

Is the Canadian Wireless Sector Competitive?

by Yves Rabeau



Nearly two decades after having decided that it was not necessary to regulate the wireless telephone sector, the Canadian Radio-television and Telecommunications Commission (CRTC) decided this past April to revisit its decision and hold public consultations on the matter. It should soon announce whether or not it believes that formal regulation is required to ensure that the sector remains competitive.¹ Wireless telephony now includes data transmission and has become a competitive factor for businesses in an environment in which communications technologies are developing rapidly.

Some observers of the Canadian wireless sector, basing themselves on certain Canadian and international studies,² maintain that the sector is not competitive enough and that more regulation is required to force providers to lower prices, increase download speeds and improve service quality. These critics also believe that Canadian consumers are at a disadvantage compared with consumers in other developed countries and that Canada is constantly losing ground in terms of innovation, penetration rates and investment in infrastructure.

At a time the CRTC is asking itself whether it should regulate the wireless sector, it is appropriate to look at the state of this industry in Canada.

Much higher prices than elsewhere?

The studies carried out by the OECD are among those most often cited to lend support to the idea that the prices of wireless telephony in Canada are much higher than elsewhere. However, Canada does not look that bad in the most recent biannual report on the communications industry, published by the OECD in June 2011. In four out of six usage scenarios, in fact, prices are lower in

Canada than in the United States, although they remain higher than the OECD average. Furthermore, in the usage case including the most calls and text messages, Canada ranks as the fifth least expensive of 34 countries.³

Nonetheless, the main story to appear in many Canadian media outlets at the time was that Canada has higher roaming charges than all other OECD countries. This comparison is based on downloading 1 MB while roaming without a plan, which is a very unrealistic situation. Another comparison from the same study provides a better reflection of the reality of roaming, namely the cost of 20 MB in 20 sessions over a period of one month in the least expensive destination. For Canadians, this means the United States, where most travellers are headed when they leave the country for more than a day. In this situation, Canada ranks as the seventh least expensive of 34 countries.⁴

For the past few years, the CRTC has asked Wall Communications to provide an annual update of prices for wireline and wireless telephony and Internet access in Canada compared to cities in the United States and other countries with a comparable level of development (Boston, Kansas City, Seattle, London, Sydney, Paris and Tokyo). Based



on the figures for 2012, Wall Communications concludes that the price of a basic wireless telephone plan in Canada is comparable to what is paid in American cities, but higher than in the other cities examined. For higher usage plans, Canadian prices are lower than those in the United States and comparable to the average of the other countries.⁵

So, when we use comparable figures to evaluate the prices charged by Canadian wireless companies, we can see that they are fairly close to the average of what we find in other developed countries. Canada is neither among the best, nor among the worst.

Investment and technology

Another common criticism is that Canada is behind in terms of deploying and using the latest wireless communications technologies. International comparisons, however, paint a more nuanced picture.

There are no reliable data allowing us to compare average download speeds from one country to another. With regard to the spread of the fastest technologies, though, Canada comes off looking pretty good. Almost the entire population is covered by HSPA+ technology. In addition, three of the 98 LTE networks—currently the most advanced technology—in service in 49 countries and territories around the world are in Canada.⁶

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Since the dawn of the Internet, Cisco has published various studies on the progress of information technology that confirm Canada's favourable position. These studies show that Canada is third in the world in terms of consumers downloading and uploading data over the Internet, just behind South Korea and France. Projections forward to 2015 show Canada maintaining its place among the frontrunners.⁷ Cisco's numbers also show that data transmission on mobile devices more than doubled in Canada from 2010 to 2011, increasing by 158%.⁸

As for the penetration rate of broadband wireless services,

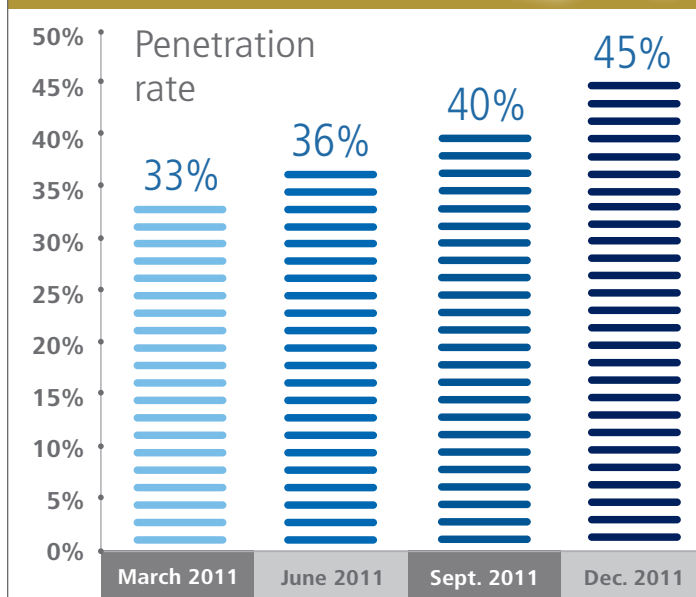
Table 1
Canada's international ranking according to various criteria

Criteria (Study)	Canada's ranking
Comparison of prices of wireless telephony / scenario with the most calls and text messages (OECD)	5 th least expensive of 34 countries
Comparison of roaming charges / 20 MB in 20 sessions over one month, least expensive destination (OECD)	7 th least expensive of 34 countries
Telephone packages above basic service (Wall Communications)	Prices lower than those in the United States and comparable to the average of other countries
Deployment of the most advanced wireless technology (4G Americas)	Three of the 98 LTE networks in service in 49 countries and territories around the world are in Canada
Amount of data downloaded and uploaded over the Internet by consumers (Cisco)	Ranked 3 rd in the world
Penetration rate of broadband wireless services (OECD)	Ranked 24 th of 34 countries

Canada is not at a Third World level, as critics are fond of claiming, but once again right in the middle of the pack of rich countries. According to the latest OECD figures, with a penetration rate of 39.7%, Canada places 24th among 34 developed countries, not far behind France and Austria, and ahead of Germany, Italy and Belgium.⁹ Indeed, a comScore study shows the extremely rapid growth of the penetration rate for smartphones in Canada. From March to December 2011, this rate grew from 33% to 45%¹⁰ (see Figure 1).

There was a time when the dominant telephone companies partially guided technological progress thanks to their equipment makers' R&D. Having sold these off, they must now adapt to technological developments originating not only

Figure 1
Penetration rate for
smartphones in Canada



Source: comScore, *Canada Digital Future in Focus*, 2012, p. 39.

from manufacturers like Ericsson, but also from new players in the wireless market like Apple and Google. The arrival of the iPhone and Nexus created outright infatuation among consumers, and cellphone companies had to be very quick in doing whatever they could to respond to this strong demand.

In order to do so, companies offering wireless services in Canada made significant investments to modernize their networks and increase their carrying capacity. From 2003 to 2005, capital expenditures totalled an average of \$1.3 billion a year, while they reached \$3.2 billion from 2009 to 2011, a 150% increase.¹¹

The vast majority of Canadian consumers have access to the most advanced wireless services, products and technologies. Whatever factor is analyzed, Canadian results are constantly improving and are comparable to those of other developed countries. We are therefore far from the caricature propagated by certain analysts of a Canada trailing the rest of the world in Internet and wireless access.

Spectrum management and foreign control

The wireless industry in Canada is dominated by three large companies: Bell, Telus and Rogers. In 2008, the federal government wanted to encourage greater competition by reserving a substantial amount of spectrum for newcomers when it

came time to sell that spectrum. This measure amounts to a form of subsidy for newcomers since they are not required to pay the price that would be determined by the market in an unfettered auction.

New providers did indeed enter the market and average consumer prices did fall, while rate plans became more flexible.¹² The main players also launched targeted discount services in order to compete with the newcomers' offers (for example, Rogers set up the Chatr brand).

Keeping in mind the costs of buying spectrum and the considerable investments that are required to deploy a network and offer good coverage to subscribers, it is nonetheless worth asking whether a market like Canada with low population density covering an immense territory can profitably support so many competing companies.

Historically, newcomers in the wireless field have not been able to survive for very long. Clearnet had a certain amount of success in the 1990s with an estimated two million subscribers, but was finally bought out by Telus in the year 2000. Microcell's Fido brand also won an enviable market share, but not enough to be profitable. After seeking bankruptcy protection in 2003, Microcell was taken over by Rogers in 2004.

The new players like Mobilicity, Wind Mobile and Public Mobile have only succeeded in capturing a small share of the market and their future profitability is uncertain, even though they concentrated their efforts on urban centres and shared towers with the dominant companies.¹³ Another notable fact: in Western Canada, cable provider Shaw decided not to move into the wireless sector, believing that it could not make a decent return on invested funds.¹⁴

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Other providers that first established themselves as cable distributors have fared better, however. Videotron has succeeded in capturing a sizeable share of the market in Quebec, and EastLink could build a solid foundation for itself in Atlantic Canada. By offering packages of cable telephone services, broadband Internet access, digital television and wireless telephone services, these companies offer a wider variety of services and are better able to absorb wireless start-up costs.

Ottawa's recent decision to lift the foreign ownership restriction for wireless companies holding 10% or less of the market should allow for greater competition in certain market segments. It is likely that this measure will lead to consolidation among the smallest players¹⁵ stemming from the arrival of a large foreign corporation buying up small companies as a first step to expanding into Canada.

If this scenario occurs, it is worth asking whether Industry Canada's decision to reserve once again a part of the spectrum up for auction in 2013 for small players is justified from an economic standpoint, since it would amount to an implicit subsidy for a large foreign corporation considered a small player in Canada.¹⁶

Conclusion

Wireless services in Canada are competitive both in terms of prices and in terms of the technology available to consumers. The networks have been extensively developed in recent years and the downloading of data by wireless devices has grown tremendously. Penetration rates for broadband wireless service are increasing rapidly. With the launch of high performance devices by players like Apple, Google and a few others, Canadians will continue to exert pressure on providers in order to be able to make use of the latest technologies.¹⁷

Canadians have every reason to want to maintain the approach put in place nearly two decades ago, namely refraining from imposing specific regulation on this important sector of our economy.

Furthermore, the media, historical partners of telecommunications companies, will want to increase their presence on mobile devices, which will put pressure on the demand for bandwidth and applications as well as an increase in the amount of advertising seen on these devices. Insofar as consumers are ready to accept the presence of advertising,¹⁸ this source of revenue can lead to rate plan fee reductions, making the technology even more affordable.

The wireless market in Canada is in full expansion and functioning well. Canadians therefore have every reason to want to maintain the approach put in place nearly two decades ago, namely refraining from imposing specific regulation on this important sector of our economy.

References

1. CRTC, "CRTC seeks views on the state of competition in the Canadian wireless sector," news release, April 4, 2012.
2. See especially: the biannual reports of the OECD (*OECD Communications Outlook*); Berkman Center for Internet and Society at Harvard University, *Next Generation Connectivity: A review of broadband Internet transitions and policy from around the world*, October 2009; Bank of America Merrill Lynch, *Global Wireless Matrix 3Q11: Look beyond the macro storm*, September 2011; SeaBoard Group, *Long Term Evolutionary Challenge: Limiting Wireless Carrier Gluttony*, February 2012.
3. OECD, *OECD Communications Outlook 2011*, 2011, pp. 285-290, tables 7.9 to 7.14.
4. These figures are from another OECD report published a few days earlier: OECD, *International Mobile Data Roaming*, May 2011. See also Terence Corcoran's analysis, "Canada's data roaming fees look pretty cheap," *Financial Post*, June 9, 2011.
5. Wall Communications, *Price Comparisons of Wireline, Wireless and Internet Services in Canada and with Foreign Jurisdictions*, April 2012.
6. 4G Americas, *Global 3G and 4G Deployment Status HSPA / HSPA+ / LTE*, August 2012.
7. "Data guzzlers: How the world will use the Internet in 2015," *The Economist*, June 1, 2011.
8. Cisco, *Visual Networking Index Forecast Highlights*, http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html#~Country.
9. OECD, *Fixed and wireless broadband subscriptions per 100 inhabitants*, OECD Broadband Portal, December 2011.
10. comScore, *Canada Digital Future in Focus*, 2012, p. 39.
11. Lawrence Surtees and Steve Yang, *Canadian Telecommunications Capex Budgets*, IDC, August 2011, p. 50.
12. Rita Trichur and Iain Marlow, "Canada's newly competitive cellphone market at risk," *The Globe and Mail*, February 11, 2012.
13. John Morrissy, "Consumer savings at risk as new wireless players struggle," *Vancouver Sun*, April 11, 2012.
14. Rita Trichur and Iain Marlow, *op. cit.*, endnote 12.
15. John Morrissy, *op. cit.*, endnote 13.
16. In various articles, economists have emphasized the possible market distortions caused by the setting aside of spectrum for small players at auctions. See for example: Robert W. Crandall and Allan T. Ingraham, "The Adverse Economic Effects of Spectrum Set-Asides," *Canadian Journal of Law & Technology*, Vol. 6 (2007), pp. 131-140.
17. Rita Trichur, "Telecom firms under pressure to keep up with smartphone obsession," *The Globe and Mail*, December 30, 2011.
18. Advertising on mobile devices is growing rapidly in Canada. The value of this advertising, which was just \$1.1 million in 2006, had risen to \$52.1 million in 2010 and reached an estimated \$82 million in 2011. Note also that online advertising in general now exceeds newspaper advertising. IAB Canada, *Canadian Online Advertising Revenue Survey, 2010 Actual + 2011 Estimated*, p. 4.

1010, Sherbrooke Street W., Suite 930
Montreal (Quebec) H3A 2R7, Canada
Telephone: 514-273-0969
Fax: 514-273-2581
Website: www.iedm.org

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