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# The Kuh-ke-nah Network of Smart First Nations Demonstration Project

## Annual Report

**Year 1**

**Ending March 31, 2002**

**Project Number: 478789**

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Deer Lake

Fort Severn

Keewaywin

McDowell Lake

North Spirit Lake

Poplar Hill

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## **PROGRESS AGAINST OBJECTIVES**

The goal of the Kuh-ke-nah Smart First Nations project is to demonstrate how First Nation communities can collaboratively use Information and Communication Technologies (ICTs) to re-determine their relationship with Canada and the world. This goal is embedded in meeting three primary objectives. ICTs must:

- contribute to community well-being in a tangible way;
- support community autonomy, self-determination and governance; and,
- enhance community capacity for sustainable development.

This goal and accompanying objectives are being successfully achieved through the development and delivery of a number of services in each Keewatinook Okimakanak First Nation. The services address community demand for ICT-enabled solutions and establish a community platform for introducing advanced informatics applications once the demonstration project phase has been concluded. Services include:

- **Keewatinook Internet High School:** Kuh-ke-nah is supporting the development of on-line access to high school programming for youth in the Keewatinook Okimakanak communities and across the region.
- **Community Information Technology Centres (e-Centres):** e-Centres are now established in each of the Keewatinook Okimakanak First Nations providing a hub for SMART service access and training in each community. The local e-Centre Manager is running the Centre and organizing technology transfer workshops and demonstrations. The Centre is providing access to IP videoconferencing and workstations for multi-media production, and is acting as a central office for the e-Centre Manager, the local Network Technician, and the Multi-Media Producer.
- **Kuh-ke-nah Portal:** The K-Net Portal (<http://knet.ca>) is a community of communities - a high speed WAN-based gateway that reflects local character and priorities. The Portal is encouraging an interactive and collaborative relationship with users by hosting web resources that draw on and benefit local people, organizations, and businesses. The Kuh-ke-nah Portal provides various on-line services including e-mail, discussion forums, personal homepages and chat services. It hosts local and regional links to First Nation businesses, organizations and communities.
- **Data Warehouse:** The Data Warehouse Initiative is facilitating the development of community and regional database projects including K-Net News, K-Net Network utilization and K-Net photo gallery. One major database application developed by K-Net staff is the open source e-learning tool that the Internet High School teachers will use starting in September 2002.
- **Keewatinook Okimakanak Telehealth:** The Kuh-ke-nah network supports the

development of an integrated IP environment for dynamic (data / voice / video) health services delivery. The telehealth initiative is delivering a variety of telemedicine applications with more planned over the next two years. A comprehensive business case is now before Health Canada to expand the initial demonstration project and its services to other remote First Nations across the Sioux Lookout Zone region in Northwestern Ontario.

- **IP Telephony Project:** Due to changing environments and opportunities the caching/router smart service will only be supported for the units that are already in the field. One caching / router unit was sent to the Communications Research Centre for their assessment and deployment within their environment. K-Net staff are now working in partnership with the Education Network of Ontario to deploy and support IP telephony services as a revenue generating stream for the Kuh-ke-nah Network. Demonstration units are now in place in each e-Centre and in the Sioux Lookout office.
- **Broadband Network Deployment:** The IP broadband network is now operational in each of the Keewatinook Okimakanak First Nations including the “last mile” cable solution. The network is now being migrated to other First Nation organizations and communities to ensure its ongoing development and maintenance. Requests for technical assistance are forever increasing and resulting in the involvement of more of the technicians on staff.
- **Smart Management and Organization:** Keewatinook Okimakanak is integrating ICT and broadband applications throughout all its programs and services to better meet the needs of the member First Nations. Modeling and supporting the use of ICTs and smart applications is resulting in the increased use of these tools within other organizations and communities.

**BOARD OF DIRECTORS**

<b>Board Member Name</b>	<b>Affiliation</b>	<b>New Board Member? Y/N</b>	<b>Number of Board / Committee meetings over past year</b>
* Chief Royal Meekis	Deer Lake First Nation	N	6 Board Meetings
Chief Roy Dale Meekis	Deer Lake First Nation	Y	4 Board Meetings
* Chief George Kakekaspan	Fort Severn First Nation	N	10 Board Meetings
Chief Solly Kakegamic	Keewaywin First Nation	N	8 Board Meetings
* Chief John McKay	Keewaywin First Nation	Y	1 Board Meetings
Chief Albert James	McDowell Lake First Nation	N	7 Board Meetings
* Chief Eli James	McDowell Lake First Nation	Y	3 Board Meetings
Chief Joe Kakegamic	North Spirit Lake First Nation	N	6 Board Meetings
* Chief Isaac Linklater	North Spirit Lake First Nation	Y	4 Board Meetings
* Chief Patrick Owen	Poplar Hill First Nation	N	5 Board Meetings
Chief Dennis King	Poplar Hill First Nation	Y	5 Board Meetings
Carl Seibel (ex-officio)	Industry Canada		4 Board Meetings

**NOTE:** \* Indicates these are present board members as of June 2002. Members of the Board of Directors for Keewaytinook Okimakanak are the elected chiefs from each of the member First Nations. Over the past year each KO First Nation has held elections resulting in a change of leadership in all the communities. Terms usually are for a two year period unless there are other circumstances requiring another election during the term.

**KUH-KE-NAH (K-NET) PROJECT TEAM**

<b>Management Team Members (new/replacement)</b>	<b>Responsibilities</b>
Geordi Kakepetum - KO Executive Director - Balmertown office	<ul style="list-style-type: none"> <li>• Overall management of Keewaytinook Okimakanak</li> <li>• Reports directly to the Board of Directors</li> <li>• Supervision of all programs and projects</li> </ul>
Brian Beaton - K-Net Coordinator - Sioux Lookout office	<ul style="list-style-type: none"> <li>• Overall management of K-Net Services activities</li> <li>• Supervision of Smart Demonstration Project</li> </ul>
Penny Carpenter-maternity leave July'02 - Finance / Business Manager - Balmertown office - replaced by John Parry	<ul style="list-style-type: none"> <li>• General management of Smart Project</li> <li>• Management of financial reports</li> <li>• Direct supervision of Balmertown staff</li> </ul>
Dan Pellerin - Network Manager - Sioux Lookout office	<ul style="list-style-type: none"> <li>• General management of network development and operation</li> <li>• Management of technical staff in KO offices and First Nations</li> </ul>
Les Meekis - Community Manager - Balmertown office	<ul style="list-style-type: none"> <li>• General management of First Nation Smart Team members in each KO First Nation</li> <li>• Coordination of community surveys, training and evaluations</li> </ul>
David Neegan - Business Development & Marketing Manager - Balmertown office	<ul style="list-style-type: none"> <li>• General management of the Business Development and sustainability strategies</li> <li>• Coordination of the promotion and marketing materials and annual conferences</li> </ul>
Margaret Fiddler - KiHS Principal - Sandy Lake FN office	<ul style="list-style-type: none"> <li>• General management of Keewaytinook Internet High School</li> <li>• Program development and supervision</li> </ul>
Orpah McKenzie - Health Director - Balmertown office	<ul style="list-style-type: none"> <li>• General management of health programs and delivery of services including the telehealth work</li> <li>• Program development and supervision</li> </ul>
Peter Campbell - Public Works Manager - Balmertown office	<ul style="list-style-type: none"> <li>• General management of data warehouse and local First Nation infrastructure projects</li> <li>• Project development and supervision duties</li> </ul>
Jesse Fiddler - Multi-Media Coordinator - Thunder Bay office (moving back to Sioux Lookout - June '02)	<ul style="list-style-type: none"> <li>• General management of multi-media web environment</li> <li>• Management of First Nation Multi-media Producers and training support</li> </ul>
Keewaytinook Internet High School Team Members (2001-2002): • Balmertown office (Lynda Kakepetum, Francine McKenzie, Doug Spracklin) • Cat Lake (Jeremy Snihur, Beverly Wesley) • Fort Severn (Gerard Soltesz)	<ul style="list-style-type: none"> <li>• Development and delivery of Grade 9 high school courses during the 2001 - 2002 school year (as of September 2001)</li> <li>• approval to begin delivering Grade 10 starting in September 2002 was received in February 2002</li> <li>• six new First Nations are now establishing KiHS classrooms for September 2002 (Deer Lake, Fort</li> </ul>

<ul style="list-style-type: none"> <li>• Frenchman's Head (Marlene McKay, Andrea Ignace)</li> <li>• Keewaywin (Darrin Potter)</li> <li>• Kejick Bay (Garnet Moore, Carla Bowles, Loretta Quoquot)</li> <li>• North Spirit Lake (Alex Neveroff)</li> <li>• Poplar Hill (Fernando Oliveira)</li> <li>• Slate Falls (Julia Rowe, Lana Bighead)</li> </ul>	<p>Hope, Fort William, Sachigo Lake, Webequie, Weagamow)</p>
<p>Telehealth Team Members:</p> <ul style="list-style-type: none"> <li>• John Rowlandson, Christine Penner-Polle, Donna Williams, Gibbet Stevens, Lilly Sawanas, Doreen Kakepetum, Jordina Skunk, Julie Meekis, Rita Wassaykeesic</li> </ul>	<ul style="list-style-type: none"> <li>• Development and delivery of Keewaytinook Okimakanak Telehealth Initiative</li> </ul>
<p>Deer Lake Smart Team</p> <ul style="list-style-type: none"> <li>• Oscar Meekis, Arlene Meekis, Cory Meekis, Jeremy Sawanas</li> </ul>	<ul style="list-style-type: none"> <li>• Working out of the Deer Lake e-Centre developing and delivery ICT support services</li> </ul>
<p>Fort Severn Smart Team:</p> <ul style="list-style-type: none"> <li>• Madeleine Stoney, Angus Miles, Barney Turtle</li> </ul>	<ul style="list-style-type: none"> <li>• Working out of the Fort Severn e-Centre developing and delivery ICT support services</li> </ul>
<p>Keewaywin Smart Team:</p> <ul style="list-style-type: none"> <li>• Raymond Mason, David McKay, Blue Mason</li> </ul>	<ul style="list-style-type: none"> <li>• Working out of the Keewaywin e-Centre developing and delivery ICT support services</li> </ul>
<p>North Spirit Lake Smart Team:</p> <ul style="list-style-type: none"> <li>• Darlene Rae, Arnold Thompson, Charlisa Fiddler, Dale Jack</li> </ul>	<ul style="list-style-type: none"> <li>• Working out of the North Spirit Lake e-Centre developing and delivery ICT support services</li> </ul>
<p>Poplar Hill Smart Team:</p> <ul style="list-style-type: none"> <li>• Susan Owen, Alice Suggashie, Jim Suggashie, Anita Strang, Gabriel Wassaykeesic</li> </ul>	<ul style="list-style-type: none"> <li>• Working out of the Poplar Hill e-Centre developing and delivery ICT support services</li> </ul>
<p>Portal &amp; Data Warehouse Development:</p> <ul style="list-style-type: none"> <li>• Cal Kenny, Steven Zussino, Robert Hunter</li> </ul>	<ul style="list-style-type: none"> <li>• Developing web pages and on-line database applications</li> </ul>
<p>Technical and Network Development &amp; Support:</p> <ul style="list-style-type: none"> <li>• John Moreau, Adi Linden, Lars Dixon, Margaret Lawson</li> </ul>	<ul style="list-style-type: none"> <li>• Constructing, maintaining and supporting the operation of the network and its ICT components</li> <li>• Addressing an increasing number of requests for technical assistance</li> </ul>
<p>Administration &amp; Financial Support:</p> <ul style="list-style-type: none"> <li>• Wanda Kakepetum, Cheryl Bechard, Michelline Sanna, Brenda Beardy</li> </ul>	<ul style="list-style-type: none"> <li>• Supporting the smart team with secretarial and financial administration</li> </ul>

## **ACCOMPLISHMENTS**

- **Smart Organization** - Keewaytinook Okimakanak is actively integrating smart strategies, tools and services within all aspects of the organization.
- **Smart Team** - Staff members work as a team locally, within projects and within the overall project to ensure success in achieving objectives. Staff consists of people living and working in Northwestern Ontario. A distributed office management model utilizing extensive applications of ICTs is required to support full-time staff in eight different communities (Deer Lake, Fort Severn, Keewaywin, North Spirit Lake, Poplar Hill, Balmertown, Sioux Lookout and Thunder Bay).
- **Smart Infrastructure** - The Kuh-ke-nah Network is a leading edge, Internet Protocol (IP), hybrid, broadband network that connects homes, businesses, organizations, communities and regions utilizing video, voice and data services. The network is using a variety of communication systems including satellite, wireless, fibre optic and cable to carry and maintain this network. The network is scalable to accommodate additional sites and communities. Network staff support an increasing number of requests for technical assistance.
- **Smart Applications** - Applications utilizing the broadband network include the Keewaytinook Internet High School, the Telehealth initiative, the Data Warehouse, the Portal, IP Telephony and the e-Centres, all ensuring ongoing development and growth in the use of the network.
- **Smart Communication** - An open and transparent management and decision-making process utilizing all the on-line communication tools is ensuring local ownership and use of the services. Sharing lessons learned and best practices during presentations and at conferences attracts more interest and developments across other regions and communities.
- **Smart Community Engagement** - Facilitating local planning workshops that produce outcomes and deliverables that are able to be addressed by local Smart Team members and supported by regional Smart Team members creates immediate successes. Ongoing consultation and planning workshops using learned facilitation skills and delivery formats will support a consistent and understood process for evaluation and development of local initiatives.
- **Smart Partnerships** - Working with different businesses, organizations, institutions, corporations and governments to lever and transfer skills and knowledge in a mutually respectable, "two way" environment is building strong relationships and long-term commitments for the communities. Creating win-win situations for everyone working on deliverables ensures ongoing sustainability.



## **POSITIVE IMPACTS OF PROJECT ON FIRST NATIONS**

Raymond Mason (e-Centre Manager, Keewaywin First Nation) wrote on July 30, 2002: "One of the obvious changes in the community is the way the computer is viewed by the people. It doesn't scare anyone anymore. We have kids as young as 7 years old playing the computers games and negotiating the internet to find the games. The young people also find the computer friendlier than before as they get used to operating it when they go on the chat lines, for example. The elders also find the high tech equipment useful as they communicate using the video conference equipment. Communicating with the outside world has taken another step forward as the community discovers the advantages of these high tech tools."

The Keewaytinook Okimakanak First Nations are benefitting from the help, support and planning of "everyone, everywhere" including local and regional partners, government and private sector interests. The K-Net "community" and these ICTs removes the isolation factor experienced by everyone who lives in a remote community. Everyone is able to share their stories and experiences with others and learn from each other.

The list that follows highlights the progress and impacts that has been made. The data shows that the Kuh-ke-nah initiative has been successful in developing working relationships with many partners across a broad spectrum of projects. It has introduced a functional model for integrating the interests and capacities of First Nations in determining their local and regional telecommunications environment.

- **First Nation ICT Related Career Opportunities**

Three new full-time positions (e-Centre Manager, Computer Technician and Multi-Media Producer) are now in place in each First Nation under the Smart Communities initiative. Employees are developing local strategies and work plans to sustain these positions within their community. Additional employment opportunities are also available in each First Nation including the KiHS teacher and classroom assistant, the Telehealth Coordinator and youth employment and training positions.

- **Affordable Network Access**

K-Net's negotiations with Bell Canada are substantially reducing the cost of regional access to broadband services. Access to the Public Benefit C-Band transponder will ensure satellite-served remote communities have equitable and affordable access to broadband services.

- **Growth in Digital Service for First Nations**

In 1998, none of the 52 Nishnawbe Aski Nation (NAN) communities could purchase full access digital broadband services. In July 2000, these services were available in the five Keewaytinook Okimakanak First Nations. By August 2002, 18 NAN First Nations will be connected to the broadband Kuh-ke-nah Network.

- **Local Area (LAN) and Municipal Area Networking (MAN)**

K-Net developed and implemented various ethernet LAN / wireless and cable MAN solutions in Keewaytinook Okimakanak First Nations. The open source cable solution is now being adopted by other First Nations to complete the last mile solution to all the buildings in their community.
- **Network Design and Strategy Development**

K-Net is assisting different First Nation organizations and communities with the development of various technical strategies and more than 20 networking and broadband development proposals. All of these products were submitted for funding consideration and approval resulting in increased connectivity and broadband applications across the region.
- **Capacity Building**

K-Net is managing different regional on-line networking and training programs. In addition, K-Net has provided technology support and training for the institutions and organizations delivering training for First Nations. On-line training tutorials developed by K-Net and specialized skills development programs on an “as-needed” basis are also made available for our partners.
- **Community Access to the Internet and other Broadband services**

Public computer facilities (referred to as e-Centres) where people can access high speed internet services are now also offering additional broadband services including video conferencing.
- **Helpdesk Services**

The K-Net SchoolNet helpdesk service has seen a steady increase in the number of support calls since it began in 1996. The HelpDesk fields about 10 calls per day for technical assistance in both hardware and software applications. Requests for technical assistance is steadily increasing. A Service Level Agreement for the telehealth hardware and network services between K-Net and NORTH Network is being put in place.
- **K-Net e-Mail Account Penetration**

In 1998, there were approximately 1200 active K-Net accounts. The majority of these accounts were users dialing in to check their messages on the K-Net bulletin board system. In October 2000 this number had more than doubled to nearly 3000 active K-Net accounts. In June 2002, this number has increased to over 5,000 accounts.

- **Website Utilization**

In 1998, no NAN First Nations and few First Nations organizations maintained their own web sites. Today, more than a thousand First Nations youth maintain web pages on the K-Net MYKNET.ORG server. Most First Nation communities now have and maintain their own web site. Many First Nations organizations contract K-Net staff to research, host and develop their web sites.

- **On-line Activity**

The K-Net portal is providing a point of regional access for First Nations users. Between September 1999 and October 2000, the number of daily visits almost tripled (growing from 199 to 755). During the same period, the number of monthly hits grew by more than four times. In September 1999, the K-Net website was registering almost 165,000 hits per month. By October 2000, that number had increased to more than 673,000 hits per month. In May 2001, over 1 million hits were recorded on the K-Net web site for the first time in a one month period. Over the past three months (May, June, July 2002) there were over two million hits in each of these months recorded on the K-Net web server.

**PROJECT SUSTAINABILITY**

<b>Operational services / applications</b>	<b>Description of Strategies or Plans in place to ensure Sustainability</b>
Network Development and Maintenance	<ul style="list-style-type: none"> <li>• Continuous growth of the network to include more communities across the region and the country.</li> <li>• Aggregation of network services and bandwidth to support demand on network capacity and share in the cost of the Network Operation Centre (NOC).</li> <li>• Continue to demand equitable and affordable bandwidth, hardware and software charges from the telecom suppliers.</li> <li>• Partner with regional, provincial and national governments and organizations to support the growth of the network and the applications that are available on it.</li> <li>• Work with the staff in each of the First Nations to develop local business expertise and infrastructure to support the use of the network and its continuous growth.</li> <li>• Manage and support the deployment of the Public Benefit C Band Transponder space for satellite served communities across Canada will continue to require additional administration and coordination efforts.</li> </ul>
Keewaytinook Internet High School (KiHS)	<ul style="list-style-type: none"> <li>• Delivery of a full range of on-line high school courses (expansion to include more First Nation classrooms and Grade 10 courses starting in September 2002)</li> <li>• Develop cost effective e-learning tool (open source) to accommodate the specific needs of the Ontario curriculum</li> <li>• Adapt and provide service support for the e-learning tool to accommodate different training / educational environments across the country</li> <li>• Partner with other school districts and regions to identify new training opportunities that can be supported by the First Nation staff across the region</li> <li>• Identify potential projects and partners that will utilize the capacity (human and infrastructure) developed for the delivery of on-line learning opportunities</li> <li>• Continue to support and work with Indian and Northern Affairs Canada to fund the delivery and support for community-based high school education programs such as KiHS</li> </ul>
Internet Based Revenue generating activities to support staff positions	<ul style="list-style-type: none"> <li>• Web Site and Portal Development - producing web sites for businesses and organizations locally and across the region utilizing the team of Multi-media Producers (example: First Nation businesses and organizations - several completed to date)</li> <li>• Web Site and Portal Hosting for different organizations and services (example: Oshki-Pimache-O-Win Education &amp;</li> </ul>

Operational services / applications	Description of Strategies or Plans in place to ensure Sustainability
	<p>Training Institute - <a href="http://oshki.ca">http://oshki.ca</a>)</p> <ul style="list-style-type: none"> <li>• Fundraising activities including government programs for employment and training, youth employment, conferences and gatherings support, etc</li> </ul>
Data Warehouse and Open Source Software Applications Development	<ul style="list-style-type: none"> <li>• Developing and maintaining open source products that can then be adapted to suit organizational and community needs (example: the KiHS e-learning tool created with different modules that can be modified by the client or K-Net Team members; similarly the Turning Point discussion forum can be modified and used by other groups; other items under development include office administration tools, GIS applications, governance / e-democracy tools)</li> <li>• Identifying partners who share both the skills and experience to develop and utilize these tools to demonstrate their potential in other environments (ie. the Headwaters Project in Northern Saskatchewan)</li> <li>• The development of on-line community engagement and planning tools to collect data, track changes and produce work plans in areas of need within our communities but also elsewhere in the world.</li> </ul>
Telehealth Application support and development	<ul style="list-style-type: none"> <li>• Expand the telehealth sites to include all the First Nations in the Sioux Lookout Health Zone (a comprehensive business plan has been submitted to Health Canada for funding and is now being considered under the Primary Care Health Transition Fund - the aboriginal envelope)</li> <li>• Work with the provincial government Integrated Network Project (INP) to ensure Smart Systems for Health (SSH) is able to purchase connectivity services from the Kuh-ke-nah Network</li> <li>• Development of the Centre of Excellence for First Nations Primary Care Health Services and Research in Red Lake will ensure ongoing research and development resources for the operation of these services and projects.</li> </ul>
Help Desk Support and development	<ul style="list-style-type: none"> <li>• Keewaytinook Okimakanak (K-Net Services) has been the First Nations SchoolNet Helpdesk since 1996. In 2001, KO bid on and won the competition for their MERX to deliver helpdesk services across Ontario. We are now in the process of applying to become the Ontario Regional Management Organization that would include administration and delivery of SchoolNet support services for all First Nation schools in Ontario.</li> <li>• Working with NORTH Network, K-Net Services in developing</li> </ul>

<b>Operational services / applications</b>	<b>Description of Strategies or Plans in place to ensure Sustainability</b>
	<p>a Service Level Agreement (SLA) to detail the work being delivered to support the ongoing operation and maintenance of the telehealth network across the region (primarily in First Nations and their service centres across the region).</p> <ul style="list-style-type: none"> <li>• As the IP telephony smart application evolves there are anticipated areas to support organizations and communities in the use of these communication tools.</li> <li>• Accommodate the increasing number of requests for technical support through referrals to technicians in the First Nations.</li> </ul>
<p>Training and Technical Support</p>	<ul style="list-style-type: none"> <li>• Employment and training projects and programs are an ongoing source of revenue for the creation and delivery of appropriate educational applications. The Sioux Lookout Aboriginal Area Management Board and the First Nations across the region recognize K-Net's ability to develop, deliver and support quality employment and training programs for their community members.</li> <li>• The development of the Centre of Expertise for Indigenous Learning Communities under the Office of Learning Technologies' Community Learning Networks OTL / CLN) program will ensure an ongoing presence of program development and support.</li> </ul>
<p>IP Video Conferencing and Telephony</p>	<ul style="list-style-type: none"> <li>• The convergence of video, voice and data over the Kuh-ke-nah Network is a reality today. There are now about 70 IP video conferencing units located in communities, organizations and schools across the region that are connected together over K-Net. Additional units are being installed and are projected (for example, the telehealth business case). IP telephone units are located in all the KO offices. Slate Falls First Nations is now operating their entire administration operation using IP telephony over K-Net. The Keewatinook Okimakanak Sioux Lookout office is converting its phone system to an IP telephone system. It is projected that these IP broadband applications will be quickly embraced by the organizations and communities across the region ensuring the need for ongoing support and development.</li> </ul>

### COMMUNITY ENGAGEMENT

The Kuh-ke-nah Network initiative has a strong history of community ownership (see <http://grandopening.knet.ca/progress.html>). The First Nation leadership directed the development of the network in its early years and continue to assume control of the directions and development being undertaken by their staff. It is understood by all the staff that the tools and benefits involved in the development of ICTs and the different applications, will only be successful if they are locally managed and owned.

The activities listed below began during the development of the original Kuh-ke-nah Business Plan (see <http://smart.knet.ca/archive/confpack.html> and <http://smart.knet.ca/archive/fsworkshop>). These initial planning workshops were so successful that the community engagement model was written into the project.

<b>Activities Undertaken</b>	<b>Actual Input</b>	<b>Influences on Project Direction</b>
Community Planning Workshops	<p>Working in partnership with Telecommons Development Group and coordinated by the Community Manager, week-long planning workshops were facilitated in each of the KO First Nations. Local Smart team members advertised and hosted these gatherings with day long sessions to deal with education, health and economic development. Session outcomes are fully documented on-line at <a href="http://smart.knet.ca/smart2002/conference.html">http://smart.knet.ca/smart2002/conference.html</a></p> <p>Follow up sessions were facilitated by the Community Manager and the local Smart Teams to review work plans and development work with community leadership.</p>	<p>Regular community workshops will now be hosted by Local Smart teams using the format introduced by TDG, to review work completed and determine next steps that meet community needs and priorities.</p> <p>Workshops are used to determine project direction.</p>
Keewaytinook Okimakanak is directed by a board consisting of the First Nation chiefs.	Board reviews plans and receives regular reports on the project progress. All developments require a board resolution.	Ensures the project addresses local needs. Local issues are being appropriately addressed.

Activities Undertaken	Actual Input	Influences on Project Direction
First Nation Smart Team members living and working with local organizations and individuals to introduce ICTs throughout the community.	Local staff members receive requests and take direction from community leadership. Local workshops and training sessions ensure the needs of the community are introduced and appropriately addressed throughout the organization.	Local staff access the required resources to address local needs and ensure the project objectives are being achieved in each community.
Smart Team members from all sectors form planning committees to ensure deliverables are successfully developed and address local needs.	Representatives from the different departments within Keewaytinook Okimakanak form advisory teams with community representatives to determine strategies and development models that are transferable to the First Nations.	Ensures the work is building a "smart" organization that is able to effectively contribute to the development and sustainability of the smart applications in each smart community.
On-line reporting and forums	<ul style="list-style-type: none"> <li>• K-Net News provides community members the opportunity to post updates and news items to be shared in an open forum (<a href="http://knews.knet.ca/search.php">http://knews.knet.ca/search.php</a>)</li> <li>• K-Net photo gallery provides both an open as well as a secure place to post collections of digital photos along with annotations (<a href="http://photos.knet.ca">http://photos.knet.ca</a>)</li> <li>• personal homepages K-Net users (<a href="http://myknet.org">http://myknet.org</a>)</li> <li>• public chat services (<a href="http://chat.knet.ca">http://chat.knet.ca</a>)</li> <li>• private e-mail services (<a href="http://mail.knet.ca">http://mail.knet.ca</a>)</li> <li>• open and closed list serves for various groups (for example: <a href="mailto:working-smart@lists.knet.ca">working-smart@lists.knet.ca</a> for the Smart Team membership)</li> <li>• facilitated discussion forums (for example <a href="http://turning-point.ca">http://turning-point.ca</a>)</li> </ul>	Public able to contribute and participate on-line, sharing ideas and needs in an open and safe environment. Many of these services are monitored by community members who are interested in ensuring a safe on-line environment for their children.



<b>Activities Undertaken</b>	<b>Actual Input</b>	<b>Influences on Project Direction</b>
Development and operation of local e-Centre delivering a variety of services (public internet access, ICT equipment, training, etc)	Residents have access to different ICT tools in small, remote, northern communities in safe and monitored environments where they can share their thoughts and ideas with local community members.	Local smart team members are able to address local needs as they are identified.
Training Workshops	<ul style="list-style-type: none"> <li>• one-on-one training and support in any setting (in the home, office or e-Centre);</li> <li>• group training sessions scheduled by the local Smart Team to address local needs and priorities;</li> <li>• group training sessions for Smart team members to provide skills and sharing of lessons learned.</li> </ul>	Smart team members are able to develop a toolkit of resources and “train-the-trainer” for peer-to-peer sharing and skill development
Regional Conferences	Keewaytinook Okimakanak’s “First Nations Connect Conference” brought together Smart team members to showcase and share our lessons learned and best practices. Other organizations and leaders also were provided the opportunity to share their work and visions. All this information is captured on-line and is being referenced regularly as a resource highlighting successes in the effective use of broadband and ICTs.	Resulting in much more follow up work with other communities and regions. Providing Smart Team members with the opportunity to share their stories and experiences.

## **MAJOR PROMOTIONAL EVENTS (PAST AND UPCOMING)**

### **Publications**

- OECD publication (Information and Communication Technologies and Rural Development, 2001) profiles the ICT work of Keewaytinook Okimakanak - <http://knews.knet.ca/article.php?sid=73>
- Telecommunications Policy 25 (2001) 315-330 by Ricardo Ramirez, "A Model for Rural and Remote Information and Communication Technologies: A Canadian Exploration" - <http://authors.elsevier.com/JournalDetail.html?PubID=30471&Precis=ABS&isso=&volo=&vol=25&iss=5&art=S0308596101000076>
- Harvard research paper by Robin McKinnon, Technology and Indigenous Peoples - Implications for Policy profiles the ICT work of Keewaytinook Okimakanak - <http://knet.ca/documents/Harvard-Research-paper.pdf>
- Telemangement - The Angus Report on Business Telecommunications in Canada - June 2002 story - "K-Net: Bringing Broadband to Northwestern Ontario - First Nation communities wire themselves up" - <http://photos.knet.ca/telemangement>
- Newspaper coverage that we become aware of is captured and archived at <http://photos.knet.ca/kuhkenah11>

### **Presentations**

- Ontario First Nations Technical Services Corporation, Sixth Annual Conference, August 22, 2001
- Emerging Technologies 2001 - "Enhancing Business, Education and Health Care Through Broadband Wireless Technologies", Thunder Bay, Oct 3-5
- Aboriginal Business Canada - Conference of External Delivery Organizations (XDOs), Toronto, Nov 13-15
- Aboriginal Economic Renewal Secretariat Information Technologies Forum, Toronto, Oct 25
- Headwaters Project Learning Technologies Forum, La Ronge, Saskatchewan, Nov 20-22
- Broadband Canada Conference, Ottawa, Dec 2-4
- Information & Communications Technology (ICT) & Nation Rebuilding Roundtable, Atlantic Policy Congress, December 11, 2001 (via video)
- ICT conference hosted by Société de Communication Atkamekw-Montagnais (SOCAM) in Quebec City, Jan 30 to 31
- Health Canada, Ontario Region User Conference (FNHIS), Thunder Bay, March 5 to 6, 2002
- National Connecting Aboriginal Canadians Forum, Ottawa, March 11 to 13
- First Nations Social Development Conference, Assembly of Manitoba Chiefs, Winnipeg, March 12-14, 2002
- Minister Nault meeting with KO Chiefs in Balmertown, March 23 (via video)

### **KO Sponsored Smart Events (past)**

- January 19, 2001: Grand opening the Keewaytinook Internet High School (<http://kihs.knet.ca>) bringing together students and dignitaries - <http://kihs.knet.ca/grandopening>
- July 6, 2001: Launch of the Kuh-ke-nah Smart First Nations Demonstration project with simultaneous celebrations taking place at the local e-centres in each of the Keewaytinook Okimakanak First Nations linked together via video conferencing facilities - <http://grandopening.knet.ca>
- February 11 to 14, 2002: Keewaytinook Okimakanak in partnership with Nishnawbe Aski Nation hosts the First Nations Connect Conference in Thunder Bay showcasing the various ICT developments in the Keewaytinook Okimakanak and identifying strategies to connect all the NAN communities to the broadband network - <http://smart.knet.ca/conference>

#### **KO Sponsored Smart Events (future)**

- April 23, 24, 2002 - meeting of interested parties from across Canada hosted in Winnipeg to develop strategies on the deployment and utilization of the C-Band transponder Public Benefit made available to Keewaytinook Okimakanak - <http://smart.knet.ca/satellite>
- June 16 to 19, 2002 - Industry Canada's First Nations SchoolNet program held their annual Helpdesk meeting in Sioux Lookout with all the Helpdesks represented from across Canada - <http://knews.knet.ca/article.php?sid=261>
- August 22, 2002 - Keewaytinook Okimakanak's Tenth Anniversary celebrations in Balmertown and launch of KO Telehealth project - <http://anniversary.knet.ca>
- October 2002 - Keewaytinook Okimakanak Telehealth Regional conference to demonstrate and support Sioux Lookout Health Zone First Nations to join the network
- Date To Be Determined - Year 2 National First Nations Smart Demonstration Virtual Conference

#### **Upcoming Events / Conferences**

- Smart City Summit Conference, Ottawa, April 23, 2002 (via video)
- E-World 2002: Transforming Saskatchewan's Culture and Communities, Regina, April 25-26, 2002

## BEST PRACTICES AND LESSONS LEARNED

### What Worked Well

Area of Interest	Practice	Reasons why Practice Worked	What Practice Achieved	Reason why Practice was Adopted
<b>Community Engagement</b>	Community planning workshops for the use of ICTs in each community	<ul style="list-style-type: none"> <li>• community centre approach with objective for skills transfer to local staff</li> <li>• working with partners (TDG) who understand the project, its goals and objectives</li> <li>• includes all sectors from the community with an open and well publicized campaign to include everyone</li> <li>• ensures local plans reflects and supports the directions of existing services</li> </ul>	<ul style="list-style-type: none"> <li>• Buy-in to the work being done in each community</li> <li>• local ownership</li> <li>• work plans that reflect local needs and priorities</li> </ul>	<ul style="list-style-type: none"> <li>• local input and planning required to determine local work plans and priorities</li> <li>• all sectors of the community working together to ensure the success of the project</li> <li>• local skill development in workshop facilitation</li> <li>• developing on-line tools to document project progress</li> </ul>
	Board and committee involvement in decision making	<ul style="list-style-type: none"> <li>• Team building at all levels of project</li> <li>• Strong history of respect and cooperation within First Nation environments</li> <li>• Desire by all parties to ensure successful development and operation of the project</li> </ul>	Ongoing roles clarification for everyone to understand the work that is required to be completed	<ul style="list-style-type: none"> <li>• existing management structure that had a strong history of success</li> <li>• distributed working environment requires good lines of communication</li> </ul>
	Modeling Smart organization and smart communities across the region	<ul style="list-style-type: none"> <li>• supportive government programs to ensure others could be included (ie. FedNor)</li> <li>• partnerships that shared both the vision and desire to include other communities</li> </ul>	<ul style="list-style-type: none"> <li>• Recognition from other government programs and services as a viable option</li> <li>• Project leverage to access other resources to sustain these developments</li> </ul>	<ul style="list-style-type: none"> <li>• project sustainability is required to ensure infrastructure and applications are accessible</li> <li>• testing the infrastructure and the applications in other environments to see what works and what needs to be included</li> </ul>
	Transparent communication	<ul style="list-style-type: none"> <li>• supports the team concept of everyone</li> </ul>	steady growth in use of the K-Net	<ul style="list-style-type: none"> <li>• opportunity for identifying better</li> </ul>

<b>Area of Interest</b>	<b>Practice</b>	<b>Reasons why Practice Worked</b>	<b>What Practice Achieved</b>	<b>Reason why Practice was Adopted</b>
	and management of project activities	working together and contributing to the overall project success <ul style="list-style-type: none"> <li>• provides an open environment for sharing ideas and practices among the team to identify better ways of doing business</li> </ul>	portal as demonstrated in the increasing number of hits and content.	ways of doing business from anyone who cares to contribute constructive suggestions <ul style="list-style-type: none"> <li>• traditional way of doing business with the organization</li> </ul>
<b>Smart Services/ Applications</b>	Keewaytinook Internet High School	<ul style="list-style-type: none"> <li>• families want to find ways to have their children stay home and still obtain a quality education experience</li> <li>• First Nation schools have a difficult time obtaining funding, staff and resources required to provide a quality secondary school program</li> <li>• provides new education opportunities in isolated northern communities</li> <li>• cooperative environment with the sharing of teachers and exchanges between students</li> <li>• provides employment and economic opportunities for First Nations</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in number of First Nations setting up KiHS classrooms</li> <li>• Students accessing classes from small communities</li> <li>• Grade 9 graduates now being able to take Grade 10 courses starting in September 2002</li> </ul>	<ul style="list-style-type: none"> <li>• demand for equitable and quality educational for First Nation students in their own communities</li> <li>• need for teachers in the First Nations who are can share their areas of expertise instead of having to be qualified in all the different secondary school courses</li> </ul>
	First Nation Telehealth initiative	<ul style="list-style-type: none"> <li>• long history of development with a number of different partners</li> <li>• strong community consultations and demonstrations with follow up program evaluation</li> <li>• medical staff commitment to developing more appropriate ways of delivering health</li> </ul>	<ul style="list-style-type: none"> <li>• improved access to medical services in the KO First Nations</li> <li>• local employment and training</li> <li>• support for expansion of service into other First Nations across the region</li> <li>• local investment in facilities,</li> </ul>	<ul style="list-style-type: none"> <li>• lack of access to medical services in general</li> <li>• high turnover of staff and professionals due to isolation and lack of resources</li> <li>• identification and ownership of the system and services being developed and delivered</li> </ul>

<b>Area of Interest</b>	<b>Practice</b>	<b>Reasons why Practice Worked</b>	<b>What Practice Achieved</b>	<b>Reason why Practice was Adopted</b>
		<p>services</p> <ul style="list-style-type: none"> <li>• national interest in improving health care delivery services and the need to change</li> </ul>	<p>equipment and connectivity</p>	
	Data Warehouse Applications	<ul style="list-style-type: none"> <li>• ease of use of the new application tools being introduced</li> <li>• easy access to the proper hardware and software</li> <li>• sufficient financial and human resource available to ensure support and access in place</li> </ul>	<ul style="list-style-type: none"> <li>• over 300 photo albums archived</li> <li>• over 300 news stories archived</li> <li>• application to digital collection programs by local staff to further develop content</li> <li>• new open source software applications (KiHS)</li> </ul>	<ul style="list-style-type: none"> <li>• distributed office environment required the creation of on-line tools to support reporting of activities</li> <li>• practical application for the increased use of the network</li> </ul>
	Web Portal development	<ul style="list-style-type: none"> <li>• simple and attractive presentation</li> <li>• scalable to include additional fields and web sites</li> <li>• low cost for development and maintenance</li> <li>• produced by young First Nation artists who understand the needs of the users</li> </ul>	<ul style="list-style-type: none"> <li>• constant growth in the number of web pages and the users of the portal</li> <li>• employment and training opportunities for local youth</li> <li>• increasing interest in working in multi-media production</li> </ul>	<ul style="list-style-type: none"> <li>• on-line presence required for users to access resources in a safe and monitored environment</li> <li>• employment and training opportunities in this field</li> <li>• gifted artists and craftspeople who can utilize existing skills in the production of on-line resources &amp; content</li> </ul>
	IP telephony and video conferencing	<ul style="list-style-type: none"> <li>• convergence of video, voice and data on the network is a practical use of resources for small communities looking for ways to develop local economic and employment opportunities</li> <li>• high cost of paying corporate sector to develop, maintain and support local infrastructure with all</li> </ul>	<ul style="list-style-type: none"> <li>• video conferencing is quickly becoming a comfortable way of meeting with others instead of travel</li> <li>• communities and organizations are installing IP telephone units</li> </ul>	<ul style="list-style-type: none"> <li>• high costs involved in alternative and traditional ways of doing business</li> <li>• First Nation people appreciate visual contact and exchanges with others</li> <li>• removes the feeling of isolation and lack of access to resources and support</li> </ul>

Area of Interest	Practice	Reasons why Practice Worked	What Practice Achieved	Reason why Practice was Adopted
		financial resources leaving the community • pricing for these tools are now comparable to traditional means of doing business		
<b>Network Infrastructure</b>	Local e-Centres and the community's broadband POP	• local ownership of facilities • public access to facilities, hardware and software in a safe and secure environment is required especially for young people • funding opportunities to develop local economic development businesses and services	• increased use of e-Centres in each First Nation • an environment for anyone in the community to schedule activities and sessions that require the use of ICT tools • a local Point-of-Presence (POP) for the high speed community connection • office space available for local Smart team workers	• local public access facilities are in great demand in all First Nations and when they become available they quickly get utilized to their full potential • the local POP requires a centralized location for the local cable infrastructure
	Broadband Infrastructure	• network services are becoming an affordable option to traditional ways of doing business • access to on-line resources are much more critical in remote First Nations • economic opportunities that become available with adequate broadband infrastructure in place	• local ownership of the community network • development of local business to sell services and connectivity • opportunity to explore other economic ventures and form new partnerships	• remote First Nations requiring equitable and affordable infrastructure to access resources available in other centres • desire to improve economic, social, health and education opportunities locally
	Community Aggregation Model	• ensures access to infrastructure for all community users, programs and services • cooperative environment for network access demands the highest level of support and maintenance to	• secure network model carrying video, voice and data for a number of different users • protection of local jobs and resources by insisting that all	• sustainability of the network depends on a cooperative business model for network operation and maintenance • common understanding that the network will only

<b>Area of Interest</b>	<b>Practice</b>	<b>Reasons why Practice Worked</b>	<b>What Practice Achieved</b>	<b>Reason why Practice was Adopted</b>
		ensure everyone is able to continue to contribute to the ongoing operation of the network <ul style="list-style-type: none"> <li>• sustainable network model for small, remote First Nations</li> </ul>	agencies and services use the community network	be affordable for individuals if everyone is working together to contribute to its ongoing operation, maintenance and development
<b>Organization</b>	Keewaytinook Okimakanak - a smart organization	<ul style="list-style-type: none"> <li>• Leadership recognized the need for new opportunities for First Nations</li> <li>• Management team consists of skilled individuals from a variety of backgrounds each respecting the strengths of the others</li> <li>• all sectors of the organization willing to identify areas to utilize ICTs to improve their services and support for the First Nations</li> </ul>	<ul style="list-style-type: none"> <li>• ICTs integrated and utilized in all program areas of the organization improving internal and external communication systems</li> <li>• new applications and services using ICTs are being introduced to better serve the First Nations</li> </ul>	<ul style="list-style-type: none"> <li>• access to the resources, hardware and software to improve the use of ICTs in all sectors</li> <li>• management support for the use of ICTs</li> </ul>
<b>Performance Measurement</b>	Annual Household and Business / Organization Surveys	<ul style="list-style-type: none"> <li>• design of survey tools involved all levels of organization (facilitated by TDG)</li> <li>• gradual transfer of skills so all levels of surveys become locally owned, administered and interpreted</li> <li>• information being collected has multiple applications</li> </ul>	<ul style="list-style-type: none"> <li>• two years of data collected with the third round being a collected this summer</li> <li>• local skills in administering and utilizing the data collected</li> <li>• opportunity to identify new local needs</li> </ul>	<ul style="list-style-type: none"> <li>• requirement of program to measure impact of ICTs on community</li> <li>• desire to see the changes over time as ICTs relate to other important community issues (language, lifestyles, education, health, etc)</li> </ul>
	Work plans based on identified needs	<ul style="list-style-type: none"> <li>• community ICT planning workshops provided the information required to develop work plans for local Smart team members</li> <li>• community leadership in the different areas involved in providing direction to the project</li> </ul>	<ul style="list-style-type: none"> <li>• set of clearly laid out tasks for each local Smart team member to use as their work to be completed</li> <li>• methods to monitor local progress and identify local training needs</li> </ul>	<ul style="list-style-type: none"> <li>• developing local skills and resources recognized as a priority</li> <li>• planning workshops and the development of the work plans clarified local expectations and requirements for everyone</li> </ul>
<b>Sustainability</b>	Network Expansion	<ul style="list-style-type: none"> <li>• other organizations and First Nations</li> </ul>	<ul style="list-style-type: none"> <li>• from five First Nations with</li> </ul>	<ul style="list-style-type: none"> <li>• remote First Nations require</li> </ul>



Area of Interest	Practice	Reasons why Practice Worked	What Practice Achieved	Reason why Practice was Adopted
		recognize the opportunities and increase level of service that the network brings <ul style="list-style-type: none"> <li>• funding programs and government priorities are in-line with availability of service</li> <li>• partnerships at all levels ensures successful construction, and operation of local infrastructure</li> </ul>	broadband access to 18 by September 2002 <ul style="list-style-type: none"> <li>• additional support services and increased capacity from other organizations and communities</li> <li>• distributed help desk service development</li> </ul>	access to both the infrastructure and the resulting applications for their well-being <ul style="list-style-type: none"> <li>• governments' move to on-line delivery of services makes broadband connectivity a priority across the region</li> </ul>
	Locally owned and managed Broadband Applications addressing local needs	<ul style="list-style-type: none"> <li>• identified need by the community to support the introduction of the different applications</li> <li>• extensive community consultations about the application</li> <li>• piloting the application in controlled environments to ensure implementation success</li> </ul>	Each KO First Nations has ... <ul style="list-style-type: none"> <li>• KiHS classrooms introduced</li> <li>• Telehealth services available</li> <li>• Local cable infrastructure providing high speed connectivity to every building</li> </ul>	<ul style="list-style-type: none"> <li>• improved access to services required in all remote First Nations</li> <li>• community members indicated their support for these services</li> <li>• spin-off economic and employment opportunities</li> </ul>
<b>Communications</b>	Presentations	<ul style="list-style-type: none"> <li>• increasing number of Smart Team members are now comfortable in delivering information to groups</li> <li>• other groups working in similar environments wish to learn from KO's experience</li> <li>• success within our environment generates success elsewhere</li> </ul>	<ul style="list-style-type: none"> <li>• Local, regional, provincial, national and international recognition for the work completed</li> <li>• support to continue the work in other locations creating more employment opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• sharing lessons learned and best practices support others to develop similar (or better) environments that we can learn from</li> </ul>
	Conferences, meetings and celebrations	<ul style="list-style-type: none"> <li>• another method of bringing groups together to learn from each other and share information</li> <li>• networking in these environments creates new opportunities for partnerships and growth of network and</li> </ul>	<ul style="list-style-type: none"> <li>• lots of publicity from many different sectors</li> <li>• new partnerships and opportunities for Smart team members and the organization</li> </ul>	<ul style="list-style-type: none"> <li>• sharing lessons learned and best practices within these environments is a familiar tool for most First Nations</li> <li>• availability to demonstrate the tools, their uses and to hear from the</li> </ul>

<b>Area of Interest</b>	<b>Practice</b>	<b>Reasons why Practice Worked</b>	<b>What Practice Achieved</b>	<b>Reason why Practice was Adopted</b>
		applications • formal and informal networking provides all the staff and communities to showcase their successes		users and leadership is important • transferring presentation and communication skills within these environments is an important component of the project

**BEST PRACTICES AND LESSONS LEARNED-Continued**

**What Did Not Work Well**

<b>Area of Interest</b>	<b>Practice</b>	<b>Important Lessons Learned</b>	<b>What We Would Do Differently</b>
<b>Community Engagement</b>	Local untrained youth workers administering the surveys	Person collecting and entering the information onto the survey tool must clearly understand all the different parts so they are able to translate it to anyone who is not clear about the question or the information being collected.	<ul style="list-style-type: none"> <li>• Provide sufficient training for everyone who is responsible for administering the survey.</li> <li>• Ensure the person responsible for the survey in each community completes some quality assurances of the information collected</li> <li>• Avoid having summer youth staff administer the survey</li> </ul>
<b>Smart Services/ Applications</b>	Caching Router Project	Improved connectivity opportunities and technologies changes reduce the need for the caching router in most of the First Nations across our region thus reducing the potential for its production as a revenue generation source.	<ul style="list-style-type: none"> <li>• Marketing the concept and the support services associated with the concept provide more opportunities for sustained revenue generation (ie. the open source concept)</li> </ul>
<b>Network Infrastructure</b>	Time lines for construction projects	There are so many different variables outside of our control to accurately project an exact project completion times.	<ul style="list-style-type: none"> <li>• Consult with other groups who have completed similar construction work and then add in some extra time to avoid any disappointments (especially with the weather conditions in the far north)</li> <li>• ensure both the funding agency and the end user understand and are kept informed about all delays</li> </ul>
<b>Organization</b>	Staff Performance Evaluations	These are an important and useful tool for supporting all staff members in the performance of their jobs.	<ul style="list-style-type: none"> <li>• Develop easy to access (on-line) tools that will support both the employee and the employer to complete and generate a plan of action</li> <li>• Ensure there is a personnel officer</li> </ul>

Area of Interest	Practice	Important Lessons Learned	What We Would Do Differently
			responsible for getting performance reviews completed in a scheduled and timely manner <ul style="list-style-type: none"> <li>• Ensure there is support for everyone to access this tool as a means of improving their position within the organization</li> </ul>
<b>Performance Measurement</b>	Objective versus subjective measurements	The amount of time required to produce reports, collect the appropriate information, manage the measurement tools, etc, can consume one's entire work, leaving very little time for producing the deliverables required to ensure project success.	<ul style="list-style-type: none"> <li>• Identifying strategies that will support all members of the team to be involved in producing reports, collecting and monitoring data.</li> <li>• Build in sufficient staffing or consultant support for them to be able to carefully monitor the ongoing progress of the project.</li> <li>• Get the government agents to collect their own subjective data by insisting they have regular visits to the project to actively participate in its progress.</li> </ul>
<b>Sustainability</b>	Traditional "business models" for telecom development in rural and remote communities	Building "sustainability strategies" based on traditional business models involving revenue and expenses is not possible if rural and remote regions want to control their own networks.	<ul style="list-style-type: none"> <li>• Ensure local control of entire network including the end devices.</li> <li>• Partner with firms and organizations that share a vision of local community ownership and avoid dependencies on hardware and software solutions.</li> <li>• Lobby government agencies to ensure they deliver their services using the community network.</li> </ul>
<b>Communications</b>	Newsletter production and maintenance	Useful and important newsletters and other publications take a lot of time and resources to produce and distribute.	<ul style="list-style-type: none"> <li>• Determine the best way to reach your target audience and avoid committing to producing material that is not useful.</li> </ul>

**FUTURE STRATEGIC DIRECTION**

**Overall Implementation of Project (Has it developed as expected)**

The project is developing as anticipated except in the areas noted. Target dates for all the deliverables are either on schedule or being surpassed due to new opportunities and partnerships that are being levered by the original project work.

**Anticipated Changes in Strategic Direction Needed in the Coming Year**

Our strategic direction will continue on with the expansion of the network and the applications to include many more partner First Nations and organizations.

The project plan moves most of the remaining network hardware and software acquisitions budgeted for third year into the second year to accommodate our different funding partners. With this investment to accommodate the expanded use of the network will come the need to identify additional staff who can support the network operations and the call centre applications (helpdesks for First Nation Schools and the Telehealth Network, in particular).

The development of the Public Benefit C-Band Transponder space promises to bring additional partners into the network.

The Year 2 “virtual” conference is now being coordinated by the team of First Nation Help Desks. Local infrastructure developments are required across the country to accommodate regional gatherings that can then utilize different ICT tools for networking all the groups and different parts of the country together.

New partners are being identified to develop additional Native Language and Culture content using a variety of multi-media formats. In particular, the Ojibway Cree Cultural Centre and Wawatay Native Communications Society have been approached to work on archiving their print, audio and video materials in an appropriate digital format so this information becomes accessible on-line. Applications are being prepared to Heritage Canada to support the development of these resources and expand the capacity of these organizations to develop and deliver these on-line services.

The Keewatinook Internet High School is expanding to include 13 First Nations across Northwestern Ontario. A full selection of Grade 9 and 10 courses is being made available for participating students. We are continuing to offer support and training for teachers and local classroom assistants in developing the skills to support on-line learners at the secondary school level.

The Keewatinook Okimakanak Telehealth Initiative promises to bring more work and resources into the First Nations across Northwestern Ontario. We are optimistic that Health Canada will support the expansion of these services and the utilization of the Kuh-ke-nah Network to carry these services in all the First Nations across the

Sioux Lookout Health Zone. This work will require additional First Nations to obtain the funding required to develop their local infrastructure and establish the services to support telehealth services.

The development of the IP telephony and IP video bridging service is being supported through our partnerships in several initiatives with FedNor and the different regional broadband projects. The Sioux Lookout Fibre Optic loop that is now being constructed is attracting more interest from the corporate sector to address their connectivity needs. Each of these initiatives will be requiring more attention and resources.

Further expansion of the network to include all of the Nishnawbe Aski Nation with new partners, communities and projects will begin to provide contract work for those First Nation Smart Team members who are positioned to take on these challenges. Adding more First Nations across the region and beginning to identify strategies to complete "the last mile" in these communities will bring additional work to the Smart team.

The pending program announcement to develop broadband connectivity solutions in rural and remote communities across Canada in the 2002 - 2003 fiscal year (the prime minister's statement on June 20) will also bring more work for the Smart team.

## **SUCCESS STORIES**

- January 2001: Grand opening the Keewatinoook Internet High School (<http://kihs.knet.ca>) brought together students and dignitaries - <http://kihs.knet.ca/grandopening>
- March 2001: Support for the development of broadband ICT infrastructure in the five Keewatinoook Okimakanak First Nations is announced by Northern Ontario Heritage Fund Corporation (NOHFC) - [http://www.mndm.gov.on.ca/MNDM/pub/newrel/nr01/023\\_01e.asp](http://www.mndm.gov.on.ca/MNDM/pub/newrel/nr01/023_01e.asp)
- March 2001: Telehealth services in Northern Ontario are expanded under the NORTH Network \$17 million project that includes \$1.2 million for Keewatinoook Okimakanak First Nations to develop telehealth services in the local health centres is announced by Health Canada, FedNor and other partners [http://www.hc-sc.gc.ca/english/media/releases/2001/2001\\_27e.htm](http://www.hc-sc.gc.ca/english/media/releases/2001/2001_27e.htm)
- April 2001: Contract signed with Industry Canada with Smart Communities Program committing \$4.6 million and FedNor committing \$970,000 over three years to develop the Kuh-ke-nah Smart First Nations Demonstration project - [http://smartcommunities.ic.gc.ca/demoprojects/demo\\_aboriginal\\_e.asp](http://smartcommunities.ic.gc.ca/demoprojects/demo_aboriginal_e.asp)
- April 2001: Developing the ICT opportunities under the smart demonstration project is supported by INAC contribution towards completion of the project.
- May 2001: Keewatinoook Okimakanak's original portal (<http://knet.on.ca>) surpasses one million hits in one month - [http://tech.knet.on.ca/~tech/monitoring/webalizer/linux/usage\\_200105.html](http://tech.knet.on.ca/~tech/monitoring/webalizer/linux/usage_200105.html)
- July 2001: Launch of the Kuh-ke-nah Smart First Nations Demonstration project with simultaneous celebrations taking place at the local e-centres in each of the Keewatinoook Okimakanak First Nations linked together via video conferencing facilities - <http://grandopening.knet.ca>
- August 2001: Establishment of the "Centre of Expertise for Indigenous Learning Communities" is supported by the Office of Learning Technologies (HRDC) as a component of the Smart First Nations Demonstration project [http://olt-bta.hrhc-drhc.gc.ca/projects/active/CLN/99244sum\\_e.html](http://olt-bta.hrhc-drhc.gc.ca/projects/active/CLN/99244sum_e.html)
- September 2001: KiHS begins its second year of operation expanding from 3 First Nation classrooms to 8 classrooms across Northwestern Ontario offering a full selection of Grade 9 courses using the WebCT e-learning tool - <http://kihs.knet.ca/classrooms.html>

- September 2001: Delivery of an on-line 15 week District wide employment and training program for First Nation Broadband Technicians involving fifteen participants, each working in their home community is supported by the Sioux Lookout Aboriginal Area Management Board (SLAAMB) - <http://knet.ca/manhat-bin/doorstep?class=broadband>
- October 2001: Poplar Hill First Nation celebrates the opening of their new Business Centre that contains their local e-Centre  
<http://photos.knet.ca/PH-BusinessCentre>
- November 2001: Smart Team members begin participating in Community Engagement Workshops in partnership with Telecommons Development Group in each of the Keewaytinook Okimakanak First Nations to identify community ICT priorities and development strategies  
<http://smart.knet.ca/smart2002/conference.html>
- January 2002: Keewaytinook Okimakanak becomes the Helpdesk for First Nation schools across Ontario - <http://www.schoolnet.ca/aboriginal/helpdesk-e.html>
- January 2002: Keewaytinook Okimakanak becomes Industry Canada's agent to support the utilization of the public benefit C-Band transponder space provided by Telesat Canada -  
<http://smart.knet.ca/conference/handouts/knet-telesat.pdf>
- February 2002: Construction of the local cable infrastructure in each Keewaytinook Okimakanak First Nation is now complete, providing high speed connections to every building in each KO community - <http://photos.knet.ca/album23>
- February 2002: Keewaytinook Okimakanak in partnership with Nishnawbe Aski Nation hosts the First Nations Connect Conference in Thunder Bay showcasing the ICT developments in the Keewaytinook Okimakanak communities and identifying strategies to connect all the NAN communities to the broadband network - <http://smart.knet.ca/conference>
- February 2002: FedNor funds several broadband connectivity projects with First Nations and their organizations working in partnership with K-Net to get onto the Kuh-ke-nah Network including:
  - \* Windigo First Nations Council (connecting Bearskin Lake, Cat Lake, Sachigo Lake and Weagamow),
  - \* Shibogama First Nations Council (Kasabonika Lake, Kingfisher Lake, Wapekeka and Wunnumin Lake)
  - \* Fort Hope, Sandy Lake and Webequie
  - \* Nishnawbe Aski Nation broadband telecommunications initiative
  - \* Ontario First Nations Technical Services Corporation video conferencing



initiative to connect all the Tribal Councils across Northern Ontario

- February 2002: FedNor financially supports Keewatinook Okimakanak to construct a local fibre optic loop connecting First Nation organizations to K-Net to expand services for the remote First Nations in Northwestern Ontario - <http://knet.ca/documents/bulletin-article.doc>
- February 2002: With the support of a Trillium Foundation grant, Keewatinook Okimakanak is further developing the Turning Point web site - <http://www.turning-point.ca/> -  
“Turning Point offers cyber-space for Aboriginal and non-Aboriginal people in Canada to have open and direct communication with each other. With your support, this site can be a dynamic and respectful meeting place for First Nations, Metis, Inuit and diverse non-Aboriginal peoples -- a turning point from which we can look back and move ahead, in a spirit of mutual respect and cooperation.”
- March 2002: Keewatinook Okimakanak Health Team announces the official start of the telehealth network readiness for the provision of secure medical applications in the KO First Nations - <http://knews.knet.ca/article.php?sid=199> and <http://knews.knet.ca/article.php?sid=183>
- March 2002: Computers-for-school project delivers 400 computers for distribution to Keewatinook Okimakanak First Nation schools and homes - <http://photos.knet.ca/Computers-In-The-Schools>

**ADDITIONAL SUCCESS STORIES  
TO THE DATE OF PUBLICATION OF THIS REPORT**

- April 2002: Meeting of partners in the use of the C-Band transponder public benefit hosted by Keewaytinook Okimakanak in Winnipeg in partnership with the Manitoba Telehealth at the Health Sciences Centre with meeting information and ongoing exchanges made available - <http://smart.knet.ca/satellite>
- May 2002: Sioux Lookout Aboriginal Area Management Board (SLAAMB) approves funding for a second on-line 15 week District wide employment and training program for First Nation Broadband Community Network Technicians involving fifteen participants, each working in their home community to start in September.
- May 2002: the K-Net web portal (<http://knet.ca>) had over two million hits in each of the months of May, June and July. Other K-Net servers hosting the K-Net mail, K-Net personal homepages, K-Net web hosting service are also experiencing growth in usage - <http://tech.knet.on.ca/~tech/monitoring/webalizer>
- June 2002: Keewaytinook Okimakanak Health and K-Net staff successfully demonstrates and prepares the business case for a regional telehealth service across the Sioux Lookout Health Zone for Health Canada's First Nations and Inuit Branch Executive Committee - <http://knews.knet.ca/article.php?sid=244>
- June 2002: Keewaytinook Okimakanak staff participate in two of Canada's Innovation Strategy summits - <http://knews.knet.ca/article.php?sid=248>
- June 2002: Keewaytinook Internet High School celebrates its second successful year of operation - <http://kihs.knet.ca/awards.html>
- July 2002: K-Net successfully "test drives" its new open source e-learning tool with a three week orientation workshop for 20 members of the Keewaytinook Internet High School team who will be delivering Grade 9 and 10 courses in thirteen First Nation classrooms starting in September - <http://kihs.knet.ca>
- July 2002: Kuh-ke-nah Network (K-Net) Success Stories on Industry Canada's Broadband-Smart Communities web site  
<http://knews.knet.ca/article.php?sid=272>