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Robert Ghiz, CWTA President & CEO

Keynote Address:

International Institute of Communications - Canadian Chapter: 2022 Annual Conference

Tuesday, May 17, 2022 9:00 to 9:20 a.m. Eastern

Good morning and thank you for inviting me to join you today – both in person and online.

I extend my thanks and congratulations to IIC Canada President, Grant Buchanan, and the rest of the IIC Canada Board of Directors for putting on another exceptional event.

When you look at the agenda for IIC Canada's annual conferences, you are looking at a snapshot of the regulatory landscape and see the pressing issues that Canadian and international regulators are grappling with, and that will dominant the regulatory headlines in the months and years to come. As head of an organization that represents the service providers and equipment vendors who build and operate Canada's world-class digital infrastructure, it is a snapshot that I take great interest in.

While this year's conference touches upon issues concerning digital infrastructure, such as the important topic of rural broadband access, much of this year's conference is devoted to the regulation of "over the top" services, such as digital platforms, streaming services, and online gaming. This is not surprising, as each of these services create different challenges for policy makers around the world.

En dépit de leurs différences, ces services dépendent tous de l'infrastructure numérique et des services réseaux qui les sous-tendent. Sans cette infrastructure, pas de connexion en ligne possible. Il nous serait impossible de prendre part à l'économie numérique et il serait encore plus difficile pour l'État d'assurer les services essentiels.

But despite their differences, they all have one thing in common. They all rely upon the digital infrastructure and network services that enable them. Without this infrastructure, we could not connect with one another online. We would not be able to participate in the digital economy, and it would be more difficult for governments to deliver critical services.

We only need to look to the COVID-19 pandemic to see the importance of telecommunications in sustaining economic and social activity. Yet I'm concerned that some people take our digital infrastructure and its future for granted. Except for the important need to expand coverage to underserved communities, some think that ongoing investment in advanced networks is a 'nice to have,' but not critical. For those of us working in the telecommunications industry, this may come as a surprise, but I assure you that such sentiments exist.

Just recently, I was discussing the importance of 5G with an elected official, and he said he didn't care about 5G as it is not that important to his constituents. He could not be more wrong.

COVID-19

As the COVID-19 pandemic highlighted, digital infrastructure is crucial to the economic and social wellbeing of Canada. In addition to sustaining business activity, our digital infrastructure played a crucial role in overcoming the social isolation caused by restrictions on travel and social gatherings. I'm sure you know of people who used video calls for the first time during the pandemic so they could keep in touch with friends and family.

This increased reliance on the internet and mobile communications led to huge surges in voice calls and digital traffic. I recall news articles in the early days of the pandemic questioning whether our digital networks would buckle under the strain. They did not. Faced with a year's-worth of traffic growth in just a few weeks, Canada's digital networks rose to the occasion. According to a survey conducted by Accenture, 90% of Canadians said their service provider met or exceeded their COVID response expectations.

Ça, c'est la bonne nouvelle. Mais ce n'est pas parce que les réseaux ont tenu le coup et que le pire a été évité qu'on peut penser pouvoir continuer comme avant après avoir poussé un grand soupir de soulagement. Il faut absolument résister à cette tentation. Pour que le Canada demeure un leader mondial des télécommunications, qu'il soit concurrentiel à l'ère de l'économie numérique, nous devons chercher à comprendre pourquoi nos réseaux ont été aussi performants pendant la pandémie et appliquer les leçons apprises pour la suite des choses.

That's the good news. But when something works and a crisis is adverted, there is the temptation to give a sigh of relief and move on. We must resist this temptation. If we want Canada to continue as a world leader in telecommunications, if we want Canada to be competitive in the digital economy, we must consider why our digital networks performed so well during the pandemic and apply those lessons for the future.

The Importance of Investment

The obvious answer is because Canadian network operators have invested heavily and consistently in expanding and enhancing their network infrastructure. The less obvious answer – perhaps not to most of you in this audience, but to many Canadians – is the regulatory framework that provides the foundation for these investments.

Canada's mobile wireless providers have invested over \$83 billion in capital expenditures and spectrum to build some of the best mobile wireless networks in the world. Fixed wired networks have received at least twice as much investment. How does this compare to infrastructure spending in other countries? According to BCG, between 2010 and 2018, the Canadian telecom industry outpaced its global peers and ranked first for investment in the G7, spending 63% more per capita than the average of OECD countries. Our industry also reinvested over 50% more per dollar of revenue received than the OECD average.

This higher level of investment should not be a surprise, as Canada is a challenging and expensive place to build digital networks. Our large geography, low population density, difficult terrain, harsh climate, and high spectrum costs are just some of the factors that contribute to higher building costs.

But that is only half the story.

In a recent report, PwC found that while Canada has the highest wireless network build costs among G20 countries, it also has the highest network quality among the G20. And in addition to being of the highest

quality, our mobile wireless networks have wide coverage, with 4G/LTE networks reaching 99.5% of Canadians according to the CRTC.

So how is it that network building is more expensive in Canada, yet Canadians benefit from some of the highest quality and farthest-reaching services?

Sustainable Competition

This level of network investment, quality and coverage is only possible in a regulatory environment that encourages sustainable competition and investment.

Fortunately, successive federal governments and our industry's regulator have long recognized that a regulatory environment that is based on competition between companies willing to invest in building their own network facilities is the best way to ensure Canada's digital infrastructure is of the highest quality and has the broadest coverage, while also offering consumers with choice and affordable prices.

An example of this is the CRTC's recent policy decision following its review of mobile wireless services in Canada. The key issue in this proceeding was whether wireless service providers that have built their own infrastructure should be forced to resell their services to mobile virtual networks operators, or MVNOs. After carefully considering the evidence, the Commission concluded that introducing a broad-based wholesale MVNO access mandate would not produce sustainable benefits for consumers and would have an overall negative impact on the mobile wireless market in Canada. It noted that such a mandate would "reduce the attractiveness of investing in mobile wireless service markets across the country."

Instead, the Commission introduced a limited, facilities-based wholesale MVNO access policy that provides companies that already own infrastructure, including spectrum, with wholesale access rights for a limited period as they continue to invest and deploy their own wireless infrastructure. This means that companies such as Videotron, Eastlink, Xplornet, who are all facilities-based providers, will have a faster path into markets in which they plan to invest and build new network facilities. In rejecting calls for a broad-based wholesale MVNO access mandate, the Commission once again acknowledged that sustainable consumer benefits can only be produced by sustainable competition. And the only form of sustainable competition is facilities-based competition.

Quality, Coverage and Declining Prices

The evidence is clear. Facilities-based competition has enabled high levels of investment which have resulted in some of the best networks in the world. It has also resulted in lower prices and increased value for consumers.

As a result of facilities-based competition, wireless prices in Canada have steadily declined. Statistics Canada's Consumer Price Index report for March of this year shows that the price index for cellular services has declined by 26% over the previous two years. This is in stark contrast to the overall CPI, which shows that prices for virtually everything else have risen by 9% over the same period. In addition, in January of this year, the federal government confirmed that the price of mid-range wireless plans has declined by 25% in less than two years. Facilities-based competition has been the key to the success of Canada's mobile wireless market. And it will be even more important to Canada's future.

5G and Next-generation Networks

Last week I spoke at the Wireless World Research Forum's 2022 Huddle conference, where attendees discussed what the world of wireless communications will look like in 2030 and beyond. The clear takeaway from that conference is that the pace of innovation is relentless, and Canada cannot afford to be left behind. Today, we are in the early stages of deploying 5G networks across Canada. Faster speeds, more bandwidth, ultra-reliability, and lower latency will make 5G a key enabler for advances in areas such as smart factories, precision agriculture, remote healthcare, and connected transit.

While the technological advances of 5G are exciting, the real measure of its importance – and why we must continue to invest in advanced technology – is its contribution to economic growth and to the well-being of society. It is estimated that the adoption of 5G will result in an additional \$40 billion in GDP to Canada's economy by 2026, and the creation of an additional 250,000 fulltime jobs in that same period. 5G will also help close the urban/rural digital divide. Fixed wireless internet services have been around for several years and are already providing rural and hard-to-serve communities with reliable internet service. However, 5G fixed wireless service will provide even better performance and connect more people in hard to serve communities.

5G also has an important role in tackling climate change. As consumer demand increases, we will need to densify networks, necessitating the use of more efficient network equipment. In this regard, it is estimated that over the next 10 years, 5G will support a thousand-fold traffic increase, while the full network's energy consumption will be only half of current levels. 5G will also help other industries reduce their carbon footprint. A report commissioned by CWTA estimates that the use of mobile technologies, including 5G, across industries has the potential to address up to 23% of Canada's total 2030 emission reduction targets.

But realizing these benefits will require a lot of work and investment by our facilities-based service providers. GSMA estimates that on a global basis, the deployment, and ongoing costs of 5G will be up to 71% more expensive than previous network generations. Accenture estimates that the initial phase of 5G deployment in Canada will require \$26 billion in capital investment by 2026. Meanwhile, it is estimated that companies that provide 5G-based solutions will receive approximately 89% of the value from 5G-enabled use cases, with the network operator providers' share being only about 11%.

The need for a stable regulatory environment that enables continued investment in innovation and network building is more important than ever. This is not just a Canadian phenomenon. There is global recognition that a country's prosperity and competitiveness depends upon connectivity and the adoption of digital technologies. For this reason, governments around the world are implementing policies designed to stimulate investment in next generation networks. When introducing the European Electronic Commercial Code and its new connectivity objective, European policy makers emphasized promoting infrastructure competition wherever possible, as well as the need for a more predictable investment environment for network investors. In the U.S., policy makers have accelerated the allocation of key spectrum bands for wireless communications and streamlined local government approval processes for the installation of network equipment.

Countries have also introduced policies aimed at accelerating the adoption of next-generation technologies. For example, South Korea has passed legislation mandating the adoption of 5G in industries such as autonomous vehicles, smart manufacturing, smart cities, and digital healthcare.

Yes, Canada has rightfully been referred to as a "4G superpower," but there is a lot of competition for that "superpower" title in the 5G era. Becoming a 5G superpower is not about bragging rights. It's about

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protecting the well-being of Canadians and providing a path for future economic prosperity. It is also about protecting our environment. I know that our facilities-based service providers are up to the challenge. Their readiness and response to the COVID-19 pandemic is proof of their desire to provide Canadians with the best and most reliable digital networks.

Our industry's collaboration with governments at all levels to bring connectivity to hard to serve communities, as well as to expand the Connecting Families low-cost internet service program, is evidence of our commitment to bringing the benefits of connectivity to all Canadians.

Through continued collaboration and with a stable regulatory environment, I am confident that Canada will soon be recognized as a 5G superpower, and we will enjoy the economic and social benefits that come with such a distinction.

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