

Trust and Confidence in Cyberspace

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We are in the e-Economy

The Canadian Minister of Industry says:

“We should aim to make Canada a fully **ICT-enabled economy - a world-leading e-Economy** that will foster growth and wealth creation across and throughout the country.”

David Emerson, Minister of Industry,

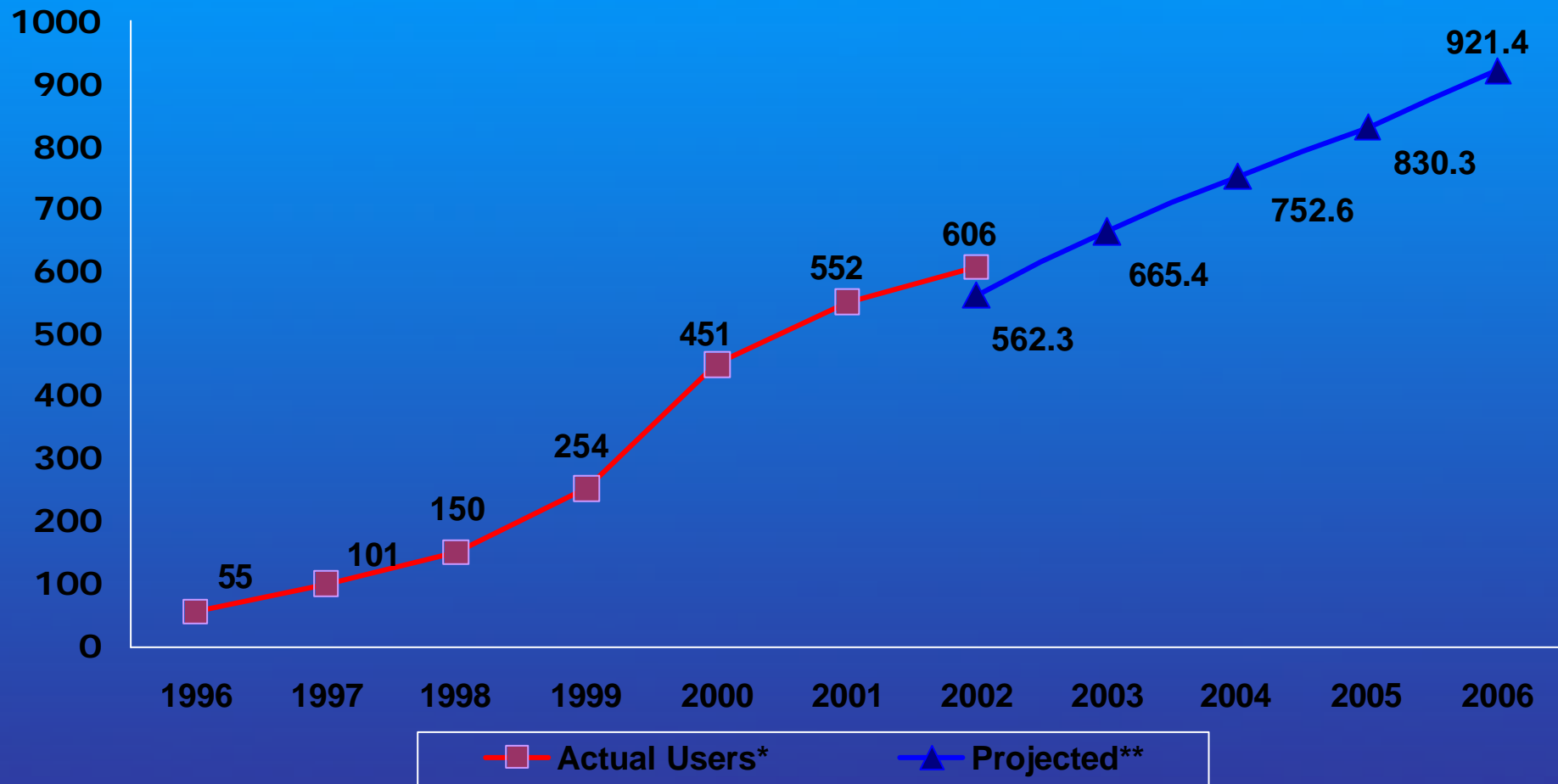
Address to e-Commerce to e-Economy: Strategies for the 21st Century

Sept 2004



Internet usage races ahead

In Millions of Users



Sources: * <http://www.nua.com/surveys>, ** Computer Economics, June 2002



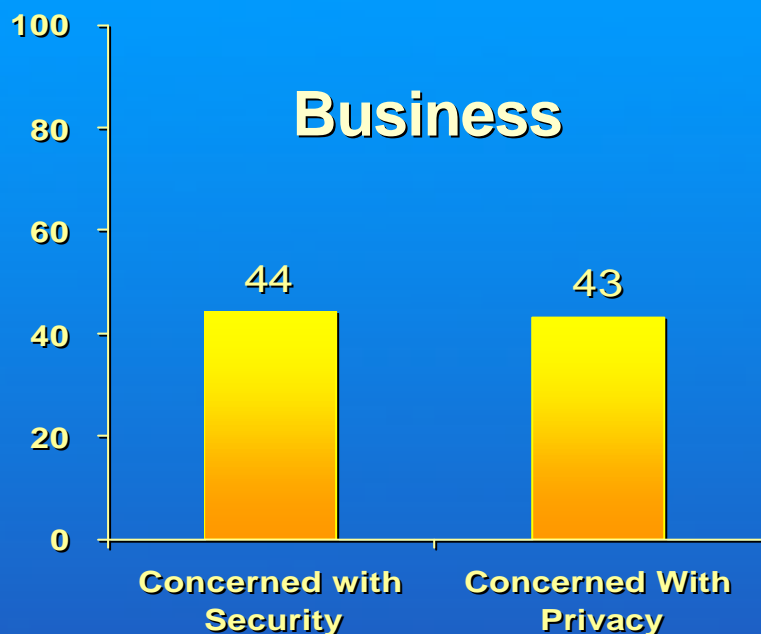
The importance of trust & confidence...

“Everything on the Web is ultimately about trust”

Nicholas Negroponte

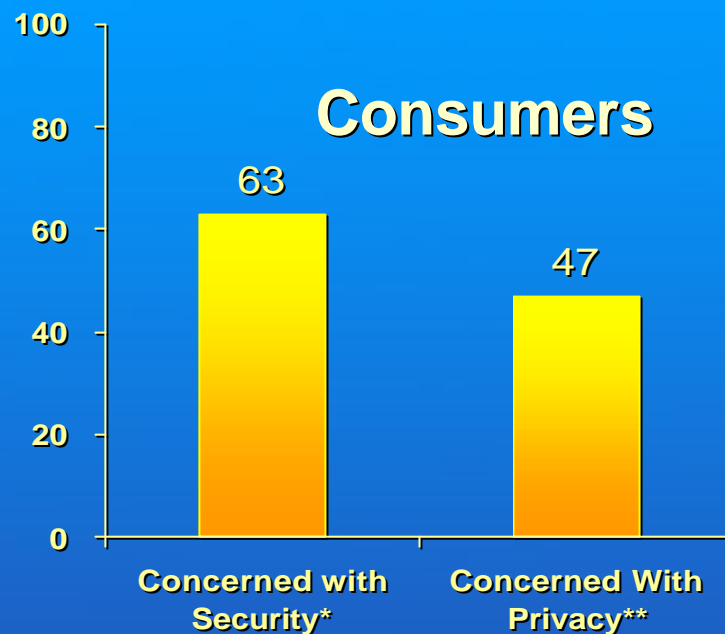
- Economic dependency on a networked environment.
- As with previous networks (electricity, highways, railways, airlines)
 - dependence and reliance only take place when there is trust.
- Uncertainty is a significant concern.
- E-commerce could falter:
 - without trust and confidence
 - excessive security costs

Ongoing concerns about privacy and security...



% of businesses identifying barrier as "very significant" to adoption of e-business

Source: Ekos, Nov/Dec 2003



* Not willing to give my credit card information over the Internet to purchase from a well-known store

** I mind companies using information about me even if I know about it and can stop it.

Source: Ekos, 2003

Despite PIPEDA and Consumer Protection Codes of Practice

Telemarketing: a serious irritant

- 2003 Environics survey reveals 38% tolerate telemarketing calls; 35% are annoyed by them and 24% hate them
- 79% would support a national Do Not Call list
- **December 13, 2004, Minister of Industry announced that the Government of Canada is introducing legislation that would reduce the volume of unsolicited telemarketing calls Canadians receive at home.**
- Federal Trade Commission (FTC) announced the US national Do Not Call Registry in June 2003 -operation commenced October 2003
 - Seen as remarkably successful - more than 62 million Americans registered telephone numbers in first year
 - Harris Interactive survey estimates unsolicited calls drop from 30 to 6 per month for those subscribed
 - Certain types of calls exempted: surveys & polling, politicians, charities

Illegal and offensive content

- Budget 2004 announced a national strategy to counter the sexual exploitation of children on the Internet (\$8 million per year)
 - As part of the Government of Canada's National Strategy to protect children from online sexual exploitation, Deputy Prime Minister Anne McLellan announced the expansion of the National Child Exploitation Coordination Centre (NCECC) for law enforcement and the expansion of Manitoba-based Cybertip.ca on May 12, 2004.

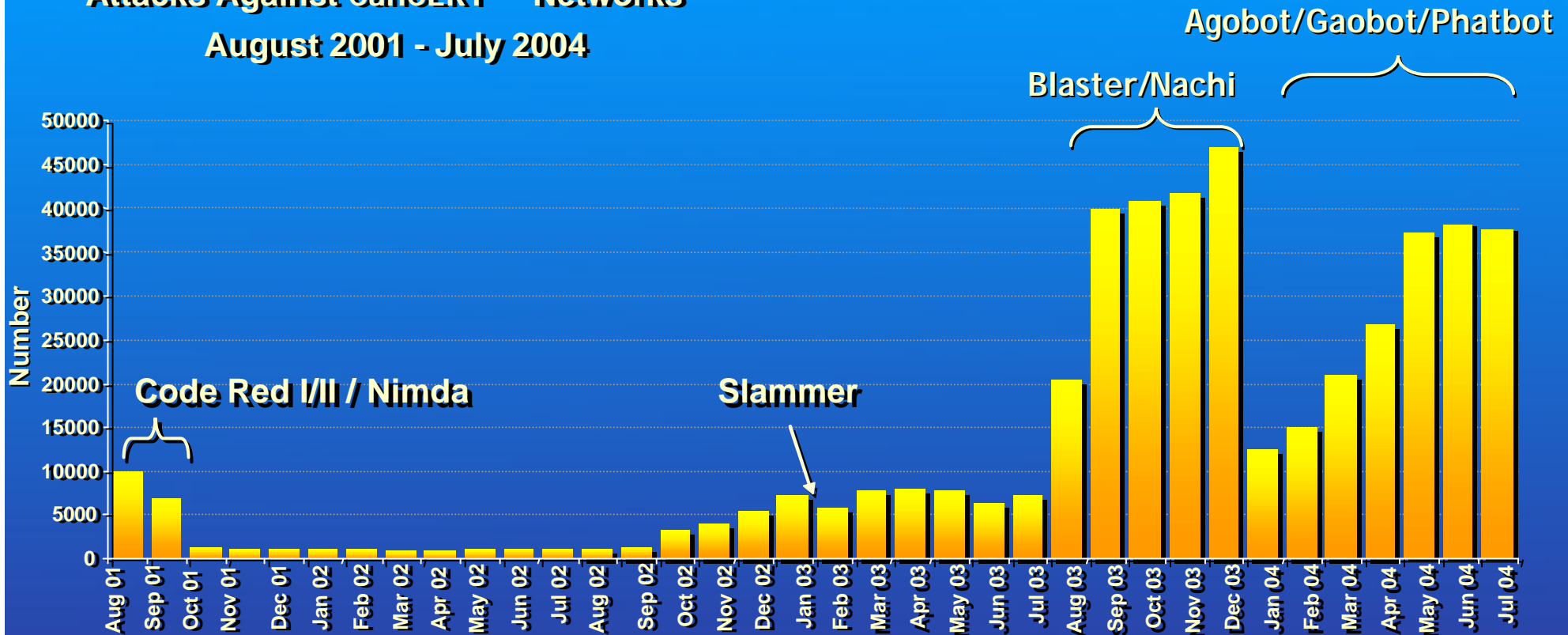
Attacks on our networks increasing

In 2004, 1 in every 16 e-mails carried a virus

Source: MessageLabs, December 6, 2004

Attacks Against CanCERT™ Networks

August 2001 - July 2004



CanCERT is Canada's first national Computer Emergency Response Team (CERT) operated 24/7 by EWA Canada since 1998. The above graph depicts the number of attacks per month against CanCERT™ networks during the period August 2001 to July 2004.



New security threats emerging quickly

PHISHING

- In September 2003 MessageLabs intercepted 279 phishing emails, by September 2004 that number rose to more than 2 million, a total of 18 million during 2004 (MessageLabs, December 6, 2004)
- 1.78 million have fallen victim to online fraud (Symantec)
- U.S. banks and credit card companies have paid almost \$1.2 billion in damages (Symantec)

EMAIL FRAUD

- High profile attacks include Visa, Bank of America, Bank of Montreal, eBay, Best Buy, Yahoo, MSNTV... (Symantec)

IDENTITY THEFT

- Cost in the last 5 years in the U.S. was \$60 billion (FTC)
- In Canada, 13,000 cases reported (ComputerWorld Canada)

E-COMMERCE ATTACKS/EXTORTION

- Almost 16% of attackers targeted e-commerce organizations, compared to 4% during the last six months of 2003 (Symantec)

Spyware/Adware and Zombies...

- Four in five users in US, or **80%, have spyware or adware** programs on their computer.
- 89% of users who were infected with spyware/adware said they didn't know the programs were on their computer.

(AOL-NCSA Online Safety Study, October 2004)

- **...Phishing attacks on the Internet were delivered via a different set of 1,000 zombies**, or computers that are maliciously taken over by viruses without the owners' knowledge; and **70 percent of those zombies were also used to send spam.**

(CipherTrust, October 18, 2004)

Spam, the "Killer" application

11 billion e-mails sent per day worldwide in 2001 (Gartner, May 2002)

Expected to grow to 36 billion e-mails per day in 2005 (Gartner, May 2002)

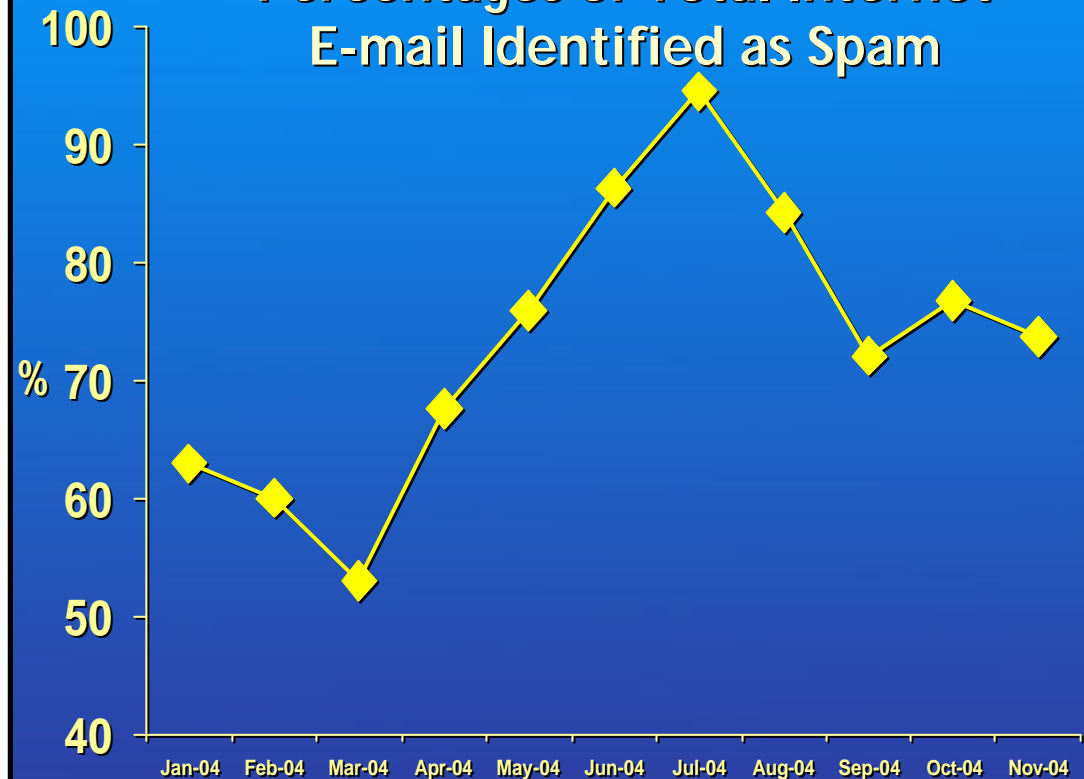
2001 - 8% of U.S. e-mail traffic was spam (Brightmail)

2003 - 40% of traffic was spam (Brightmail)

2004 - 73% of traffic was spam (MessageLabs, December 6, 2004)

Compared to 40% of U.S. postal service mail that is commercial

Percentages of Total Internet E-mail Identified as Spam



Source: MessageLabs, December 6, 2004

The spam business model

- **Spam is profitable:** costs are minimal
 - Direct mail requires response rate of 1 in 50
 - Spam can operate at return rate of only 1 in 4000
- A huge global web of loosely managed networks facilitates this e-mail abuse
- Impunity: enforcement of domestic laws is difficult and requires considerable resources

The costs of spam

- Estimates of the annual cost of spam to the U.S. economy
 - \$10 billion (Ferris Research)
 - \$87 billion (Nucleus Research)
- Radicati Group and Message Labs estimate worldwide cost to businesses at \$20.5 billion
- **Loss of public confidence in Internet communications**
- 25% of Internet users have curtailed their use of e-mail because of spam (Pew Foundation-2003)

The challenges for Canada

- o Huge volumes of spam coming into Canada
- o Canadian-based spamming activity
- o Public and business frustration - time, cost, content
- o Political pressure - individual legislators draft anti-spam measures
- o Lack of international coordination

Top Twelve Spam Producing Countries, 2004	
Country	%
US	42.11
South Korea	13.43
China (Hong Kong)	8.44
<u>Canada</u>	<u>5.71</u>
Brazil	3.34
Japan	2.57
France	1.37
Spain	1.18
UK	1.13
Germany	1.03
Taiwan	1
Mexico	0.89
Others	17.8

A consensus to move forward?

- o Canada's Task Force on SPAM (May 11, 2004)

Another threat to the realization of e-economy potential is **spam... the cancer of the e-economy**. A few years ago, spam was a mild irritant. Today, it is a public nuisance, an impediment to business, an invasion of privacy and a threat to our networked infrastructure.

The Honourable David L. Emerson, Minister of Industry

Address to e-Commerce to e-Economy: Strategies for the 21st Century

Ottawa, Ontario, September 27, 2004

- o OECD Task Force on Spam
- o London Action Plan
- o Work through the APEC, ITU
- o Canada's National Cyber Security Task Force

Task Force - members

- **Lori Assheton-Smith**, Senior Vice-President and General Counsel, Canadian Cable Television Association
- **Michael Binder**, Assistant Deputy Minister, Spectrum, Information Technologies and Telecommunications, Industry Canada
- **Tom Copeland**, President, Canadian Association of Internet Providers
- **Bernard Courtois**, President, Information Technology Association of Canada
- **Michael Geist**, Canada Research Chair in Internet and E-Commerce Law, University of Ottawa
- **Amanda Maltby**, Senior Vice-President, Canadian Marketing Association
- **Suzanne Morin**, Assistant General Counsel, Bell Canada, and Internet Law Policy Forum
- **Geneviève Reed**, Head of Research and Representation, Option consommateurs
- **Neil Schwartzman**, President, Coalition Against Unsolicited Commercial Email Canada
- **Roger Tassé**, Partner, Gowling Lafleur Henderson LLP

Task Force - process

- Discussions with parliamentarians, government agencies and key stakeholders on implementation
- Online Public Consultation Forum
- Convened a stakeholder forum December 3, 2004 to review progress to date and additional requirements
- Report to Minister of Industry spring 2005

Canada's anti-spam deliverables

- Legislation and Enforcement
 - Criminal Code, Competition Act, PIPEDA
 - Clarity of offences, deterrence - statutory penalties and damages
 - Enforcement issues
- Network and Technology
 - **Canadian ISP Best Practices to Reduce Spam**
- Validating Commercial E-mail
 - Options for marketers' certification scheme being developed by marketing community
- Public Education and Awareness
 - **www.stopspamhere.ca**
- International Collaboration
 - Bilateral and multilateral agreements
 - London Action Plan, OECD Task Force on Spam

Spam and related activities threaten the safety and security of our networks

- Challenges include:
- Resources
- Competing Priorities
- Perception of Severity

Our networks are a critical element
of our basic infrastructure

We need a solution

Government of Canada

www.gc.ca

Industry Canada

www.ic.gc.ca

Electronic Commerce

www.e-com.ic.gc.ca

Canada's Task Force on Spam

<http://strategis.ic.gc.ca/spam>

Canada's Task Force on Spam Online Forum

<http://strategis.ic.gc.ca/spam-forum>

Stop Spam Here

www.stopspamhere.ca

Consumer Connection

www.strategis.gc.ca

Broadband

broadband.gc.ca

Canada 

<http://sitt.ic.gc.ca>

