Canada's World Regional Dialogue

Communications Revolution

Canada is wired to a world where technology unites and divides
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**INTRODUCTION**

We are living in the middle of a worldwide revolution in communications. Our ability to connect and exchange information—with people, businesses and communities all over the world—has changed dramatically. Some say these changes are for the better as they give us new means of working, learning, keeping in touch, shopping, and sharing our perspectives. Others see these changes negatively, as they reduce our face-to-face contacts, and encourage us to become isolated in virtual reality. No matter which perspective you take, the fact that Information and Communications Technologies (ICT) will continue to evolve and bring changes to our lives is undeniable. In Canada alone, the percentage of the population using the Internet has increased from 40.3% to 67.8% since 2000. Worldwide, usage has grown over 248% in the same time period. It may seem hard to believe, therefore, that globally only 19% of the population is accessing the Internet. ICT benefits certain individuals and groups but excludes those who lack access to technology. It offers promises, but also poses challenges.

While ICT both unites and divides, one thing is certain: ICT moves faster than our society’s capacity to understand its applications and implications. Technologies always develop faster than policy, so governments are left playing catch-up. Historically policy-making on ICT has been dominated by governments and industry. Given the extent to which ICT policies affect the lives of citizens and communities, there is no better time than now to inform ourselves, and think about what role Canada should play in the global ICT environment. **Canada must ensure that domestic and international policies reflect and keep pace with a globally connected, rapidly changing world. What are the values, interests and assets that we believe should inform our policy choices in this field? This discussion guide provides information and background to help set the stage for your deliberations on these questions.**

**WHAT IS INFORMATION AND COMMUNICATIONS TECHNOLOGIES (ICT)?**

Communications technology has been changing throughout recorded history—the invention of the printing press in the 15th Century, is but one example of a major change. But until the late 20th Century communication happened face-to-face, through the postal system or over the phone. Traditional media—newspapers, radio and TV—were mainly aimed at local, regional or...
national audiences. The invention and marketing of the personal computer and the launch of the Internet, linking computers and their users together in a global network, changed this, reducing the importance of geography and paving the way for a World Wide Web and a revolution in how people connect across distances.

**WHAT IS INFORMATION AND COMMUNICATIONS TECHNOLOGIES?**

Statistics Canada defines ICT as: technologies such as desktop and laptop computers, software, peripherals and connections to the Internet that are intended to fulfill information processing and communications functions.

*Source: StatsCan*


Things have changed dramatically even in the last decade. The Internet has moved beyond the home base of the personal computer and can be accessed from handheld devices like mobile phones and BlackBerries (a Canadian invention). This portability means investors in Toronto can now use mobile phones to sell and buy at the stock market the same way that rural farmers around the world can check the current market price for their crops.

What makes the communications revolution even more exciting is the evolution of the World Wide Web to what is often called “Web 2.0”.2 We have a new way of sharing our own opinions and creations – bypassing record companies by promoting our music on MySpace, side-stepping traditional newspapers by posting our views on blogs, making our own movies outside of studios and posting them on YouTube. This opening up of the web to ordinary citizens, like other aspects of the communications revolution, offers promises but also poses challenges, as we will explore next.

**WHAT IS WEB 2.0?**

Simply put, Web 2.0 is the user-created web – the Internet that we can all contribute to by making videos with our cameras or phones and putting them on the web, by writing personal diaries or opinion pieces (perhaps on a blog) by editing articles in a digital encyclopedia (Wikipedia being the main example) or by maintaining our friendships through social networking sites like Facebook.
BACKGROUND

Some important issues to consider when thinking about what role Canada should play in global ICT include: privacy and security; Internet activism and the open source movement; intellectual property and open access; the digital divide; and, media concentration and regulation. This discussion guide provides a brief overview of these complex issues, which you will have a chance to discuss further in your dialogue session.

PRIVACY AND SECURITY

Privacy and security are closely related concepts. The nature of the Internet, and particularly the emergence of Web 2.0, means citizens are putting what might be considered private information into the hands of their Internet service providers and other companies. The availability of personal information to marketers, and the increasing amount of ‘targeted’ advertising -- advertising that is designed for you based on what you search for or email about – have raised questions about citizens’ rights in the context of ICT.

In undemocratic countries, activists take particular risks when using the web, as governments sometimes use their private information to crack down on what we in Canada see as free speech or legitimate dissent. The case of Shi Tao, a pro-democracy activist who was jailed after the Internet service provider Yahoo turned his emails over to the Chinese government, has raised questions about the right to privacy and the extent of government surveillance in both democratic and non-democratic countries. In some cases, however, governments conduct surveillance on web-based transactions and communication not to crack down on pro-democracy movements, but to prevent activities like terrorism or the exploitation of minors. Extremist groups are quick to adopt ICT to spread their political views and influence others, and also to coordinate their activities. If security agencies can access these groups’ web-based communication they may have more success in stopping illegal and dangerous activities. The right to privacy in this context is complicated.

What kind of privacy protection, both from governments and businesses, are citizens entitled to when they use ICT? What role can democratic governments like Canada play in ensuring privacy?

Some Canadians have raised concerns about the actions of Canadian technology companies abroad. In order to operate in China, for example,
companies must comply with the government’s insistence on being able to access the information of Internet users, and to filter out certain types of information and websites it does not want citizens to access. The possibility of investing in China is hugely attractive to Canadian companies: in 2006 Canadian companies made over $7 billion by exporting goods to China. The answer to the question of whether Canadian businesses should be developing and selling technologies that enable questionable activities by governments or individuals depends on one’s perspectives and assumptions about technology, trade and human rights. You will be exploring these perspectives in your dialogue session.

Internet Activism and the Open Source Movement

The public availability of the Internet enables immediate global communication not only by large companies and international bodies but also by non-profit and public advocacy organizations and coalitions of all sizes. By giving people new tools for organizing and communicating, and in some cases making it easier for activists to assemble larger broad-based coalitions, ICT has changed the nature of political activism. The rapid spread of information via the Internet also enables the general public to be more quickly informed about global events. Web 2.0 is important here – videos of the pro-democracy demonstration by monks in Burma/Myanmar filmed by the monks themselves, for example, would not have been available even ten years ago. What effect this will have on public concern about global issues is as yet unclear.

Future use of the Internet will depend not only on the flow of information, but also on the ability of ordinary people to adapt and apply ICT as they see fit. Dissatisfaction with commercial software companies’ ability to exercise control over their software packages and to restrict their application has led to what is called the ‘open source’ movement. Advocates of open source support the development of software packages whose code (the source of the software) can be obtained freely and altered or developed to suit the users’ needs. They argue that ICT tools should be in the public domain to generate greater knowledge sharing in society. Commercial software companies counter this, arguing that they invest huge capital and resources in research and development and, as with any other commercial venture, are entitled to restrict usage in order to recoup their investment.

Intellectual Property and Open Access

In the context of ICT, the term “intellectual property” refers to the issue of who owns the information and products that we access using ICT. Supporters of strict copyright laws and protection for the creators of intellectual property argue that copyright protection is good not only for the creators...
themselves but also for the general public, as creators have an economic incentive to produce more and better works and products.⁶

Those who oppose strict intellectual property and copyright protection are concerned about the availability of products, both commercial and creative, to the general public. They think that the public should be able to download music, movies or other works without cost. Some opponents of strict copyright laws also argue that users should be free to incorporate parts of other works in the interests of parody or critique without worrying about violating these laws and risking fines or other legal penalties. There is also an important question of public access to government or publicly funded research. Should the public have the right to access the research funded by the government, or should the results be owned by private interests?

A related issue is government’s stewardship role in guarding and preserving information and research for future generations. Some feel that these public resources are endangered because of inadequate resources.

Alongside the open source movement, what is called the ‘open access’ movement has emerged to advocate alternatives to a strict intellectual property rights regime. Open access is free, immediate, and permanent online access to scientific and scholarly materials for all users.⁷ Supporters of open access argue that it maximizes the benefits of scientific research by making it available to the public. Opponents, many from commercial journal publishers, warn that the open-access publishing model is economically unsustainable as it does not give publishers adequate incentive to publish new materials. Together, the open source and open access movements raise questions about access to information and tools in a new knowledge-based economy.

In 2007, proposed new legislation on federal copyright reform in Canada provoked a heated debate. The copyright law would have imposed strict rules on copying and downloading music and other digital media, making most sharing of digital information illegal. Critics of the proposed legislation quickly organized a campaign against the legislation via the Internet, using Internet activism as outlined in the previous section, and were successful in extending the debate about the proposed legislation.⁸ How to protect intellectual property while also allowing Canadians optimal access to cultural and other products remains a key policy concern.

**Digital Divide**

This refers to the divide between people who enjoy access to and the ability to use ICT and those who do not – whether they are in developing countries or countries like Canada. Reasons for this divide include: lack of ICT infrastructure; limited accessibility of ICT facilities; unaffordable services; and
lack of education and training. This divide can have effects far beyond ICT itself: it can lead to a divide in educational, professional and lifestyle opportunities.

The gap is not in dispute but there are different perspectives on whether and how to close it. While some people see the digital divide as a cause of poverty and believe that investment in ICT will trigger development, others argue that lack of access to communication is a result of poverty, a problem that should be addressed before the widespread introduction of ICT. They question whether any investment in ICT makes sense in countries like Afghanistan, where the literacy rate is 28%9. Another set of arguments says that the digital divide should not be the cause of too much concern, and is a natural outcome of different levels of development worldwide.

**A G L A N C E AT THE D I G I T A L D I V I D E W O R L D W I D E**

According to the statistics collected by the International Telecommunication Union (ITU), over the last 12 years the digital divide has been shrinking in terms of numbers of fixed phone lines, mobile subscribers and Internet users. Yet a significant divide still remains.

By the end of 2006, just over 10% of the population in developing countries was using the Internet, compared to close to 60% in the developed world.

Within Canada, the digital divide is determined mainly by geography, income, age and gender. In 2005, only 58% of Canadians living in rural and small town areas accessed the Internet, well below the national average. Older individuals and those with less education and lower incomes are less likely to use the Internet (though in rural and small town Canada, women are more likely to use the Internet than men). Providing accessible and affordable broadband Internet to more rural and remote areas remains a challenge. This becomes an economic concern when we consider that Canadians must be able to compete globally in the knowledge economy.

**MEDIA CONCENTRATION AND REGULATION**

The term “concentration” refers to the domination of the media sector (nationally and globally) by a small number of companies that own a large share of the media products. This phenomenon will probably continue as larger firms acquire smaller ones. In Canada, big multinational firms like CanWest -- whose holdings include the Global TV network, the National Post, major metropolitan newspapers and many smaller market dailies and free weeklies -- control a large percentage of our media market. In December 2007, CanWest also took over one of the country’s top entertainment companies, Alliance Atlantis Communications, with substantial financial involvement by New York-based Goldman Sachs, one of the world’s biggest investment banks, raising concerns about foreign ownership, especially among the union representing Alliance Atlantis employees.

The degree and type of concentration in a country’s media industry often depends on the extent to which it is regulated. Deregulation is the process by which governments remove, reduce, or simplify restrictions on business and individuals with the intent of encouraging the efficient operation of markets. Supporters of deregulation argue that it moves ICT forward by stimulating innovation, promoting access to the communications system, lowering costs and creating more and better products. In many countries, technology licensing regulations can create barriers in access to ICT. Some governments - in the global north and south – permit high license fees, high customs duties on imported equipment and fail to encourage competition among service providers. Such practices limit the introduction and spread of new technologies and increase the price of ICT. Deregulation has been seen as a crucial factor in the development of innovations in ICT, as it has made the development of such technology more profitable for ICT companies.

Regulation can also serve to limit the size of media and technology companies by preventing too much concentration. Supporters of this sort of regulation argue that concentration leads to monopolies and lack of competition, which also drive up the price of services.
When only one or a few companies provide access to certain technologies, they can determine the price to charge. According to this reasoning, government should prevent excessive concentration and ensure that media reflects a diversity of viewpoints and open discussion in democratic society.

Another issue in Canada has to do with cultural sovereignty. The regulatory body for the Canadian telecommunications industry, the Canadian Radio-television and Telecommunications Commission (CRTC), requires radio and television stations to play a certain percentage of Canadian-made content. The CRTC claims these regulations are important for two reasons: culturally, Canadian news and entertainment programs must give voice to Canadians, to their talent and their shared experiences, and; economically, it means jobs for thousands of Canadians. Increasing foreign and concentrated ownership has raised concerns about the quantity and quality of Canadian-made content available to Canadians. The rise of digital media is also a factor here: the CRTC does not have, and probably could not impose, similar Canadian content requirements for the Internet. What kinds of controls, if any, should we impose on cultural imports from other countries? Should we protect Canadian cultural identity? If so, how? These are important questions for Canadians to consider, and areas where government needs direction from citizens.
Canada has been called a world leader in ICT. Canada’s performance in ICT falls into four areas: digital opportunities, business and innovation, trade, and development assistance.

**Digital Opportunities**

Canada was an early adopter of the Internet and other ICT practices. It continues to have a high percentage of Internet users and a high penetration rate for broadband. However, though Canada’s Internet usage and broadband penetration rates are among the highest in the world, several challenges remain. The International Telecommunications Union, the United Nations agency for information and communication technologies, which Canada joined in 1908, produces an annual “Digital Opportunities Index (DOI)”. The DOI measures countries against the ideal of 100% availability of mobile ICT devices and broadband. It considers the affordability of ICTs relative to the average income. Canada consistently ranks within the top 25 economies, but between 2006 and 2007 slipped seven spots, falling to 17th place. This is because although the rates of wireless phone use here are quite impressive, other countries are quickly surpassing Canada in being able to provide more affordable, accessible services. Staying on top of the list of ‘wired’ countries will be a major challenge for Canada.

**Business and Innovation**

Canada has a long history of notable contributions to ICT innovation, going back to the concept of the telephone, which was developed by Alexander Graham Bell at his parents’ home in Brantford, Ontario. The first Trans-Atlantic radio transmission, by Guglielmo Marconi, was received in Newfoundland. Canada also produced the world’s first PC and the BlackBerry, a handheld device that can send email from almost anywhere using wireless phone networks developed by Waterloo, Ontario-based company Research in Motion (RIM).

**Connectivity in Canada**

In 2007 over 64% of Canadians had Internet access, with the majority having the broadband access necessary to viewing and creating sophisticated content. 19.3 million Canadians subscribe to wireless (also called cell or mobile) phones. Canada's wireless carriers now offer coverage to more than 98% of Canadians and 47% of all phone connections in Canada are now wireless.

Sources:

http://www.internetworldstats.com/am/ca.htm
By 2007, there were approximately 12 million BlackBerry subscribers worldwide, and RIM had doubled its profits from 2006, earning over USD 1.67 billion in just one quarter. RIM has benefited from federal and provincial government investments in its research, obtaining more than $50 million in grants and loans from different branches of government. 

Funding research and development in technology is part of Canada’s policy.

**Trade**

The Canadian government also helps ICT companies by promoting both trade in Canadian ICT goods and services abroad, and international partnerships for research and development. In 2006, ICT exports accounted for 5.3% of total Canadian merchandise exports, and were valued at $23 billion. Despite the high priority placed on ICT trade, exports have declined by 3.9% since 2006 and Canada still has a sizeable trade deficit in ICT goods, of about $20 billion. The Department of Foreign Affairs and International Trade (DFAIT) runs a Science and Technology program with a mandate to: “play a strategic leadership role in enhancing Canada’s Science and Technology (S&T) capacity, competitiveness and prosperity through effective international linkages for Canadian research institutions, universities and firms”.

Canada has signed bilateral S&T Agreements with the European Union,
France, Germany, India, Israel, Japan and most recently with China (in January 2007). Information and Communications Technologies are one of five priority sectors – areas where Canadian expertise closely matches Chinese demand and where Canadian companies have told the government they want to pursue business opportunities -- in Canada’s market plan with China.26

**Development Assistance**

When providing developing countries with development assistance Canada has long advocated closing the digital divide. According to the Canadian International Development Agency (CIDA), Canada has “supported the use of ICTs as a tool for development” for more than 25 years. The 2001 Speech from the Throne outlined the government’s commitment to closing the digital divide through domestic innovations, an ICT agenda, involvement in the Group of 8 industrialized countries’ Digital Opportunity Task Force (DOT Force) and investments in developing countries. That same year Canada invested $20 million in the establishment of the Institute for Connectivity in the Americas. CIDA’s current strategy, called “Knowledge for Development Through Information and Communication Technologies,” aims to help close the digital divide while focusing on the need for gender equality (as the population using the Internet in most developing countries is overwhelmingly male).29 A commitment to closing the digital divide is likely to be part of CIDA’s policy for years to come. Other government departments, such as Industry Canada, also place importance on using ICT for development purposes.30

The International Development Research Centre (IDRC), a Canadian Crown corporation that works in close collaboration with researchers from the developing world, has sponsored the use of ICTs since its founding in 1971. In 2000, IDRC established an Information and Communications Technologies for Development (ICT4D) program. Through the ICT4D program, IDRC supports research collaboration initiated by developing countries and greater access to technology in the developing world. In some countries – such as Mongolia – the first Internet service providers were established with IDRC’s support. In addition to focusing on Internet access, IDRC also stresses that promoting connectivity in developing countries often depends more on encouraging the spread of cellular phone use, as 70% of the world’s population lives within reach of some sort of communications signal.
Canada has great strengths and some challenges in its development and use of ICT at home and abroad. What are the ICT priorities Canada should focus on at home and globally? To stimulate your thinking about this question, this discussion guide offers a few approaches to the question of ICT policy. These approaches are not exhaustive or mutually exclusive. Feel free to come up with your own approaches or combine different elements of these three approaches. The approaches are not meant to limit or narrow your thinking but simply to stimulate your ideas about what Canada should and could do. We encourage you to be creative in bringing your own ideas to the discussion.
Canada would strive to adopt policies to provide the greatest number of people, both at home and abroad, with access to ICT. In the modern world access to ICT should be considered a basic right. More than that, access to ICT is critical to Canada’s competitiveness in areas ranging from the information sector to the mass media and the arts. On a national level, the government and private companies would invest in the expansion of ICT infrastructure to provide access to wireless phones and the Internet to all Canadians, regardless of their level of education or income or their location. Internationally, Canada would offer ICT-based development assistance to developing countries to allow them to catch up to the developed world and enjoy similar freedoms and opportunities.

A focus on increasing access would lead the government to provide incentives to Canadian companies to encourage them to develop new technologies that permit improved access to ICT. This would include helping major companies achieve international competitiveness and supporting small start-up enterprises through their early years. Copyright and intellectual laws would strike a reasonable balance between protecting creators of art and technology and allowing users a maximum amount of freedom to enjoy digital media.
ARGUMENTS IN FAVOR

- Improved access would result in the development of “network effects” – the exponential increase in interaction that occurs when people who otherwise might not connect are able to become part of technology networks. The more people that contribute their shared knowledge to the World Wide Web, the greater the value of the information that is provided there, for everyone. With more people using email, the advantages of being connected grow, as more people can be reached using this technology. These network effects show how everyone benefits from greater access, even those who already have good access to technology.

- Democratizing access to the Internet in Canada and abroad would promote entrepreneurship and economic development in all regions of Canada, stimulating the development of new businesses and artists, which would contribute to the global economy and lead to further expansion of ICT. Canada could make a significant contribution to closing the digital divide abroad and use the relationships that result from ICT-specific development assistance as a base for potential economic relations in the future.

- Expanding Internet access means giving people a new way to get informed and involved, contributing to a more active and politically aware population.

ARGUMENTS AGAINST

- The market is the best driver of ICT expansion. Canada is already one of the most wired countries in the world and its ICT user rate will continue to grow. We do not need to rush this, especially since it is unlikely that heavy investment in rural and poor areas will yield returns. The same argument holds for international aid. As countries develop they will adopt ICT, but in the short term Canadian funds, effort, and good will should be used to fight more immediate problems like disease and malnutrition.

- Arguing that access to the Internet automatically translates into more business, art, and political activism is simplistic. Most Internet traffic is wrapped up in entertainment and blogs – the sites most frequented by Canadians, excluding search engines, are Facebook and YouTube, followed by Wikipedia, MySpace, and Blogger.com.

- Promotion of homegrown businesses and protectionist measures do not guarantee economic returns. Subsidies and protectionism tends to create inefficient companies, and while protection for Canadian technological talent has worked in the past, this investment does not guarantee the emergence of another company like RIM or another breakthrough product like the BlackBerry.

QUESTIONS

1. Are we so reliant on the Internet that access should be a public good and thus a policy priority?
2. Should we invest government money in expanding the Internet to places where there is perhaps not enough demand to make it profitable for private interests to provide Internet services? Why not let the market do this?
3. Should we prioritize ICT over other sectors of our economy?
4. Should we invest in ICT in developing countries, or should we devote our aid dollars to addressing other problems?
**Approach 2**

**Emphasize Market-Based Solutions for ICT**

The ICT sector has developed very rapidly, with minimal government regulations and controls. The role of the Canadian government would focus on supporting well functioning financial and economic markets that allow for entrepreneurship, innovation and growth and not on picking winners and losers or making markets serve social purposes. The government would invest more in public education so that tomorrow’s workers and leaders are able to benefit from all of the advantages that are offered by ICT innovation. Government also has an important role to play in supporting basic science and technology research at universities and technology institutes and would collaborate with the private sector on commercializing research.

There is no need for the heavy hand of the state to impose unreasonable Canadian content laws or to restrict foreign ownership in the ICT sector. The market (consumer demand) should determine what content is provided and which businesses succeed. However, to help markets function well, Canada would implement stricter copyright and patent protection and tighten enforcement of such laws in order to ensure profit incentives work and users pay. Internationally, Canada’s development policy would promote a trade-based approach to ICT by supporting developing countries’ trade strategies. This would include pushing for deregulation in their technology sectors while also opening up markets in the developed world for their products.
ARGUMENTS IN FAVOR

- Basic economic theory and practice has shown that a well functioning market is the most efficient method of allocating resources. Allowing content to be driven by market demand would provide users with affordable ICT products and services and would maximize choice.

- Reducing subsidies would force Canadian companies to get more aggressive and competitive. While fewer companies would succeed, those who made it would be globally competitive.

- By implementing and enforcing strict intellectual property laws, Canada would stimulate development of new technology products and artistic content: the profit incentive would be protected and creators would not fear having the fruits of their labour stolen or appropriated by others.

- Treating developing countries as partners rather than beneficiaries of aid allows them to develop their own competitive businesses, making them less dependent on donors while at the same time providing Canadian companies with business partnerships.

ARGUMENTS AGAINST

- Given the domination of American ICT companies and the size of the US market, Canadian ICT businesses face an uneven playing field. In addition, world powers like China invest heavily in applied research and in support for the ICT sector. Canada cannot afford to not invest in this sector if it wants a Canadian presence in ICT at home and abroad. To do otherwise would be to abandon our fastest growing industrial sector.

- Canadian content requirements promote the development of Canadian media, arts, and technology. Without such laws Canada would be even more saturated with foreign content and risk further erosion of our national cultural identity.

- By implementing stricter copyright laws, Canada would be promoting corporate control of technology and the arts. Open source software and free use of Web 2.0 encourage citizen control of ICT.

- Canadian international development policy should include a focus on supporting the development of ICT sectors. Without this aid, developing countries will not be able to create homegrown industries and expand their population’s access to ICT tools. Such aid can allow them to create a solid ICT industry and economy which could, in time, lead to mutally beneficial trade with Canada.

QUESTIONS

1. Is it important to have Canadian perspectives on domestic and international news? What about Canadian ownership – whether public or private?
2. Should some parts of ICT (e.g., Internet access) be considered a public good?
3. Do we need to set a good example for our major trading partners, such as China, in terms of respect for intellectual property?
**Approach 3**

**Emphasize ICT to Advance Canadian Interests**

Canada’s ICT policies would be guided by a clear articulation of Canadian interests. ICT is the fastest growing sector of the global economy, and therefore Canada must strive to become a global ICT leader. We need to also pay attention to the risks associated with allowing greater foreign ownership of the Canadian media and greater foreign content. Under this approach Canada would shore up defenses in the ICT sector to strengthen our economy and our cultural sovereignty. In order to achieve these goals, Canada would implement stricter Canadian content laws and foreign ownership restrictions in the ICT sector. Regulations on privacy and security would strike a reasonable balance between the protection of private interests and the protection of collective security. Without infringing on Canadians’ freedom of expression, Internet privacy laws would enable Canadian law enforcement agencies to access information on people who threaten Canada’s security. Internationally, Canada would tie its ICT-specific development assistance to the purchase of Canadian goods and services – if developing countries wanted financial assistance from us, they would use it to buy our products.
ARGUMENTS IN FAVOR

✔ Active promotion of Canadian innovation and creativity in the ICT sector makes good economic sense. Public investment in this sector promises to pay off – just look at RIM and its globally successful BlackBerry. We need this sector to remain globally competitive.

✔ Protecting a reasonable level of Canadian ownership of electronic broadcasting will help to support Canadian identity and our ability to continue to tell our own stories. This also helps to support citizen engagement, civic literacy and democratic processes.

✔ We know that terrorist and extremist groups are using ICT to advance their causes - and there is recent evidence that Canadian servers house pro-terrorism sites. It is in our collective interest to give Canadian public authorities the regulatory powers to oversee online activities for security purposes.

✔ Canadian aid need not be purely philanthropic. While Canada should help other countries, it should use this aid (especially in an area like ICT) as an opportunity to establish mutually beneficial business relationships.

ARGUMENTS AGAINST

✗ Governments do a bad job of picking winners and losers. Rather than subsidizing Canadian industry, let the market work – consumers will pick the winners.

✗ Canada is too small an investment market. We need to encourage more foreign investments if we are to grow a world class ICT sector. Foreign investment will also offer consumers more choice of entertainment, education and news and provide more opportunities for Canadian artists.

✗ Users’ confidence in safe and private use is essential to the development of ICT. Allowing the government to access this information is undemocratic and could set a dangerous precedent.

✗ Foreign aid is just that: aid. It is philanthropic and meant to help the beneficiary. Tying aid to business is morally questionable and establishes an uneven playing field by creating an economic obligation on the part of developing countries.

QUESTIONS

1. What is the right balance between protecting our privacy and protecting collective security? How do we control what the government can and can’t see? How will this affect what we are willing to do online?

2. Can we advocate free trade while applying protectionist policies and subsidizing strategic sectors of our economy? Are we willing to risk falling behind or supporting inefficient national companies over efficient, profitable foreign ones?

3. Are we willing to tie aid to the purchase of Canadian goods and services in cases where those goods and services can be purchased more cheaply in the local economy?

4. How important is Canadian cultural sovereignty? Do we need Canadian-made digital content in order to preserve our national identity?
CONCLUSION

So now, it’s your turn. What do you think? The information and the approaches outlined in this discussion guide are meant to provide you with a starting place to ask questions, consider options and develop your own views on how to best position Canada in the changing ICT world.

This issue, like any international policy issue, is complex and complicated. The conditions within the international arena are always changing and it is often difficult to navigate the best course for Canada. We can decide not to do anything and get swept up in the current or we can set sail in a direction that we have mapped out and defined.

Imagine you are the Prime Minister or the Minister of Industry for the weekend. What ideas, insights, questions and options would help key decision-makers set a course for Canada?
YOUR NOTES

USE THIS PAGE TO COME UP WITH YOUR IDEAS
**APPENDIX: WEB RESOURCES**

Internet World Stats:
http://www.internetworldstats.com/stats.htm

Michael Wesch’s video on Web 2.0:
http://www.youtube.com/watch?v=6gmP4nk0EOE

OECD Communications Outlook:
http://www.oecd.org/document/17/0,3343,en_2649_201185_38876369_1_1_1_1,00.html#highlights

Media Awareness Network’s Information on the Telecommunications Act:

Wikipedia page on deregulation:

Canadian Communications Foundations Timeline on Broadcasting in Canada:
http://www.broadcasting-history.ca/timeline/CCFTimeline.swf

CRTC Page on Canadian Content:

Friends of Canadian Broadcasting Website:
http://www.friends.ca/

CBC page on Media Ownership in Canada:

Industry Canada Site on Intellectual Property:
Canadian Intellectual Property Office’s page on protecting your intellectual property:
http://strategis.gc.ca/sc_mrksv/cipo/toolkit/main-e.html

The Cape Town Declaration on Open Access.
http://www.capetowndeclaration.org/

Privacy Commissioner of Canada’s page on protecting your privacy on the Internet:
http://www.privcom.gc.ca/fs-fi/02_05_d_13_e.asp

Wikipedia page on Internet activism:
http://en.wikipedia.org/wiki/Internet_activism

ITU’s page on the Global Cybersecurity Agenda:
http://www.itu.int/osg/csd/cybersecurity/gca/

ITU’s page on the Digital Opportunity Index:

ITU’s page on the digital divide worldwide:

On Rural Internet Use in Canada:

Industry Canada page on the ICT sector:

DFAIT’s Science and Technology Program:

CIDA’s Strategy on Knowledge for Development through Information and Communication Technologies (ICT)
http://www.acdi-cida.gc.ca/ict

Industry Canada’s page on ICT for Development:

International Development Research Centre’s Page on ICT for Development:
END NOTES

1 All statistics from: http://www.internetworldstats.com/stats.htm
2 http://www.youtube.com/watch?v=6gmP4nk0EOE
3 http://www.hrichina.org/public/highlight/
5 China is the world's fastest-growing major economy and could become the world's largest economy by 2025. http://www.international.gc.ca/commerce/markets-marches/factsheet-china-en.asp
7 http://en.wikipedia.org/wiki/Open_access
9 http://www.unicef.org/infobycountry/afghanistan_statistics.html
10 Internet use rates in Canada's largest urban areas ranged from 68% in Montreal to 77% in both Ottawa–Gatineau and Calgary. http://www.statcan.ca/english/freepub/21-006-XIE/21-006-XIE2007003.htm
11 Broadband is a “broad bandwidth” connection to the Internet. It allows a large amount of data to travel at one time. This type of fast connection is necessary for using most sophisticated Internet content such as audio or video.
12 http://www.thestar.com/article/287654
17 http://www.telecommunications.ca/History.htm
23 A trade deficit occurs when a country spends more money on importing goods than is made on exporting them.
The Speech from the Throne, delivered by the Governor General, outlines the government’s priorities for the year.

Also known as the G8, comprised of United States, France, the Russian Federation, the United Kingdom, Germany, Japan, Italy, Canada and the European Union

CIDA seeks to help develop the education, health and HIV/AIDS sectors, build local capacity, support knowledge-sharing and networking, and international partnerships that promote the use of ICTs in development. CIDA has supported projects such as telecommunications sector reform in Colombia, digital telecommunications training in China, the Caribbean AIDS Telecommunications and Information Network, the Developing Countries Farm Radio Network, and many others. For a full list see: http://www.acdi-cida.gc.ca/CIDAWEB/acdicida.nsf/En/STE-42484634-H3B
