



# Infrastructure 2003-2008

 NBDC's  
first 5 year  
business  
plan:  
June, 2003

## Nunavut Broadband

### Business Plan Submission for Implementation Funding



#### Submitted to:

##### *Broadband Pilot Program Office*

300 Slater St.  
Ottawa, ON K1A 0C8

#### Submitted on:

*June 6, 2003*

#### Submitted by:

##### *Nunavut Broadband Development Corporation (NBDC)*

c/o Baffin Business Development Centre  
Igluvut Building, PO Box 1480, Iqaluit, NU X0A 0H0  
[www.nunavut-broadband.ca](http://www.nunavut-broadband.ca)

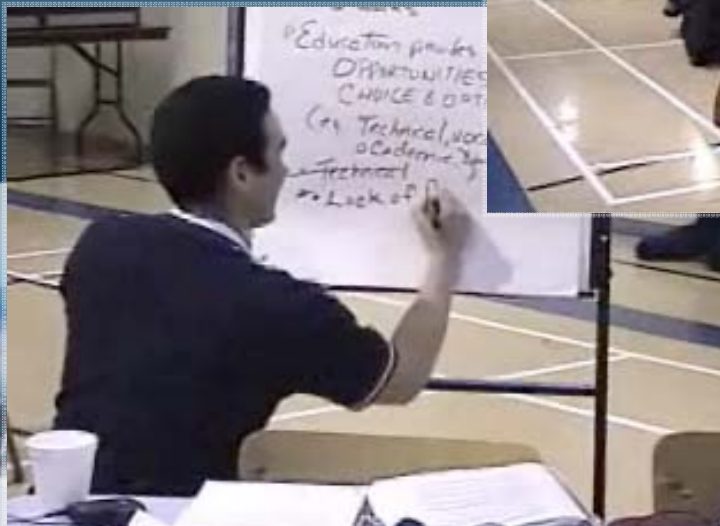
# Sivumut Conference 2003



Broadband needed  
for economic  
growth



QuickTime™ and a  
TIFF (LZW) decompressor  
are needed to see this picture.



# Investors in Infrastructure 2004-05

 Industry Canada, contribution:	3,855,000
 Atuqtuarvik Corp., loan:	3,000,000
 SSI Micro Ltd, CIK investment:	1,600,000
 Nun Bus Credit Corp, loan:	1,000,000
 INAC, contribution to 2.5 wireless:	250,000
 22 Nunavut municipalities, contribution:	220,000
 Gov of Nunavut EDT, contribution:	125,000
 Gov of Nunavut CGS, contribution:	125,000

**TOTAL Cost to build QINIQ: \$10,175,000**

# Launch of QINIQ, 2005

1st broadband goal in economic strategy completed



Photo: SSI Micro

# Nunavut Economic Outlook 2005



"...over time, the \$10 million spent to bring broadband infrastructure to every community may one day be viewed as the greatest infrastructure breakthrough in the territory's history" *Nunavut Economic Outlook, 2005*



# Research and Development 2004-2007

- 👉 2.5 GHz wireless
- 👉 VOIP trials
- 👉 Hotspots development
- 👉 Security monitoring
- 👉 On the land trials
- 👉 Geoscience plan
- 👉 Desktop conferencing trials
- 👉 Banking on Broadband report

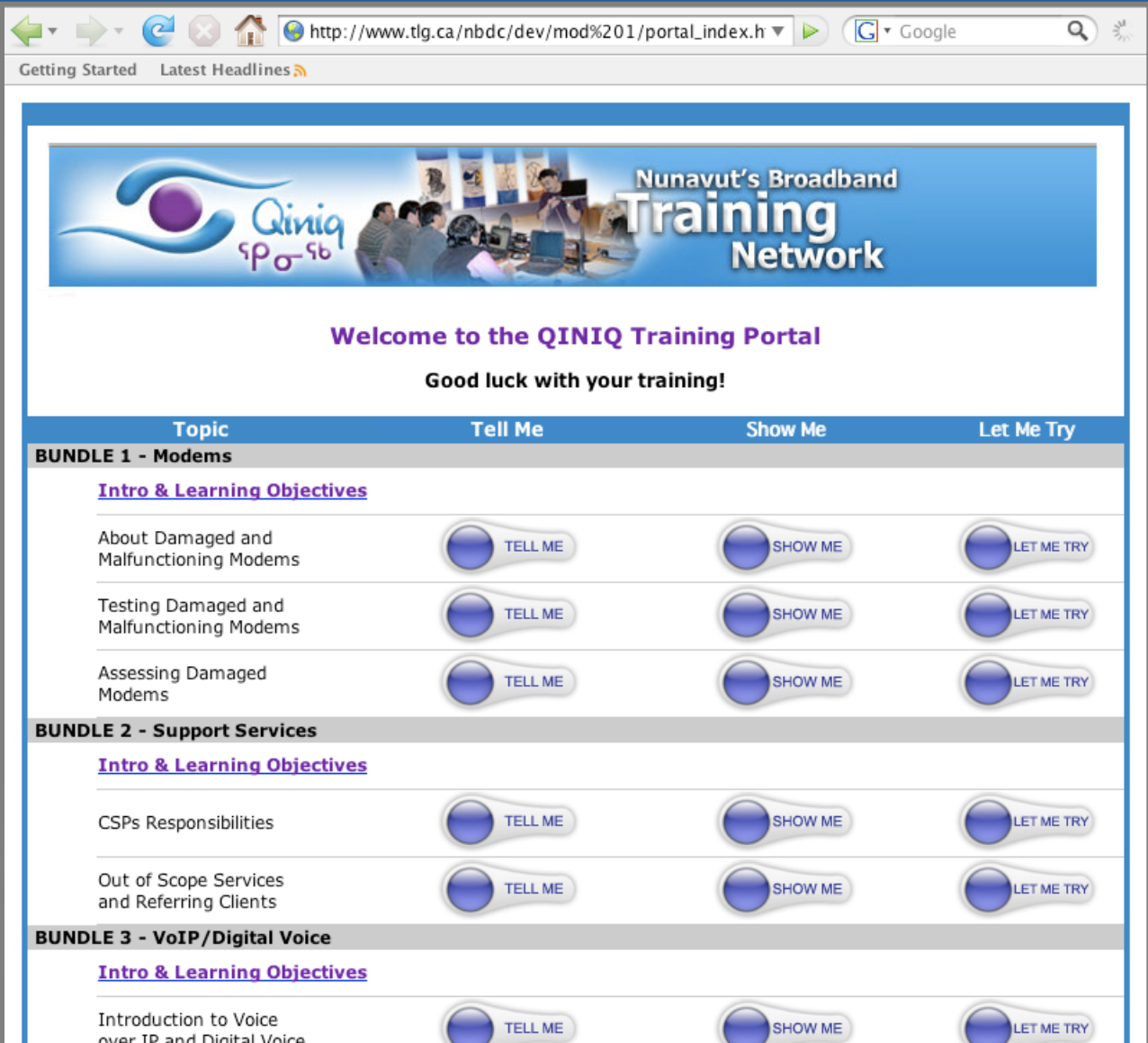
# Capacity Building

- ☞ Community Service Provider in every community receives 20% gross revenue
- ☞ Conferences held every 2 to 3 years



# Capacity Building

 Online CSP  
Training  
Centre in  
Development



The screenshot shows a web browser window displaying the QINIQ Training Portal. The browser's address bar shows the URL [http://www.tlg.ca/nbdc/dev/mod%201/portal\\_index.h](http://www.tlg.ca/nbdc/dev/mod%201/portal_index.h). The page features a header with the QINIQ logo and the text "Nunavut's Broadband Training Network". Below the header, a welcome message reads "Welcome to the QINIQ Training Portal" and "Good luck with your training!". The main content area is organized into three bundles, each with a "Topic" column and three interactive buttons: "Tell Me", "Show Me", and "Let Me Try".

Topic	Tell Me	Show Me	Let Me Try
<b>BUNDLE 1 - Modems</b>			
<u><a href="#">Intro &amp; Learning Objectives</a></u>			
About Damaged and Malfunctioning Modems	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>
Testing Damaged and Malfunctioning Modems	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>
Assessing Damaged Modems	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>
<b>BUNDLE 2 - Support Services</b>			
<u><a href="#">Intro &amp; Learning Objectives</a></u>			
CSPs Responsibilities	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>
Out of Scope Services and Referring Clients	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>
<b>BUNDLE 3 - VoIP/Digital Voice</b>			
<u><a href="#">Intro &amp; Learning Objectives</a></u>			
Introduction to Voice over IP and Digital Voice	<input type="button" value="TELL ME"/>	<input type="button" value="SHOW ME"/>	<input type="button" value="LET ME TRY"/>

# Infrastructure 2008-2013

 NBDC's  
next 5 year  
business  
plan:  
March, 2008



## Infrastructure Phase II

*Managing Bandwidth - Nunavut's Road Ahead*  
March 31, 2008



March 31, 2008 v1.1

Document Prepared for:  
Infrastructure Canada

Nunavut Broadband Development Corporation  
2<sup>nd</sup> Floor, Igluvut Building  
P.O. Box 2159  
Iqaluit, NU X0A 0H0

[www.nunavut-broadband.ca](http://www.nunavut-broadband.ca)  
ph (888) 599-6232  
fax (866) 383-6315

# Bandwidth Challenge

- ☞ Satellite bandwidth 100 times more expensive than bandwidth on fibre
- ☞ Infrastructure Canada subsidized QINIQ for first 2000 subscribers only
- ☞ SSI Micro currently subsidizes most of the remaining 2000 subscribers
- ☞ QINIQ faces severe bandwidth shortfall

# Broadband needs collected...

- ☞ Comprehensive Questionnaire - over 200 respondents
- ☞ In person workshops held in Cambridge, Rankin and Iqaluit in February - 50 participants from all sectors

## 2) 1.1 Do you have access to the Internet and broadband now?

Please select one only:

	Percentage	Responses
Yes	70.6	144
Yes, but not easy to get regular access	1.5	3
Yes, but too slow or expensive	10.3	21
No, but would like access	15.7	32
Other	2.0	4
<b>Total responses:</b>		<b>204</b>

## 3) 1.2 Why do you use the Internet and broadband?

Please check all that apply:

	Percentage	Responses
For individual or personal use (including education)	54.2	169
To do my job as an employee or manager (also fill in Section 2)	31.1	97
To run my own business/work (also fill in Section 2)	9.6	30
To work in IT or create broadband content (also fill in Section 3)	2.6	8
Other	2.6	8

## 4) 1.3 For personal use, why do you use broadband?

Please check your most important uses:

	Percentage	Responses
Communicate with family and friends	18.5	180

# Broadband needs:

- moving large files: maps, Nunavut video
- moving data of all kinds
- meeting online with video, audio and document sharing for training, meetings
- better classroom connectivity
- justice applications - ex. bail hearings
- health applications - ex. x-ray transfers
- and much more defined in Business Plan

Satellite bandwidth in the arctic is like  
water in the desert...



Photo: Thar Desert, [www.worldofstock.com](http://www.worldofstock.com)

**We have to manage it carefully.**

# Infrastructure II tasks:

- 👉 run RFPs for new services
- 👉 select vendors
- 👉 negotiate contracts
- 👉 develop process for Infrastructure Canada investment
- 👉 develop reporting process from customers and vendors

# Future Support

- All investment 2003-2008 listed in report
- Core funding challenge for NBDC
- GN EDT key supporter for core operations and project funding to NBDC

## Investment in Nunavut Broadband



By Fiscal Year and by Investor

Investment 2003-2004		
Operations Funding		
GH Sustainable Development (Core Funding)	50,000	
INAC (Business Plan Funding of \$35,000 from 2002-2003)	35,000	
Industry Canada BRAND Phase 1 (Business Plan)	30,000	
David E. Smith, Lorraine Thomas (unpaid contractors)	91,480	
Travel Assistance from various sources for advisory committee, research	35,000	241,480
Project Funding		
INAC, Innovation Fund, Workshop Project with ISPs	100,000	100,000
Investment 2004-2005		
Operations Funding		
GH EDT	50,000	50,000
Project Funding*		
INAC, Innovation Fund, (6 Projects)	506,000	
GH Education (Community Skills)	281,000	
KPID (Training)	38,000	
MECD (Training)	20,000	
Kakkvak (Training)	15,000	
Agriculture Canada (Training)	15,000	875,000
Infrastructure and Bandwidth Funding		
Industry Canada BRAND Phase 2 (Infrastructure)	3,885,000	
SS Micro Limited (Contribution In Kind, Infrastructure)	1,600,000	
22 Nunavut Municipalities (Infrastructure)	220,000	
GH EDT (Infrastructure)	125,000	
GH CGS (Infrastructure)	125,000	5,955,000
Debt/Equity repayable from Customer Revenue**		
Atqarsuvtik Corporation (\$1 million not drawn down as of May 2008)	3,000,000	
Nunavut Business Credit Corporation (Infrastructure, project mgt)	777,000	3,777,000
Investment 2005-2006		
Operations Funding		
GH EDT (Core Funding)	200,000	
GH CGS (Professional Services Support - legal, audit, mgt)	75,000	
GH EDT SP Program (Infrastructure Canada negotiations costs)	130,000	405,000
Project Funding*		
GH EDT, QNHQ Network Launch, Bankin Inlet	20,000	
GH Education, Community Skills Database Project	395,000	
Industry Canada Video Project	88,000	
INAC Innovation Fund (7 projects)	589,000	
GH EDT SP Program (2 projects)	220,000	1,212,000
Infrastructure and Bandwidth Funding		
Infrastructure Canada HSI Bandwidth Subsidy Year 1 (Satellite Services)	980,000	980,000
Debt/Equity repayable from Customer Revenue**		
Nunavut Business Credit Corp (loan for modems)	223,000	223,000

June 2008

[www.nunavutbroadband.ca](http://www.nunavutbroadband.ca)

## Investment in Nunavut Broadband



By Fiscal Year and by Investor

Investment 2006-2007		
Operations Funding		
GH EDT (Core Funding)	200,000	
Nunavut Corporation and Nunavut Sealink and Supply (private sector)	50,000	250,000
Project Funding*		
GH EDT, SP Program, CSP Conference and Online Training Development	150,000	
INAC SINED, CSP Conference and Online Training Development	187,451	337,451
Infrastructure and Bandwidth Funding		
Infrastructure Canada HSI Bandwidth Subsidy Year 2 (Satellite Services)	910,000	910,000
Investment 2007-2008		
Operations Funding		
GH EDT (Core Funding)	200,000	
GH EDT - supplemental funding for legal costs	50,000	250,000
Project Funding*		
Private sector contributions for legal costs	34,000	
GH EDT, HEFF Program, Infrastructure Phase II and Online Training	185,000	
INAC SINED, Infrastructure Phase II	80,000	299,000
Infrastructure and Bandwidth Funding		
Infrastructure Canada HSI Bandwidth Subsidy Year 3 (Satellite Services)	980,000	980,000
Investment 2009-2013		
Contributions		
Infrastructure Canada HSI Bandwidth Subsidy Year 4-8 (Satellite Serv.)	4,960,000	4,960,000
<b>Total all NBDC Broadband Investment to March 31<sup>st</sup>, 2008</b>		<b>\$21,904,931</b>
Projected Investment 2008-2009		
Operations Funding		
GH EDT (Core Funding confirmed)	200,000	
GH EDT - requested additional funds (not confirmed)	100,000	300,000
Project Funding*		
GH EDT, SP Program, Online Training (confirmed)	190,000	
GH EDT, SP Program, Infrastructure Phase II (not confirmed)	75,000	
INAC SINED, Infrastructure Phase II, Online Training (not confirmed)	150,000	415,000
Infrastructure and Bandwidth Funding		
Infrastructure Canada HSI Bandwidth Subsidy Year 4 (Satellite Services)	990,000	990,000
<b>NBDC Projected Investment April 2008 - March 2009</b>		<b>\$1,765,000</b>

Notes: \* Projects allocate 10 to 15% of cost toward the administrative and financial operations of NBDC. All other project funds are used for the development of services and applications largely by Nunavut-based organizations.  
 \*\* Equipment of the CBC and equity is by the network operator, SS Micro Limited from Customer revenue.

June 2008

[www.nunavutbroadband.ca](http://www.nunavutbroadband.ca)

# INAC Future Support (1)

## Capacity Building





-  CSP Conferences every 2 years      \$100,000 every 2 years
-  Online training centre development      \$75,000 per year

 Total Capacity Building support from INAC, 2008-2013:

 \$575,000

# INAC Future Support (2)

## Infrastructure Development Management Support

-  up to \$50,000,000 of funds to be managed by NBDC
-  no ongoing funds for project management from Infrastructure Canada
-  require support for full time person to work on infrastructure project in Nunavut
-  INAC contribution 50% of cost of position only

 Total Infrastructure Development Management support from INAC, 2008-2013:

 \$375,000

# INAC Total Investment, 2008-2013

 Capacity Building total:	\$575,000
 Infrastructure Dev total:	\$375,000
 INAC, 5 years:	\$950,000

