

Communications

Background

Infrastructure for the Future: High-Speed Communications Networks Not an Option

In its May 3, 2011 announcement on broadband Internet services, the CRTC recognized the importance of Internet communications to the daily lives of Canadians and set a target for broadband Internet access services across the country. By the end of 2015, the CRTC expects all Canadians to have access to broadband speeds of at least 5 megabits per second (Mbps) for downloads and 1 Mbps for uploads.¹

Modernizing such infrastructure is costly. At CRTC hearings in 2010 that considered basic service obligations, one telephone company estimated that it would cost \$700 million annually² for 10 years to bring high-speed Internet to all Canadians. “It’s a task that can never be achieved by market forces alone,” MTS Allstream Inc. told the CRTC, in one of the first such estimates to be made for Canada. Experts agree that the market alone will not resolve Canada’s communications infrastructure deficit.³ There is little doubt that governments will have to facilitate the transition with various programs to bridge the gap.

The recommendations in this chapter are designed to return Canada’s communications infrastructure to world-class standards.⁴ At stake is nothing less than the future of our communities, especially those in rural and remote areas.

Current Issues

Recognize “Effective” Connectivity as an Essential Service

A study done for the U.S. Federal Communications Commission (FCC) recognized broadband “as a key enabler of economic growth that can benefit services such as telemedicine in rural areas, allow better management of transportation and energy systems and reduce infrastructure costs for businesses.”⁵ Rural respondents to a 2011 national survey of economic development professionals in the U.S. reported that 100–120 Mbps was the minimum needed over the next three years to impact local economies.⁶ Although the CRTC has set a 1 Mbps upload and 5 Mbps download target, it must be recognized that not much can be achieved within this low minimum standard.

- In order to return Canada to a leadership role in the availability and use of new communications technologies, “effective” broadband that supports a wide range of communications applications must become a vital part of policy and programs at the federal level. The AFB believes that “effective” broadband means high-speed Internet of 100 Mbps or more.⁷

Develop a National Communications Strategy

Canada still lacks a national plan for universal access to effective broadband. This stalls our economy and negatively affects productivity. The CRTC, among others, has pointed out the need for a comprehensive national strategy to secure the nation’s economic future.⁸

Digital infrastructure planning elsewhere indicates just how far Canada has fallen behind:

- Australia released its *National Broadband Strategy* in 2004;
- Great Britain released the *Digital Britain Report* in 2009;
- Germany released its *Information Society Germany 2010* plan in 2006;
- France and New Zealand announced national digital strategies in 2008;
- The FCC released its national broadband strategy for the U.S. in March, 2010.

In May 2010, Industry Canada conducted a six-week online consultation about the digital economy. Then-Industry Minister Tony Clement, speaking

to an industry group in November 2010, offered an interim report with few specifics and suggested that something more definite might be ready for the spring of 2011.⁹ Canadians are still waiting.

Meanwhile, in its February 2011 report on emerging and digital media, the Standing Committee on Canadian Heritage “encouraged the Government of Canada to proceed as quickly as possible with the development of a national digital economy strategy,” and recommended that the strategy be reviewed every five years.¹⁰

The AFB agrees with the Heritage Committee and will immediately begin a national consultation on communications. The process will invite input from beyond business and academia and will be led by a panel of researchers mandated to hold citizen meetings across the country and receive written submissions. The meetings will explore a wide range of communications policy issues from copyright to the infrastructure required to operate the national network on an open-access basis.

These discussions will also seek ways to improve the environmental sustainability of the ever-growing use of information communications technology (ICT). ICT devices currently contribute 2–3% of global greenhouse emissions.¹¹ As the availability and use of “always on” broadband rises, this amount will likely increase. Technical solutions such as “power saving” devices – and upgraded standards for them – must be explored and supported. On the social side, incentives for telecommuting and video-collaboration to support decreased use of fossil fuels for land and air transportation should be considered.

- The AFB allocates \$250,000 to fund a broad, national consultation to modernize communications policy in Canada. We will present a transparent process that can be implemented before September 2012. A comprehensive plan based on these discussions will be presented to Canadians by April 2013.

Create Jobs With Next Generation Broadband Networks

To fully exploit the potential of the new communications tools, Canada needs better broadband infrastructure. Though there are no firm estimates of the number of Canadian jobs that might be at stake, estimates from other jurisdictions can offer some guidance:

- A 2009 study by the World Bank suggests that an increase of 10% broadband penetration in high-income countries correlates with a 1.2% growth in GDP.¹²
- “Rural counties in the United States that embraced broadband adoption at the start of this decade enjoy access to more jobs than those that did not,” reads a 2009 study by the U.S. Department of Agriculture. Their residents also make more money than their less-connected counterparts.¹³
- The Communications Workers of America predicts that a \$5-billion stimulus for broadband infrastructure would create almost 100,000 new jobs directly in the short term and 2.5 million jobs through network effects.¹⁴
- A report by the Information Technology and Innovation Foundation (U.S.) suggests that a broadband subsidy of \$10 billion will directly create or retain 500,000 jobs.¹⁵

In Canada, the only recent federal program to address connectivity (in 2009) allocated a scant \$225 million over three years to fund the expansion of rural broadband infrastructure.¹⁶ Broadband connectivity is defined as “access to Internet service that supports data transmission at a minimum speed of 1.5 Mbps. to a household.”¹⁷ In reality, 1.5 Mbps is not enough to support applications such as e-health or e-education or e-commerce. At this speed, Canadians in rural areas and pockets of them in urban areas will remain effectively disconnected and disabled for a long time to come.

In contrast, in April 2009 the Government of Australia announced it would build a national high-speed broadband network to deliver up to 100 Mbps to 90% of its citizens. The eight-year, AU\$43-billion project will be one of the largest state-sponsored Internet infrastructure upgrades. The Australian Prime Minister has suggested the project will support up to 37,000 jobs at the peak of construction.¹⁸

Canada must similarly bring its communications infrastructure up to world standards. To that end, the AFB ramps up to \$1 billion per year to make world-class broadband a reality for all Canadians. The decade-long infrastructure project will start in 2013–14 and will be guided by the recommendations of a National Communications Strategy. Because it is such a major commitment of public funds, Canadians will retain majority ownership of the resulting infrastructure.

- The AFB ramps up to \$1 billion annually over 10 years to modernize Canada's digital communications infrastructure.

The Standing Committee on Canadian Heritage recently recommended that the Government of Canada reinvest some of the money it receives from the next spectrum auction in a digital strategy, that the Government of Canada extend the Broadband Canada: Connecting Rural Canadians program of Industry Canada, and that it continue to make efforts to ensure all Canadians have access to high-speed Internet.¹⁹ The AFB agrees with these recommendations.

- The AFB will reinvest the proceeds from the upcoming spectrum auction to finance the modernization of our digital infrastructure.
- The AFB will immediately extend and expand Industry Canada's Connecting Rural Canadians program.

Build Capacity and Generate Demand With a National Public Access Program

National programs that provide access, education and support for effective use of ICT in communities are considered essential in countries — such as Korea — that rank high in their use of online tools. Such programs are considered investments that generate demand and build human capacity to meet that demand.²⁰ The question of digital literacy also came up at the CRTC hearings on basic service. Concerns were raised about the 25% of Canadians who have no Internet service — even where service is available — and other questions arose about programs that might address that gap.^{21,22}

Luckily, Canada already has such a program in its national network of 3,500 community technology centres which every day help more than 100,000 people²³ incorporate new technologies into their lives. These sites and their young facilitators — along with a legion of volunteers — provide job-search and software training, technology literacy programs, access to community services, and cultural integration opportunities. They partner with the local private and public sector to provide services and experienced personnel in diverse areas, from film editing to website-building. Along the way, thousands of youth gain valuable job experience. Both internal and external evaluators agree that this program has been successful and cost-effective for years.²⁴ This network must not be allowed to collapse in the current

telecom policy vacuum. Support for existing centres must be expanded and a program to restart funding for new centres must be established.

- The AFB allocates \$40 million to support new and existing national public access sites in the 2012–13 budget year.

This investment will boost local economies by encouraging technology use for community development and by offering collaborative tools that promote the effectiveness of the community sector. When Canadian communities suffer because of major job losses, these programs provide essential support in this economic downturn.

The AFB also agrees with the Standing Committee on Canadian Heritage which recommended that the Government of Canada work with provincial authorities to support programs that encourage the development of a digitally literate population and that the Department of Human Resources and Skills Development review its policies and programs in order to ensure that priority is given to training in digital skills. The Committee also recommended that the Government of Canada examine the proposal of the Canadian Association of Community Television Users and Stations (CACTUS) for the establishment of community-operated multimedia centres and access to its material online as a way of encouraging people to develop digital skills.²⁵

- The AFB will ensure that the Department of Human Resources and Skills Development continues to support digital literacy with its CAP-YI youth initiatives program.
- The AFB will support community-oriented multimedia centres as part of a digital literacy program.

AFB Actions

- The AFB allocates \$250,000 to fund a broad national consultation to modernize communications policy in Canada.
- The AFB ramps up to \$1 billion annually over 10 years to modernize Canada's digital communications infrastructure.
- The AFB allocates \$40 million to support new and existing national public access sites in the 2012–13 budget year.

Notes

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