



ICTC POLICY
BRIEF

MVNOs: Embracing
the Next Wave of
Telecommunication
Services to Fuel
Tomorrow's
Economy

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Canada's Competitiveness in a Global Economy and the Role of the Telecom Sector

The Canadian economic landscape is rapidly diversifying, expanding and shifting. With the increasing absorption of technology across all verticals, our economy is afforded new opportunities and possibilities. At the same time, many traditional sectors are simultaneously being faced with the challenge to evolve and grow amidst this disruption and change. Business models are being modified, with industry, policy makers and consumers needing to adapt.

In 2019, Canada ranked 13th globally in terms of competitiveness [1]. While this still placed us in the top 20th percentile, our global competitiveness ranking fell by 3 points from the year prior and more than 5 points from 2015, where Canada was ranked the 5th most competitive country in the world [2]. This is a reality that should not be taken lightly. Competitive business practices are one of the foundational principles of a fair and free economy, and Canada must work to safeguard its place among the top most competitive countries in the world.

Competition across the economy is crucial. It ensures that consumers receive the best and most cost-effective services available, while industry is provided the freedom and opportunity to grow and develop. Although this is something that can be analyzed from a number of different angles, this paper will focus on competitiveness in the Canadian telecommunications sector as a key building block of the nation's overall economic strength. Using mobile virtual network operators (MVNOs) as a central consideration, this paper will showcase the value proposition of MVNOs as a first and important step in a future Canadian business landscape that is increasingly competitive, attractive, and robust.

What are MVNOs and What Makes Them Critical for Tomorrow's Economy?

Mobile Virtual Network Operators (MVNOs) are resellers of network capacity. They lease or buy in bulk the excess network capacity of large or mainstream providers, and resell services to customers. Because the portion of the spectrum that they lease is usually unused by the large carriers, MVNOs can often offer services to customers at more cost-effective rates.

As increased connectivity and autonomy are expected to be the foundation of the Canadian economy in the next number of years, MVNOs have the potential of enabling new services to empower IoT connectivity, Smart Cities, and even services like autonomous vehicles [3].

Additionally, with the impending deployment of 5G in Canada and the advantages that this technology offers over previous generations [4], MVNOs have the potential of unleashing a new breed of services to meet a wide range of demand for the connected economy. This can include reliable and secure low latency services, secure broadband for public safety (S-MVNO) as well as connectivity capacity for advanced manufacturing, retail, medical infrastructure, and many others. This new generation of MVNOs can help to pave the way for entrepreneurs and smaller businesses in Canada to access affordable and reliable mobile services, while better tapping into the power of Big Data and AI to scale.

How Do They Work?

MVNOs obtain network capacity from large telecom providers at wholesale prices. They then sell telecom services to the public under their own brand. Because MVNOs are just leasers rather than owners of spectrum, they are not required to pay for upkeep and maintenance of telecom infrastructure, nor do they incur the added cost of radio frequency spectrum licenses. Due to these cost-savings, MVNOs are able to resell their network capacity to customers at a reduced cost.

Why Do Large Carriers Sell Their Network Capacity to MVNOs? Aren't They Worried About Competition?

Large carriers like Bell or Rogers for example, have sold unused spectrum to MVNOs because their networks have extra capacity – in other words, were it not leased out, this spectrum would simply go unused. By offloading this unused spectrum in bulk to third party providers like MVNOs, the original network operator is able to make a small profit without incurring additional expenses. Examples of existing MVNOs include subsidiaries created by network operators, or flanker brands.

MVNOs do not act as direct competitors to large carriers. Rather, they rely on existing infrastructure and spectrum already owned by said network providers. However, while oftentimes services are not as extensive as those via traditional carriers, their ability to compete on cost can be substantial. In some cases, MVNOs have been known to offer comparable services at rates that can be up to 75% lower [5] than large carriers.

What Are Some Examples of MVNOs?

In 2016, Sugar Mobile launched in Canada. Sugar, using the network of Ice Wireless [6] in Northern Canada was able to offer consumers wireless plans for as little as \$19/month. However, a mere year following their launch, regulatory directives by the Canadian Radio-television and Telecommunications Commission (CRTC) functioned to not only force Sugar to immediately shut down services [7], but to further block the provision of MVNOs like it in Canada, altogether. Citing concerns related to the compromise of existing investments made by telecom providers in infrastructure and service delivery, truly competitive MVNOs were officially labeled inoperable in Canada.

Despite this decision in Canada, MVNOs are prevalent and even common in other parts of the world. The United States is a prime market for MVNOs, where approximately 60 third-party providers lease space from the big four network operators, AT&T, Sprint, T-Mobile, and Verizon.

One commonly known MVNO in the US is Cricket Wireless. Cricket uses the AT&T network, offering unlimited talk, text and data for \$50 USD/month. While Cricket offers a comprehensive package, at \$50/month it is among the most expensive of such providers. Cheaper options exist with companies like Mint Mobile. Using T-Mobile's network, Mint offers users a three-month package of unlimited talk, text, and 10GB of data for \$23 USD/month. Compare these packages to the average monthly cost of similar plans with AT&T and T-Mobile directly, averaging between \$70 to \$100 USD per month.

Canada and MVNOs: Where Do We Stand?

Truly competitive MVNOs are not yet permitted in Canada. This means that the majority of network and wireless services must be administered by the big three telecommunications providers: Rogers, Bell, and Telus.

Understanding that competition is a critical driver of an innovative and a forward-looking economy, in March 2018, the Canadian federal government urged the CRTC to revisit their competition policies and regulations. One topic for review was the role of MVNOs in Canada – that is, the reconsideration of whether or not the resale of wireless services to third party providers should be allowed in the name of competitive business practices.

Later on, the CRTC came to a decision. In so doing, it affirmed that it would stand by its original decision on the entry of third-party providers into the telecom market – in short: it would not allow competitive MVNOs entry into the Canadian telecom market. Despite the reality that these new players could provide more options to consumers, the CRTC maintained that their entry would undermine infrastructure investments already made by the main carriers, while simultaneously “introducing regulatory uncertainty into the market”. [8] The uncertainties they referred to include concerns of regulatory unknowns that may arise from changing in the meaning of roaming by broadening the definition of a “home network” [9].

Instead, the CRTC proposed that it would mandate the introduction of low-cost, data-only plans into the market. These plans would be offered to consumers without the need to engage in a contract with the provider. The CRTC asked all major carriers to submit proposals for low-cost data-only plans that would be available in prepaid formats. As of late 2018, all three national carriers offered at least one data-only plan priced at \$30 CAD or less per month [10].

"Skinny" Data-Only Plans: Are They All They're Cracked Up To Be?

All major carriers now offer what are referred to as “skinny data-only” plans. Yet, while these plans do act as new low-cost options for consumers, they leave much to be desired. Rogers’ Chatr Mobile for example, offers 1GB for \$35 CAD a month, on a 3G network. This means that download speeds are a mere fraction of the speed seen on the LTE networks available via the standard plans of these carriers – download speeds on Chatr are 3Mbps compared to 40+ Mbps on LTE. Similarly, Bell’s Lucky Mobile allows users access to 1GB for \$25 CAD/month. However similar to Chatr, download speeds are stuck at 3Mbps, rendering a 1GB package quickly consumed.

These skinny data-only plans introduce alternatives to customers who may be unwilling or unable to afford a standard plan. However, while these options may be viable or useful in some cases and at least substantially more affordable, they bring with them issues of low bandwidth, slow connections, unstable networks, and the potential for costly overage charges. Skinny data-only plans are merely one early option when it comes to advancing competition in the sector and providing Canadian consumers with more choice in their telecom services.

Competition in the Telecom Sector: A Consumer Cost Tale

The story of consumer cost in the Canadian telecom sector is well-known. For years, Canadians have been aware that they pay some of the highest fees in the world for telecom services. Many arguments have been put forward in the past to justify this expense – these include the expansive landscape, low population density and a number of others, all rendering telecom infrastructure expenditure considerable. The annual snapshot of telecom services in Canada showcases the cost of various service plans and compares them to similar services offered in other countries.

The 2018 snapshot found that on average, plans containing 2GB of data [11] cost consumers approximately \$75/month [12]. While this is a small decline from 2017 prices that averaged slightly more than \$81/month for the same plan, the cost is still far above the monthly rates of comparable plans across the G7 countries. In the US, the cost of a similar plan would be roughly \$60/month [13] – a fee that is approximately 20% cheaper than in Canada. An even more pertinent comparison is available when evaluating the cost of such services among many European countries. While comparing results for 1GB instead of 2GB plans, in 2018 a UK-based organization, Cable, analyzed data from more than 6,000 plans in 230 countries around the world to calculate average cost per subscription [14]. While a mere preliminary analysis [15], the results of this study are telling. Here, the highest cost for a 1GB plan in the EU was seen in Greece, totaling nearly €29/month (~\$44CAD), and the lowest cost was found in Poland, where consumers paid €1.17/month (~\$2CAD) for a 1GB plan [16]. Most plans in the EU fell within the €3 to €7 range (~\$4.50 to \$10.50 CAD [17]).

In the US, MVNOs are a crucial part of the telecom fabric. They offer consumers more choice and promote the development of fairer business practices. In the European Union, competition in the space is even more advanced, with the MVNO market in the region being both the largest and most mature in the world.

In many EU states, not only are MVNOs fully operational, but incumbents are allowed and encouraged to compete for consumers by offering higher-quality and more cost-effective plans. Prime examples in the EU include the world's first recognized MVNO, Virgin Mobile, launched in 1999 in the UK [18]. In the UK, there are approximately 30 MVNOs leasing telecom services from four main providers. All but 6 offer 4G data capabilities [19], with fees averaging approximately £10/month (~\$17 CAD) for a 1GB pay-as-you-go plan. Offering competitive rates and similar services to large telecom carriers, MVNOs are quickly gaining ground in Europe.

The Canadian telecom sector is a key element of the Canadian digital economy. With 86% of Canadians having a broadband connection at home [20], and mobile subscriptions reaching nearly 32 million [21] Canadians are among the most frequent users of telecommunications technology in the world. However, despite these realities, the sector is also one of the most highly-regulated in the G7 both in terms of domestic and international investment and competition. Domestically, three providers currently administer the majority of telecommunications services and functions. Small players find themselves unable to enter the market and developments like truly competitive MVNOs – being only one step in the competition journey – are blocked.

At the same time, challenges also exist on the international front. This is so much so that Canada has the highest foreign direct investment regulatory restrictions of any G7 country [22], with the telecommunications sector being one of the most strictly guarded. Currently, foreign entry into the Canadian telecommunications sector is limited to investments where 80% of the business' members or board of directors are Canadian [23]. These restrictions render international investment difficult in this space. By comparison, the G7 average for foreign ownership in the telecom sector is approximately 50%. The telecommunications sector is one of Canada's strongest contributors to the technology landscape. Supporting and continuing to grow the sector is key, and competition must be the cornerstone of this pathway.

Competition in the Telecommunications Sector and Canada's Journey Forward

Falling three places on the global competitiveness scale from 2018 to 2019 alone, Canada must focus on ways to enhance competition and safeguard sound business practices. Doing so is critical not only for economic growth and prosperity, but for the overall ability of our country to attract investment, continue to support and encourage domestic innovation, and bolster the reputation of Canada as a top location for job growth, productivity, and highly-skilled talent.

In 2018, the telecommunications sector brought in approximately \$50B [24] worth of revenue to the Canadian economy and employed more than 100,000 Canadians [25]. It is an essential industry offering connectivity services and employment opportunities for Canadians. Opening up the market to new players and competitive practices will have a substantial effect on the future growth and sustainability of the sector, while better supporting the needs of Canadian consumers.

Competitive MVNOs are one important and viable solution that the communications industry can adopt to support choice and affordability of services for all Canadians. The introduction of such MVNOs into the Canadian telecom sector will help to level out pricing, while expanding the scale and scope of service offerings to Canadians. It will support domestic innovation and business growth across all industry verticals, and provide better and more affordable options for Canadian consumers.

Competition must not be viewed as a threat to existing infrastructure investments or incumbent telecom providers. By allowing new entrants like competitive MVNOs, the Canadian telecom sector will be better able to expand, adapt, and grow. Such synergies will undoubtedly unleash new applications and business models, while bolstering the economic return from current telecommunication infrastructure. Competition should not be met with resistance – it is a foundational pillar, enabling innovation and resilience for the telecom sector, as well for the overall economy in an increasingly global marketplace.

About This Brief

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About ICTC

Through forward-looking research, innovative capacity building programs, and practical policy advice, ICTC fosters innovative and globally competitive Canadian industries empowered by a talented and diverse digital workforce.

Endnotes

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