



Canada: Cellular Communications

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Summary

Wireless is the fastest growing sector of the Canadian telecommunications market and is presenting opportunities for U.S. companies to export technologies, products and services. U.S. companies will be able to take advantage of opportunities in wireless cellular services (particularly in wireless network development), innovative cellular hardware and software development, ultra wideband technology & devices, wireless fidelity (Wi-Fi) Access Points and technology and channel marketing partnerships.

The wireless market in Canada is comprised of telecommunications services provided by mobile wireless access facilities. These services include mobile telephony, mobile data such as text messaging, roaming, wireless Internet access and to a lesser extent, paging services. Satellite services associated with mobile telephones are also included in this segment. This report summarizes the Canadian wireless market by looking at its present and future dynamics and suggests opportunities for U.S. businesses and equipment providers. The wireless telecommunications industry is classified under the North American Industry Classification system (NAICS 517) – 5172 wireless (except satellite), 5174 satellite and 5179 other.

Market Demand

Technological improvements and increased availability of alternative methods of receiving phone service has resulted in large shifts in how Canadian households communicate by phone. Statistics Canada's Residential Telephone Service Survey, in December 2006 reported that an estimated 3.8 million households, or almost thirty percent of total households, used exclusively traditional land-line services. A second survey, completed in December 2007 showed this number had declined to 3.1 million households or twenty-four percent of the total households. The December 2007 survey also showed that seventeen percent of households are likely to replace an existing traditional telephone service with a wireless telephone service in 2008. For wireless firms, a key consideration related to telecommunication services is the growth of mobile phone and wireless device users. In this regard, Canada's wireless market is growing rapidly.

Wireless subscribers and Penetration

Canada has not yet reached its peak usage level of wireless services. The Canadian wireless market is steadily growing and creating opportunities in the area of communication. At the end of March 2008, Canadian wireless phone subscribers numbered 20.1 million, an increase of eight percent over the previous year. This increase also raised the national wireless penetration rate to over sixty-two percent. A recent study by [Datamonitor](#) forecasts that by 2012, the Canadian wireless telecommunications services market will have a volume of 30.6 million subscribers, an increase of almost forty-four percent since 2007.

Recent research by the Canadian Wireless Telecommunications Association (CWTA) estimates that wireless penetration in major urban centers has exceeded seventy percent, with some greater metropolitan areas approaching the eighty percent mark. Another study by research house, IDC Canada, estimates cellular penetration to reach more than seventy-six percent of the entire Canadian population

within the next five years. Penetration across the country varies with Albertans at the forefront of wireless phone adoption with a household penetration rate of seventy-nine percent while Quebecers represent the other end of the wireless penetration spectrum at only fifty-one percent. Canada's overall mobile wireless penetration rate is behind many of the member countries in the Organization for Economic Co-operations and Development (OECD). On the other hand, the penetration rate for wireline services, by household, was 92.5 percent. This is due to Canada's competitive prices for local wireline services and a mature and reliable wireline network. In fact, wireline access penetration in Canada has consistently ranked near the top among OECD countries, despite Canada's geographic enormity and vast rural and remote areas relative to most other OECD countries. These are some of the reasons why mobile penetration remains lower in Canada than in other OECD countries.

Wireless Coverage and Services

Considering Canada's vast size, wireless coverage is extensive, with Canadian wireless carriers now offering coverage to more than 98 percent of the population over a geographic area of approximately 501,933 square miles.

With regards to services, Canadian carriers are slightly behind in the rollout of 3G capabilities, considering Canada's total land area, in comparison with the United States. Due to the smaller size of Canadian operators relative to global operators, Canadian operators have taken a "smart follower" approach when it comes to the commercial deployment of new technologies and services. While a smart follower approach makes good business sense for an operator, a consistent lag in the commercial deployment of new technologies and, more importantly, slow monetization of the technology investment, impacts the entire value chain.

With new products like the iPhone and the Blackberry Bold, smart phone customers want to duplicate the Internet experience they are used to on their desktop computers. This creates great opportunity for a phone company, but also adds tremendous pressure on its networks. Industry experts say that there certainly has been a great enhancement from 2G to 3G, but telecoms are beginning to experience clogged networks and have to continually balance the capacity of their networks. Canadian telecommunications service providers will soon have to either have to begin limiting how much data a 3G phone customer can use or add network capacity by expanding infrastructure.

Following the launch of Canadian inter-carrier text messaging capability in April of 2002 and, more recently, the announcement of North American inter-carrier text messaging interoperability, Canada's mobile phone operators have come together with the Canadian Wireless Telecommunications Association (CWTA) to offer common (universal) short codes which will be activated across all of the operators' networks. By provisioning common short codes, the Canadian wireless industry hopes to offer all mobile phone customers new and ubiquitous text messaging experiences. The industry anticipates these new experiences will further the growth of text messaging. Preliminary numbers for the first nine months of 2007 total almost 7 billion text messages sent, compared to 4.3 billion in all of 2006. On an average day in 2007, Canadians sent approximately 31.5 million text messages per day. According to the CWTA, in 2008 this number increased to 54.1 million text messages per day.

Fixed wireless services are now emerging as a competitive alternative to traditional wireline offerings. Broadband wireless services, that compete with high speed wired interconnects, operate in a number of bands of frequency. Wi-Fi services are now commonplace in hotels, malls and office buildings.

Usage and Pricing

The average Canadian subscriber uses approximately 400 voice minutes per month. This represents the 2nd highest monthly usage in the world and is growing rapidly. Usage may be increasing because Canadian wireless prices have been falling steadily and consumers are now enjoying prices that are below or close to the average wireless prices across the 30-member countries of the OECD. According to OECD's recently published "[Biennial Communications Outlook 2007](#)," Canadian prices rank 10th lowest for "low" users, 7th lowest for "medium" users, and 13th lowest for "high" users.

Still, wireless rates are generally higher than wireline prices in Canada, with the exception of low call volume users. Canadian low-usage wireless service rates are below those in the United States, but tend to be higher than those in other countries surveyed. At a high usage level, Canadian wireless rates are comparable to the United States and France, but significantly higher than in the United Kingdom and Australia. According to a recent study by Merrill Lynch, the average revenue per unit (ARPU) in Canada is \$48 vs. \$56 in the United States.

As a result of diminishing revenue growth, Canadian wireless service providers have recently made attempts to increase their revenues. In addition to switching to per-minute billing from the prior standard of per-second billing, the leading wireless providers (Bell Mobility, TELUS Mobility, Rogers Wireless) delayed their evening start times from 6 p.m. to 8 p.m. in an effort to boost revenue per subscriber. In the summer of 2008, both Bell Mobility and TELUS Mobility announced charges for incoming text messages. They both stopped providing free incoming text messaging and implemented a \$0.15 charge per incoming text message, however, many plans include free incoming text messages as part of their monthly package. The Canadian government has since announced that they plan to ban charging for unsolicited incoming messages.

Trend to Quintuple Play Services

Communications companies are crossing what have been traditional boundaries between broadcasting and telecommunications. More and more companies are providing customers with "triple play" services, high-speed Internet, television, and fixed line telephone services (either circuit or VoIP) over a single broadband connection. In fact, the growth of triple play services has led to "quadruple play" service where wireless communications is being introduced as another medium to deliver video, Internet access, and voice telephone service and "quintuple play" where long distance telephone is added to the mix.

Deregulation

Industry Canada has responsibility for the licensing regime governing wireless communications, including the awarding of spectrum licenses to companies, and for the terms and conditions for these licenses. The Canadian Radio-Television and Telecommunications Commission (CRTC) enforces the regulations set out by Industry Canada. Over the last ten years, a dramatic shift has occurred in Canada from highly regulated telecom monopolies, with extensive foreign ownership restrictions, to more loosely regulated private markets. This trend is expected to continue.

In April 2007 the Government of Canada (GOC) announced that it would continue to deregulate the telecommunications market, including allowing incumbent providers to set prices in markets where competitors are providing fixed telephony services via other facilities (such as wireless or cable). The announcement also specified that the government would not regulate in markets where at least 2 carriers service seventy-five percent of residential customers.

Further deregulation in telecommunication, broadcasting and new media markets is expected during 2008 and 2009, including possible loosening of Canada's foreign investment restrictions.

Market Data

The Canadian mobile phone market generated total revenues of \$1.9 billion in 2007, this representing a compound annual growth rate of four percent for the period spanning 2002-2007. The performance of the market is forecast to accelerate, with an anticipated compound annual growth rate of eight percent for the five-year period 2006-2011, resulting in a market value of \$2.5 billion by the end of 2011.

In units, consumers in Canada purchased 11.5 million in 2006. This amount is estimated to grow to 17.9 million units by 2011.

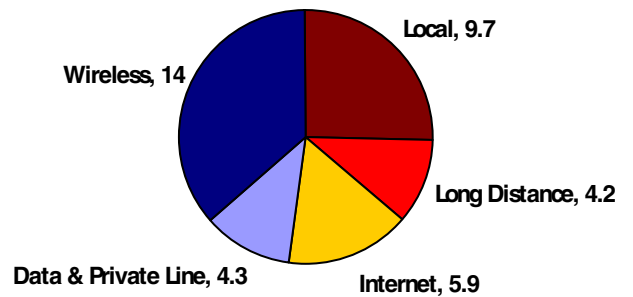
Exports of wireless communications equipment have been steadily increasing since 2003, reaching a total of \$2.8 billion in 2007. The primary destination of these goods is the United States. Canada has also been steadily increasing the amount of wireless communications equipment that it is importing. Since 2003, there has been a twenty-one percent increase in imports, totaling almost \$4 billion in 2007.

The Canadian wireless equipment manufacturing and products industry is comprised of approximately 400 companies, mostly SMEs that employ approximately 21,000 people. Most of these employees are in highly skilled positions, who on average earn 30 percent more than the average Canadian worker.

The Canadian cellular services industry is comprised of approximately 20 national, regional and municipal cellular operators. These operators employ approximately 16,000 individuals and generated more than \$14B in revenue in 2007, representing almost 30 percent of the Canadian telecommunications market. A recent study of the Canadian wireless telecommunications market by [Datamonitor](#) states that by 2012, this market will have a value of \$19.7B, an increase of 50 percent from 2007. The CWTA sites that aggressive competition; inventive marketing and exceptional customer service will be the drivers for the impressive growth in the wireless sector.

Canadian exports of wireless communications equipment have remained stagnant for the last several years, ending up at \$2.8B in 2007. Canada has a healthy production of wireless technologies, but much of it is exported to the United States. Canadian imports of wireless communications equipment was approximately \$4B in 2007, with eighty percent of the total value coming from the United States.

**Telecommunications Revenues (\$billions)
by Market Segment 2007**



Wireless Communications Equipment Manufacturing In Canada

	2002	2003	2004	2005	2006	2007	2008 est.
Total Market Value	1,461.2	1,491.5	1,641.5	1,693.8	1,709.2	1,905.4	2,150.0
Exports (including re-exports)	2,177.5	1,968.7	2,247.6	2,622.4	2,708.2	2,806.1	2,907.5
Imports	3,407.1	3,286.3	3,672.8	3,643.4	3,905.9	3,996.5	4,154.0

Best Prospects

A substantial number of Canadian telecommunications companies are leaders in their field or show significant strength at various levels of the value chain and are known for the manufacture of high-quality products and high levels of customer care and post sales support. Canadian companies are global leaders in the areas of cellular equipment (core access technologies), data-centric mobile devices, WiMAX equipment and software defined radio (SDR) solutions and architecture. In addition, Canadian companies show significant strength in the following technologies:

- Internet Protocol (IP) infrastructure for next generation networks (IMS/MMD),
- mobile service enablers (short message service centre [SMSC], multimedia messaging system centre [MMSC], media gateways, etc.),
- wireless fidelity (WiFi) mesh network equipment and associated services,
- semiconductors (for base station equipment, Customer Provided Equipment, and handsets)
- professional services including business process improvement and product/service development.

U.S. companies will find opportunities in the areas where Canadian companies are still developing technologies or are challenged. These areas include:

- mobile content and aggregation,
- integration services,
- cellular handset development,
- WiFi Access Points (AP) and
- ultra wideband (UWB) technologies and devices.

Cellular services is another area where Canadian companies are challenged, however foreign ownership restrictions are in place, therefore U.S. companies wishing to expand into this space will have to do so in partnership with a Canadian firm (see section - Market Issues & Obstacles).

Best sales prospects in the mobile communications market are for those technologies and products that improve existing technologies by making them smaller, faster and more intelligent than the versions of the equipment currently available. Products that focus on the convergence of wireless and the Internet, on 3G or 3.5G technology or that comply with newly established product standards such as Wireless Application Protocol (WAP) or Bluetooth will be well received in Canada.

When Rogers originally announced that they would be carrying the iPhone, some calculated that a current Rogers plan that most closely matched the cheapest AT&T plan came out to roughly \$281; an amount that outraged Canadian consumers. This resulted in Rogers selling a \$30/month, 6 GB plan that has become extremely popular. U.S. companies who develop applications that use data on mobile phones may be able to benefit from this situation.

Canada also offers an excellent environment for U.S. companies wishing to establish technology and channel marketing partnerships. Canada is ranked as one of the top ten countries for entrepreneurial access to capital; ranked second in the OECD countries in tax relief per research and development (R&D) dollars spent and has a diverse and highly skilled workforce. This in conjunction with regionally centered wireless clusters made up of highly innovative and competitive companies, and government owned facilities and incentives to support leading edge R&D have contributed to the presence of multi-national R&D centers in Canada. These include Ericsson's Canadian Centre of Excellence (the largest outside of Sweden), and Siemens AG's Technology Innovation Centre and smaller R&D centers such as Motorola, Nokia and Alcatel/Lucent.

The Spectrum Auction

In anticipation of advanced wireless services coming down the pike, from May 27 to July 21, 2008, Industry Canada auctioned off 105MHz of spectrum; 45MHz of which was reserved for new entrants, while the remaining 65 MHz was available to all players. New entrants were defined as any company that had less than ten percent of revenues in Canada's wireless market. As part of the auction, the government also mandated roaming agreements, which will force existing carriers to share their networks with newcomers for five years, plus another five if the new entrants can build up their own networks nationally. The GOC is also forcing existing carriers to rent space on their cell phone towers to newcomers.

The auction resulted in 282 licenses being conditionally assigned to fifteen companies, with 12 new-entrants. Between two and five new companies in each provincial territory will be ready within a year to roll out cellular services. One new entrant purchased sufficient spectrum across the country to be considered a national carrier, even though it will not be able to offer services in Quebec.

The result of the spectrum auction provides many opportunities to U.S. companies. The winners of the new spectrum licenses now need to spend billions more to upgrade, and in some cases, build from scratch their high-speed wireless networks. Equipment sales to established customers such as Bell Mobility Inc., TELUS Corporation and Rogers Wireless Communications Inc., could include new base station controllers for handing off traffic between towers, or additional switches for managing packets of digital information. For the new entrants, there will be requirements for everything and these companies will be looking for partners who can help them bring up their networks very quickly to help them start realizing revenue as soon as possible. This is also a prime opportunity for U.S. cellular software developers as Canadian vendors will be vying for new features that give them a competitive edge.

Key Suppliers

Suppliers to the Canadian wireless industry can be broken down to wireless service providers and wireless equipment providers.

Wireless Service Providers

The Canadian cellular services industry is comprised of approximately 20 national, regional and municipal cellular operators. This market is dominated by 'the big three,' Bell Mobility Inc., Rogers Wireless and TELUS Corporation, who are also the only national carriers in Canada. In the first quarter of 2008, CWTA reported that these three companies held ninety-two percent of total subscribership in Canada or 19.3 million people. Of these three carriers, Rogers Wireless is the dominant player with respect to the number of subscribers, with a thirty-seven percent market share, while Bell and TELUS held twenty-eight percent and twenty-seven percent of the market share respectively. The remaining eight percent was shared amongst regional wireless service providers, small incumbent telecommunications service providers (TSPs) and mobile virtual network operators (MVNOs). The 2008 spectrum auction has also introduced several newcomers to the Canadian cellular services industry including Globealive Communications, Quebecor (Videotron), Shaw Communications, Bragg Communications and Data & Audio-Visual Enterprises Wireless Inc (DAVE Wireless). Overall, competition in Canada is less intense than in the United States, but the GOC's auction of spectrum is expected to cause significant transformations in the market.

Incumbent Carriers

Rogers Wireless – Formerly known as Rogers AT&T Wireless, headquartered in Toronto, Ontario, is a wholly owned subsidiary of Rogers Communications. Rogers currently operates Canada's only Global System for Mobile Communications (GSM) network and therefore is the only carrier in Canada capable of

supporting the Apple iPhone or Blackberry's Bold. Rogers Wireless carries phones manufactured by Apple Inc., Nokia, Samsung, LG, Sony Ericsson, HTC and RIM.

Bell Mobility - Bell Mobility is a division of Bell Canada and is headquartered in Mississauga, Ontario. Bell Canada is the main asset of BCE Inc., also known as Bell Canada Enterprises. Bell Mobility uses the CDMA (Code Division Multiple Access) standard. Speculation from industry followers says that Bell has plans to adopt a GSM-compatible technology in the near future. Bell's handset lineup includes phones from LG, Motorola, Nokia, Samsung and Sanyo.

TELUS Corporation - Telus is based in Burnaby, British Columbia. TELUS currently utilizes a CDMA 2000-based mobility phone network but has recently signed an agreement with Nokia Siemens Networks to upgrade to the HSPA (High speed packet access) standard. The upgrade should take about a year and will likely be ready September 2009.

New Entrants

Globealive Communications – Globealive achieved the broadest collection of spectrum licenses in the recent spectrum auction that will cover all major cities except Montreal and Quebec City. The company was also the winner of 20MHz of spectrum covering Southern Ontario (including Toronto), a significant win given the region's large, growing and diverse population. One potential concern is that Globealive holds only a modest 10 MHz of spectrum in markets outside of Southern Ontario and the limited spectrum depth may require greater tower density. Globealive's expansive territory will require a significant network investment, with an estimated total of \$1.9 billion over the next ten years. Globealive is backed by powerful partners and investors believe that the company may look to share the cost of construction by partnering.

Quebecor Inc. – Quebecor's Videotron unit was successful in the recent spectrum auction in securing all 40MHz of set-aside spectrum in Quebec thereby shutting out all other new entrants in the province. This new spectrum covers all of Quebec including Montreal and Québec City. Quebecor also gained a foothold outside of Quebec with 10MHz of spectrum covering a good part of southern and eastern Ontario (including Toronto). Quebecor has announced that they will be spending up to \$1 billion over the next four years to roll out its wireless network to compete against Canada's Big Three mobile providers.

Data & Audio-Visual Enterprises Wireless Inc. (DAVE) – Startup DAVE Wireless has emerged from the auction as a small, yet potentially important player with spectrum in Ontario as well as major urban areas such as Vancouver, Edmonton, Calgary and Victoria. It is expected that DAVE may pursue a niche service offering in cities where it has spectrum or participate as part of a more extensive partnership with other new entrants.

Bragg Communications – Bragg is another big winner of the spectrum auction claiming 30MHz of spectrum in Atlantic Canada (including Halifax). Bragg also secured spectrum in some of its other rural cable territories across Canada: notably in Ontario and Alberta.

Shaw Communications – Shaw accumulated a healthy 20Mhz of spectrum across all of its major Western Canadian territory, and a few smaller licenses for its cable plant in NW Ontario. Shaw is expected to bundle and leverage existing facilities and perhaps sign roaming and facility-sharing agreements with Rogers.

Wireless Equipment Providers

There are several providers of wireless handsets to the Canadian market, such as Motorola, Nokia, Samsung, Sanyo, Audiovox, LG, Apple Inc, Sony Ericsson, HTC, Panasonic and the Canadian company, Research in Motion (RIM). In 2006, the top four mobile phone manufacturers in the Canadian market were Motorola, LG, Samsung and Nokia, who between them obtained an eighty-three percent share of

the Canadian market. Motorola led the market with a volume market share of 32.2 percent, followed by LG with 17.5 percent, Samsung with 17.4 percent, and Nokia with 16.1 percent. Samsung and LG have capitalized on the advantages they can bring to Canada from their home market in South Korea, the leading mobile phone technology development market. Both companies have been able to transfer new advanced technologies to Canada to increase their competitiveness among Canadian consumers. The recent launch of the Apple iPhone in Canada is expected to reshape the market dynamics. The resulting changes may be slow to occur as Canadians tend to be more price conscious than Americans and may be reluctant to accept the high price tag of the iPhone.

Motorola, Inc. – Motorola provides mobile devices, wireless communications systems and services, and end-to-end broadband products. The success of Motorola in Canada over the last few years is largely due to the immense popularity of the RAZR mobile phone. Subsequent models of the MOTORAZR were released in late 2007 and experienced the same success.

LG Electronics Canada – LG Electronics, part of the South Korean company LG Group, is a manufacturer of electronic appliances and devices. Given South Korea's lead in the adoption of new mobile phone technology, LG (and Samsung) are transferring some of these new technologies from their home market to the Canadian marketplace. This is providing LG with competitive edge – technologically advanced mobile phones at competitive prices.

Samsung Electronics Canada Inc. – Samsung provides in-home, portable and in-car consumer electronics. Samsung's focus is on hardware development. The company is one of the leading global patent developers and their focus on new product development is the cornerstone of Samsung's success in Canada. In January 2008, Samsung launched their newest smartphone in Canada in attempts to compete head on with Motorola.

Nokia Canada – A manufacturer of mobile devices and network equipment, Nokia provides a wide range of devices for imaging, games, media, and business purposes. Though Nokia is the world leader in mobile phone sales, their performance in Canada is the weakest among the top four manufacturers. Strong competition and an apparent inability to provide phones that accommodate Canadian consumer preferences for clamshell (flip phones) and ultra-thin designs are likely the cause of Nokia's struggles in the Canadian market.

Apple Computer Inc. – A provider of in-home and portable consumer electronics, Apple is unique in that it operates both hardware and software production. The company's ability to successfully integrate consumer electronics solutions, such as the hardware (iPod), software (iTunes), and distribution of third-party digital content (iTunes music store) is a key competitive advantage. Apple's recently launched iPhone will have a significant impact on the dynamics of the mobile phone market in Canada. As Apple only has [nine retail outlets](#) across Canada, the iPhone is primarily sold through Rogers Wireless outlets.

Research in Motion Ltd. (RIM) – RIM is a designer and manufacturer of wireless solutions for the worldwide mobile communications market. RIM is best known for the BlackBerry™ wireless email solution, but RIM also produces wireless modems.

Sony Ericsson Mobile Communications – Sony Ericsson is a global provider of mobile multimedia devices, including mobile phones and accessories. In January 2008, Sony Ericsson launched the K850 Cyber-shot, one of the most advanced camera phones to hit the Canadian market. This 5 megapixel camera phone will help Sony Ericsson compete in the mobile phone market as manufacturers continue to improve technology and add advanced features in mobile phones, such as GPS and advanced camera optics.

High Tech Computer Corporation (HTC) – In the past HTC products were typically sold under several brand names, including HTC, Dopod and Qtek, and are often rebranded by major telecommunication carriers, such as Bell Mobility, TELUS Mobility, and Verizon Wireless. Now the Taiwan-based

manufacturer focuses primarily on Microsoft Windows Mobile-based portable devices. According to Gartner Research, HTC was third for second quarter smartphones sales in the world, behind Nokia and RIM.

Some providers of other wireless equipment in the Canadian market include the foreign companies Cisco and Alcatel Lucent, as well as the Canadian companies Nortel, Sierra Wireless, Wireless Edge, BelAir Networks, SR Telecom, Redline Communications, Wavesat, and DragonWave Inc. Software providers, such as the Canadian companies Rednee Solutions Inc. and Nortel, are also present.

Prospective Buyers

In general, Canadian consumer behavior in the purchase of mobile communications equipment tends to follow the American model. Consumers desire to listen to music, watch video, play games and communicate anywhere and anytime transforming the mobile phone sector. The mobile phone is no longer just for calling people, but rather it is becoming an all-in-one portable communication/entertainment device.

According to a global business study by market research firm TNS, sixty percent of Canadians between the ages of sixteen and sixty use a cell phone, a point significantly below the global average of eighty percent. However, CWTA reports that Canadians remain among the world's highest users of wireless voice services at an average of 400 minutes per month. As well, the strong customer growth the industry continues to experience is directly mirrored by Canadians' rapid adoption of wireless data services such as text messaging, e-mail, mobile Web browsing and a vast array of multimedia entertainment content.

Market Entry

In both the mobile communications market and the wireless equipment market, business buyers include both network operators and independent retailers. Retailers purchase wireless equipment, including handsets, direct from the manufacturer or through distributors to sell to end-users. Network operators are vertically integrated companies and have their own retail outlets or they purchase for their own internal use. It is necessary for all buyers to stock the latest innovative technologies to meet-end user demand.

Network operators will be primarily interested in knowing about products and services that can be part of their value added service portfolio. They will also be interested in systems, equipment, software, etc., that would lower costs, and increase data protection and security.

For U.S. firms, there are various ways to enter the Canadian market. Your market entry strategy should be based on your knowledge of the Canadian market, financial resources and human capital available. Entering the Canadian market can range from establishing a Canadian subsidiary to establishing a strategic partnership with a local company. Some firms that are new to selling to Canada prefer to sell directly to the Canadian end-user and provide service from their U.S. headquarters.

Industry Canada, a cabinet-level department, requires that all wireless equipment to be sold in Canada must be certified. In April 2004, the United States and Canada simplified the trade of telecommunications equipment by allowing certified U.S. telecommunications equipment to ship directly into Canada. Industry Canada recognizes seven U.S. testing and inspection organizations to certify, prior to export, that U.S.-made telecommunications products meet Canadian requirements. Canada's recognition of these 'certification bodies' simplifies the regulatory approval process and provides U.S. manufacturers of wire and wireless telecommunications products with an uninterrupted path to the Canadian market. A list of Industry Canada approved labs and a copy of the 1998 Mutual Recognition Arrangement on Telecommunications Equipment can be found at:

<http://ts.nist.gov/Standards/Global/CABs/apec/designations.html>

Market Issues & Obstacles

Canadian telecommunications regulations are divided between the CRTC and Industry Canada. The CRTC is an independent agency responsible for regulating Canada's broadcasting and telecommunications system. Industry Canada sets regulatory policy, issues licenses to all telecommunications and broadcasting operators, and regulates all equipment specifications. U.S. firms who wish to export wireless products to Canada will be required to comply with the regulations outlined by Industry Canada. U.S. firms who would like to provide services to Canada may also be subject to foreign investment restrictions.

Foreign investment restrictions were established in "The Telecommunications Act" of 1993. The Act states that foreign companies can own no more than twenty percent of an operating company or carrier, such as Bell Canada and no more than thirty-three percent of a holding company, such as BCE, Inc. This means that with respect to any network-based telephone companies, there is an almost forty-seven percent foreign ownership limit in place. Section 16 of this Act requires that in order to be eligible to operate in Canada, a telecommunication common carrier must be a "Canadian-owned and controlled corporation," incorporated or continued under the laws of Canada. Subsection 16(3) of the Act specifies that a corporation is Canadian-owned and controlled if:

- a) not less than eighty per cent of the members of the board of directors of the corporation are individual Canadians;
- b) Canadians beneficially own, directly or indirectly, in the aggregate and otherwise than by way of security only, not less than eighty per cent of the corporation's voting shares issued and outstanding; and
- c) The corporation is not otherwise controlled by persons that are not Canadians

Tariffs and Levies

Under the North American Free Trade Agreement (NAFTA), no customs duties or tariffs are levied on qualified U.S.-made products entering Canada. To get duty-free status under the NAFTA rules of origin, a commercial NAFTA import over \$1,600 must be accompanied by a NAFTA Certificate of Origin, while a commercial import less than \$1,600 only requires a statement of origin from the exporter that the product is U.S.-made. Canada looks at the origins of the component parts of an item and whether they are transformed in the process of manufacture into another category to determine whether a product is entitled to NAFTA treatment. This can be quite complex; therefore, U.S. companies should consult the U.S. Department of Commerce's NAFTA Certificate of Origin Interactive Tool at <http://web.ita.doc.gov/ticwebsite/ticit.nsf/>.

Taxes

The Canadian Goods and Services tax (GST) of five percent on a value-added basis is assessed by Revenue Canada at the time of import, and at each subsequent resale level. Importers are entitled to partially offset their GST payments by collecting and retaining GST payments received from their customers.

Standards Certification

All electrically powered products sold in Canada must comply with the standards established by the Canadian Standards Association (CSA), Canada's largest standard-writing body. Information pertaining to these standards can be obtained by contacting the CSA directly. According to the Canadian Radiocommunication Act and the Radiocommunication Regulations, in addition to CSA requirements, wireless telecommunications equipment imported into Canada must also be certified by Industry Canada.

Industry Canada's equipment certification requirements for wireless telephones are covered by several existing Radio Standards Specification (RSS) regulations. These standards can be found on Industry

Canada's website at http://www.ic.gc.ca/epic/site/smt-gst.nsf/en/h_sf01375e.html. U.S. companies should contact Industry Canada to determine the appropriate equipment certification requirements for their particular products.

Labeling Requirements

The GOC's Consumer Packaging and Labeling Act requires consumer product packaging to be in both official languages, English and French. In addition to federal labeling requirements in Canada, the Province of Quebec has additional French-language requirements. For example, directions for use and warranty certificates accompanying the product must be provided in the French language. The province also requires that any French labeling/markings must be given at least equal prominence as labeling/markings in any other language(s) on packaging. For further information on language requirements for the province of Quebec, contact the Office québécois de la langue française at <http://www.oqlf.gouv.qc.ca/english/charter/index.html>. Exporters are encouraged to work with a local distributor or major retailers to meet these requirements and ensure proper French-Canadian language usage.

Trade Events

[Pacific Northwestern Wireless Summit](#)

January 16-18, 2008
Vancouver, British Columbia, Canada

[Spectrum 20/20](#)

May 6, 2008
Ottawa, Ontario, Canada

[Canadian Telecom Summit](#)

June 15-17, 2008
Toronto, Ontario, Canada

[Wireless and Mobile Expo](#)

July 15-16, 2008
Toronto, Ontario, Canada

[Canadian Wireless Management Forum](#)

October 9, 2008
Montréal, Québec, Canada

[CTCA 2009 Conference](#)

May 13-15, 2009
Niagara-on-the-Lake, Ontario, Canada

Resources & Key Contacts

- [Canadian Independent Telephone Association \(CITA\)](#)
- [Canadian Radio-television and Telecommunications Commission \(CRTC\)](#)
- [Canadian Standards Association \(CSA\)](#)
- [Canadian Telecommunications Consultants Association](#)
- [Canadian Wireless Telecommunications Association \(CWTA\)](#)
 - [Wireless Telecom](#)
 - [Communiqué](#)

- [Communications Research Center Canada \(CRC\)](#)
- [DataMonitor – Mobile Phones in Canada](#)
- [DataMonitor – Wireless Telecommunication Services in Canada](#)
- [Industry Canada - Spectrum Management and Telecommunications](#)
- [National Telecommunications Cooperative Association](#)
- [Network for Emerging Wireless Technologies \(NEWT\)](#)
- [Ontario Telecommunications Association](#)
- [Ottawa Wireless Cluster](#)
- www.wirelessnorth.ca

For More Information

The U.S. Commercial Service in Ottawa, Canada can be contacted via e-mail at: Tracey.Ford@mail.doc.gov; Phone: 613-688-5406; Fax: 613-238-5999; or visit our website: www.buyusa.gov/Canada.

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