). Available online: https://crtc.gc.ca/eng/archive/2019/2019-57-1.htm.

have submitted comments concerning mandated access for MVNOs.[10] In general, incumbent facilities-based wireless providers argue that mandated access will discourage next generation wireless investment and would undermine competition from new entrants.

Amid Falling Prices, Political Direction for MVNO Entry to Reduce Prices

The Prime Minister's recently published Mandate Letter to the Minister of Innovation, Science and Industry provided express political direction for reducing the average cost of cellphone services and expand mobile virtual network operators (MVNO) in the market.[11] Specifically, the Mandate Letter directed the Minister to:

> Use all available instruments, including the advancement of the 2019 Telecom Policy Directive, to reduce the average cost of cellular phone bills in Canada by 25 per cent. You will work with telecom companies and expand mobile virtual network operators (MVNO) in the market. If within two years this price target is not achieved, you can expand MVNO qualifying rules and the Canadian Radio-television and Telecommunications Commission mandate on affordable pricing. In a backgrounder published on March 3, 2020, the federal government clarified that its 25 percent reduction target would be computed from a "benchmark price" "based on prices advertised on company websites in early 2020 for post-paid, bring your own device (BYOD), unlimited talk and text plans in the 2 to 6 GB range."[12]

Notably, from the wireless services component of Statistics Canada's consumer price index, prices for cellular services have declined by almost 17 percent as of December 2019 from a high point in June 2017 (see Figure 1). In contrast, Canada's all-item Consumer Price index increased by 4.6 percent between June 2017 and December 2019.[13] This index compiles all costs associated with the services of a

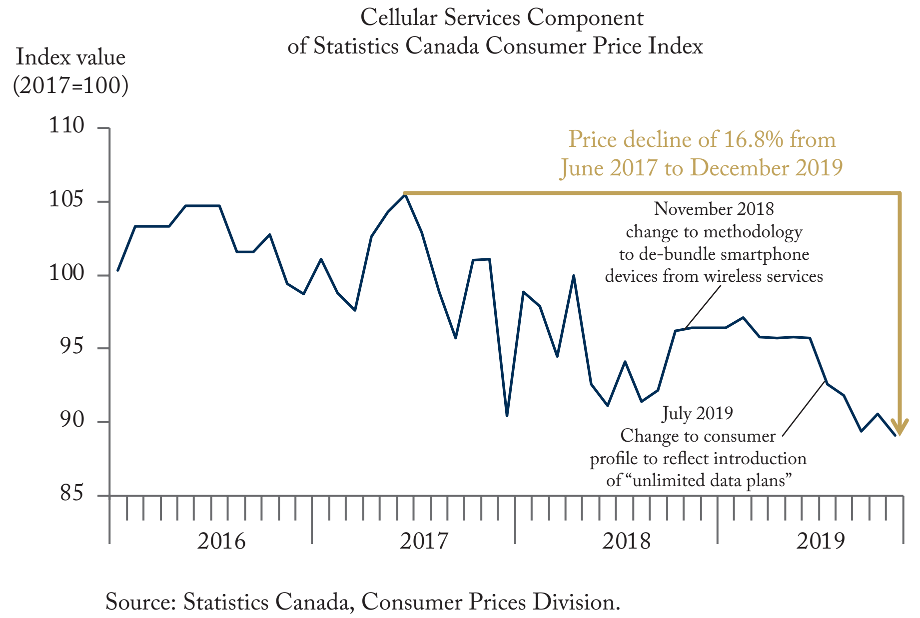
10 See further comments by interveners: https://services.crtc.gc.ca/pub/ListeInterventionList/Default-Defaut.aspx?en=2019-57&dt=fu&lang=e&S=C&PA=t&PT=nc&PST=a.

11 Office of the Prime Minister. *Minister of Innovation, Science and Industry Mandate Letter* (13 December 2019). Available online: https://pm.gc.ca/en/mandate-letters/minister-innovation-science-and-industry-mandate-letter.

12 Innovation, Science and Economic Development Canada, "Government of Canada takes action to offer more affordable options for wireless services" (5 March 2020). Available online: 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.

13 Notably, with increased de-bundling of smartphone devices from wireless services, Statistics Canada modified its index in November 2018 to exclude devices (i.e., to only track wireless services). Between November 2018 and December 2019, this wireless services index declined by roughly 9 percent. As well, the significant decline in July 2019 corresponds to the widespread introduction of "unlimited data plans."

Figure 1: Cellular Services Component of Statistics Canada Consumer Price Index



Source: Statistics Canada, Consumer Prices Division.

cellular device in a given period. As explained by Statistics Canada, the services included in the cellular services component have evolved with Canadians' changing consumption patterns. Since cellular plans are typically discontinued rather than modified, this index tracks several representative profiles for Canadian wireless consumers. These profiles are updated regularly with shifts in market share or new services.

Certain Council members were cautious about inferring that intensified competition has driven recent price declines. These members pointed out that price declines may be witnessed in oligopolistic markets if input costs decline. That is, if input costs decline, even a monopoly would reduce prices in order to maximize profits. Given the complexity of cost structures and products within telecommunications services, these members cautioned that identifying efficient price levels is beyond the Council's scope.

However, particularly given observed price declines in cellular services, other Council members believed that the federal government appears to have established an arbitrary and politically motivated target for a 25 percent price reduction in cellular service costs. These members doubted that the federal government's target was based on a rigorous economic analysis of efficient price levels.

"Wires and airwaves" Essential for Competition in Communications

Council members agreed that facilities to transmit information – whether by signals over wireline infrastructure or using radio spectrum – are essential for providing communications services. The question at the core of the discussion was whether competitors ought to build their own facilities, or whether mandating access by some competitors to other competitors' facilities is preferable.

One group of Council members argued that the CRTC should increase mandated access – particularly by allowing MVNO access to wireless transmission facilities at regulated wholesale rates. These members contended that the CRTC should not assume that the only way to compete is to build alternative transmission systems and operate them more efficiently. In these members' opinion, such "facilities-based competition" is an out-dated concept in the current technological setting, in which they contend great efficiencies can be generated by superior computer power and algorithms without the need of owning and running hardware transmission facilities.[14] While acknowledging that mandated access requires close attention to appropriate access prices, this group of Council members contended that facilities-based providers would continue to have an efficient incentive for new infrastructure if the CRTC adopts a "cost plus" framework for setting rates for mandated access. That is, these members argue that rates can be calibrated to provide sufficiently high risk-adjusted returns on capital to preserve incentive for new investment at the margin.

In contrast, as discussed further below, a second group of Council members expressed scepticism that the CRTC would have the capacity to set appropriate prices for access that provide the appropriate risk-adjusted rate of return to investment in facilities.

These sceptical members contended that mandating access has failed empirically to foster durable competition. For example, certain members pointed to the CRTC's arguably unsuccessful earlier approach to compelling unbundling of local loops for telephones in order to foster competition in voice

14 For elaboration, see: Konrad von Finckenstein, "Why it's time to discard the concept of facilities-based competition." CARTT (4 February 2020). Available online: https://cartt.ca/commentary-why-its-time-to-discard-the-concept-of-facilities-based-competition/.

services.[15] Nonetheless it was the development of voice services provided through cable and fiberoptic facilities (e.g., VoIP) that ultimately produced new competitors for telephone facilities.

In this way, these members observed that regulators tend to be "backwards-looking." That is, regulators arguably focus on static sources of competition. By assuming that existing infrastructure will be the only technology for delivering a given service, certain Council members believe that regulators run the risk of interfering in the dynamic that drives entry of durable new facilities-based competition.

Scepticism that Regulators Can "get rates right" for Mandated Access

All members recognized that a fundamental challenge for mandated access is setting appropriate rates. Members also agreed that, if facilities-based competitors earn economic rents on infrastructure (i.e., profits in excess of the required risk-adjusted returns for the capital investment) because of imperfect competition, it is conceptually conceivable that mandated access for re-sellers could reduce consumer prices without compromising incentive for new investment.

Importantly, if economic rents are the regulators' concern, certain members also questioned why mandating access for re-sellers at prescribed rates is a preferable approach relative to simply establishing maximum consumer-facing prices.

Nonetheless, Council members differed on the practical question of whether prices or rates for mandated access could be set to only constrain economic rents and without impairing investment incentives. All members admitted the challenge of establishing rates or prices in a multi-product setting where variable costs are relatively low and fixed costs for physical infrastructure, as well as "overhead" human resources, are required to deliver multiple types of services.

15 Certain members also observed that unbundling of local loops for telephones in the United States by the Federal Communications Commission had been similarly unsuccessful.

Certain Council members contended that methodologies exist to accurately allocate fixed costs between services.[16] For example, these members contend that access pricing and conditions to incumbents' wireless facilities could be based on the exercised value of the real options as part of the incumbents' investments in building their networks. These members contended that such options could be estimated to capture the irreversibility factors in investment costs incurred by facilities-based providers, which are a major source of incumbent general opposition to mandated access. These members contended that, to ensure a level playing field competition in services, the regulator could impose a full cost sharing condition (rather than the usual avoidable cost condition) on incumbents to favour long-term rather than short-term efficiency and prevent predatory pricing strategies.

However, most members were sceptical that a conceptual framework could be accurately and consistently "taken to the data" – particularly in a dynamic setting where facilities-based providers operate across multiple business lines and compete to roll out new technologies and operational improvements. To these members, the empirical challenges of accurately identifying economic rents are intractably complex. In particular, a regulator will face difficulty accurately allocating fixed costs for networks (particularly overhead and capital costs) when these are shared across multiple, non-competing products.

Indeed, these members observed that, while stylized economic models are helpful to understand competitive dynamics, any theoretical framework abstracts from the messy day-to-day decision-making within companies. Although any facilities-based provider aims to maximize its own profits, it lacks perfect information about its own production function, which involves many moving parts and costs, and is always adapting to a "fog of war" of changing marketplace conditions.

In such a setting, most members were sceptical that the outside-in view of the regulator could accurately identify economic rents for a specific provider at any moment in time, let alone keep pace with changing marketplace conditions. Moreover, these members emphasized that facilities-based providers differ widely in their internal corporate organization, physical infrastructure and mix of services. With such heterogeneous competitors, a "one size fits all" methodology for establishing rates risks dampening incentives for at least certain facilities-based providers.

16 For elaboration, see: Boyer, Marcel, Michel Moreaux, Michel Truchon 2006. Partage des coûts et tarification des infrastructure, CIRANO Monograph. Available online: https://cirano.qc.ca/files/publications/2006MO-01.pdf; Boyer, Marcel 2010. "The Measure and Regulation of Competition in Telecommunications Markets," chapter 5 in Gentzoglanis, A. and A. Henten (Eds.), Regulation and the Evolution of the Global Telecommunications Industry, Cheltenham, UK and Northampton, MA: Edward Elgar Publishing; Boyer, M., Christoffersen, P., Lasserre, P., Pavlov, A. 2004. "Value Creation, Risk Management and Real Options." ICFAIAN Journal of Management Research III (10), 42-62 (also as CIRANO 2003RB-02). Available online: https://cirano.qc.ca/files/publications/2003RB-02.pdf; and Boyer, Marcel. 2007. "Optimal Policy Relative to Spectrum Auction." Industry Canada, Government of Canada (Gazette Notice DGTP-002-07). Available online: https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/dgtp-002-07-MEI.pdf/$FILE/dgtp-002-07-MEI.pdf.

Questions of "Sunset" for Time-limited MVNO Entry

In its submission to the CRTC wireless review, the Bureau recommended that the CRTC provide MVNO access to wireless facilities but limit this only to those who are likely to be able to build a network within a five-year period and transition the customers they won as an MVNO to their own network.[17] The Bureau's proposal contemplates a fine or bond mechanism to provide build-out incentives within the five-year horizon for such facilities-based providers who enter geographic markets as MVNOs. Nonetheless, if a time-limited policy does not substantially improve competitive outcomes after a five-year period, the Bureau recommends a commitment by the CRTC to implement a broad MVNO policy in markets that still lack competition.

Relative to mandated access for "pure" MVNOs, certain members were cautiously supportive of time-limited entry of facilities-based providers as MVNOs in geographic markets where they presently lack wireless facilities. These members conceded that, conceptually, entry as MVNOs for such facilities-based providers might enhance facilities-based competition – for example, by providing "learning by doing" knowledge around the dynamics of consumer demand in specific geographic markets.

Specifically, participants in a specific market will have better information about market dynamics (e.g., usage patterns, customer willingness to pay) and such information reduces the uncertainty around assumptions required to build a robust business case for long-term entry. With the large capital investments required for facilities-based competition, allowing facilities-based providers to enter other geographic markets as MNVOs for a time-limited period may thereby enhance their willingness to enter as long-term, facilities-based competitors.

However, those members who cautiously supported time-limited entry doubted that regulators would follow-through on any "sunset." Specifically, these members forecast a commitment problem around such time-limited entry, anticipating that the CRTC will give into future pressure to extend or ignore the time-limitation once these MVNOs are established in the market but fail to build facilities within the prescribed period.

For other members, this time-limited entry for facilities-based providers would not go far enough to enable new competition. For these members, facilities-based providers' infrastructure should be viewed as an "essential facility" and broad mandated access for "pure" MVNOs is appropriate to enable competition in the allegedly bottlenecked market for wireless services.

17 Competition Bureau. Telecom Notice of Consultation CRTC 2019-57 – Further Comments of the Competition Bureau (25 November 2019). At para. 266-270. Available online: https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/04510.html.

Mandated Access May Put investments in Digital Infrastructure at Risk

Certain members stressed that wireline and wireless facilities are the source of value for communications services and incentives for facilities-based carriers to compete will drive the roll-out of new infrastructure and innovative technological solutions for delivering content. These members emphasized that telecommunications providers will have a diminished incentive for new infrastructure if the regulator will grant access at favourable rates to competitors to "free ride" on their investments.

Specifically, facilities-based carriers invest to gain a competitive advantage that mandated access takes away, eliminating a key rationale for new investments. From a financial perspective, mandated access significantly increases the risks and reduces the returns on invested capital. Therefore, certain members believe that mandating access for MVNOs would slow deployment of "5G" wireless services and would eliminate business cases for expanding wireless service into certain low population areas.

To this end, these members point to international experiences with mandating access. For example, certain members cited an international study of wireless operators in 21 countries that indicated reduced investment intensity by 17 percent in the short-run and 36 percent in the long-run where mandated access was imposed.[18] For wireless services in Canada, members compute such a reduction would be equivalent to reducing investment intensity by approximately $400 million per year in the near-term and to more than $1 billion per year in the long-run relative to the counterfactual.[19]

These members also highlighted an analysis by Boston Consulting Group (BCG) of international experience with mandated access.[20] The BCG study suggests that the combination of mandated access to wireline facilities at the rates prescribed in the Broadband Decision and mandated access for MVNOs could reduce capital intensity by 25 percent across both wireline and wireless facilities-based providers. From BCG's analysis, such a scenario would translate to an "investment gap" in wireline

18 See Kim, Jihwan, et al. 2011. "Access Regulation and Infrastructure Investment in the Mobile Telecommunications Industry", *Telecommunications Policy* 35(11) at p.907-919, as discussed in Sanderson et al. 2019. *CRTC 2019-57 Review of Mobile Wireless Services: The Value of High Quality Networks* (14 May) at p.26. Available online: https://services.crtc.gc.ca/pub/ListeInterventionList/Documents.aspx?ID=278744&en=2019-57&dt=i&lang=e&S=C&PA=t&PT=nc&PST=a.

19 This approximate calculation is based on the wireless capital expenditures of $2.7 billion in 2018 as reported in the CRTC Communications Monitoring Report.

20 Boston Consulting Group Centre for Canada's Future. 2019. "In the Balance: Future-proofing Canada's digital infrastructure to unlock benefits for all" at p.20. December. Available online: https://media-publications.bcg.com/flash/dotbcg_other/CCF%20Digital%20Infrastructure-%20In%20the%20Balance.pdf.

and wireless capital expenditures (reflecting the reduction in investment relative to the planned counterfactual) of $2.0 billion in 2021, rising to $2.5 billion in 2025. BCG concluded that such a significant investment gap would hamper 5G deployment nationwide.

Finally, members opposed to mandated access pointed to a similar conclusion reached in analysis by TD Securities, which projected that total investments in wireline/cable infrastructure could decline by roughly $1.68 billion annually after 2021.[21] Specifically, TD Securities estimated a 22% reduction in wireline investment based on the by the estimated anticipated loss of $2.3 billion in high gross margin broadband revenue and consequent incentive for management to mitigate cash flow impacts by imposing much higher hurdle rates on new capital investment. TD Securities concluded that the diminished investment would likely impair rural network extension but also reduce capital spending on broadband capacity and quality in urban areas. TD Securities estimated that the rates in the Broadband Decision are so low relative to the true costs of building and maintaining next generation networks that even certain incumbent wireline providers may start leasing from other facilities-based providers in their home territories rather than proceed with currently planned initiatives for upgrading networks.

Competition Doesn't Follow Political Timelines But Delivers in Long-run

Certain members contended that mandated access is necessary to unleash competition in telecommunications services when other regulatory measures have failed to reduce prices. These members argue that the government's political directives respond to voter/consumer sentiment that prices for telecommunications have remained stubbornly high and market forces have been unsuccessful in producing adequate new entry.

However, other members pointed to indicators that market forces are already working in Canada. For example, these members pointed to data showing Canada having the second-fastest mobile wireless speeds in the world[22] and providing LTE coverage for 99 percent of Canadians.[23] These members also

21 Valentini, Vince, Bentley Cross, and Towaki Dojima. 2019. "We See Good Odds of the CRTC Decision Being Revised/ Overturned." TD Securities.4 September. Available online: https://www.ic.gc.ca/eic/site/smt-gst.nsf/vwapj/CRTC-2019-288-Attachment-1.pdf/$file/CRTC-2019-288-Attachment-1.pdf.

22 Canadian Wireless Telecommunications Association, Facts & Figures, available online: https://www.cwta.ca/facts-figures/ [CWTA Facts & Figures]; see also Ookla, "Speedtest Global Index." 2019. March. Available online at: https://www.speedtest.net/global-index.

23 *CWTA Facts & Figures*; see also Bell Coverage Map: https://www.bell.ca/Mobility/Our_network_coverage.

argued that, over the past decade, Canada has witnessed successful, facilities-based new entrants (e.g., Freedom, Videotron, Eastlink) who now earn approximately one-third of net new mobile wireless additions.[24] Concurrently, consistent with the Statistics Canada data above (see Figure 1), these members stressed that wireless prices have declined and competitors have launched unlimited data plans.

Moreover, for many Council members, the directive in the mandate letter to the Innovation, Science and Industry minister (and, in effect, to the CRTC) raises a more fundamental concern. Specifically, these Council members highlighted the risk of significant and long-lasting impacts from destabilizing expectations for facilities-based providers with large immobile sunk costs. Mandated access can certainly compel short-run reductions in consumer prices, but telecommunications providers will respond by adjusting their investment behaviour accordingly. If facilities-based providers perceive a risk that governments will change the rules over the life of their investment, they will discount this risk in making new investments.

Many Council members believe investors will view such politically driven policy shifts that diminish returns on sunk investments as a form of sovereign risk. Such risks will be "priced in" for future investment decisions unless political decision-makers make credible commitments to an independent regulatory process grounded in consistent principles. Certain Council members observed that the adage that "trust arrives on foot and leaves on horseback" equally applies to the durability of investor perceptions of countries' regulatory frameworks. If government pursues short-run political objectives at the expense of returns on long-lived infrastructure investments, certain Council members believe confidence in Canada's regulatory regime for telecommunications will be difficult to win back.

24 Canadian Wireless Telecommunications Association. 2019. *Industry Statistics*. 11 November. Available online: https://www.cwta.ca/wp-content/uploads/2019/11/Sub-Stats-2019-Quarter-3-EN-Web-11.20.2019.pdf.

Members of the C.D. Howe Institute Competition Policy Council

Members of the Council participate in their personal capacities, and the views collectively expressed do not represent those of any individual, institution or client.

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* Not in attendance, Feb. 18, 2020.

Non-members observing at meeting: Bram Abramson; Ken Engelhart; and Keith Halliday, Boston Consulting Group.

a: As Co-Chair, Elisa Kearney attended and facilitated this meeting but did not contribute substantively to the discussion.