Irish Loop E-Technology Needs Assessment

Local Governments and Not for-Profit Organisations

Final Report

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For the Irish Loop Development Board

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1.0   Introduction

In the Fall of 2008, the Irish Loop Development Board (ILDB) commissioned Connections Research of Bauline (Conception Bay) to undertake a Needs Assessment and Economic Benefits Analysis of the use of e-technology by local governments and not for-profit organisations (NPOs) in the Irish Loop region (Zone 20)[1]. The Study's Terms of Reference (TOR) can be found in Appendix 1.

The ILDB has led the development of the Irish Loop Innovation Strategy to promote innovation in groups, organisations and communities utilising technology adaptation and high-speed Internet access. Important components in the Strategy are local governments and not for-profit organisations wishing to utilise e-technology to:
- ❖ enhance their operations,
- ❖ improve their competitiveness,
- ❖ feature community strengths, and
- ❖ market goods and services to local, provincial, national and international audiences.

The assignment required the Consultant to:
- ❖ assess the projected needs for technology and website development in 15 Local Governments and 15 NPOs in the Zone,

- ❖ analyse the benefits of investing in e-technologies in relation to business development, investment, sustainability and engagement,

- ❖ provide a notional costing on fulfilling the e-technology needs identified along with an analysis of the cost of collective versus individual approaches in addressing these needs,

- ❖ prepare individual community and organisation summary reports, and
- ❖ develop a business case to support e-technology investments.

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[1]   The province of Newfoundland and Labrador is divided into 20 Regional Economic Development Zones. Each of these Zones is represented by a Regional Economic Development Board whose job it is to facilitate the creation of economic opportunities in its Zone. The Irish Loop Zone encompasses the area of the southern Avalon which begins 25 kilometres south of St. John's at Bay Bulls, and continues for 180 kilometres to the community of Riverhead, St. Mary's Bay.

1 Municipalities & Organisations

For this Study, 15 municipalities and 15 NPOs in the Irish Loop were selected (see Appendix 2).

Municipalities

Participating municipalities were the 15 incorporated municipalitys around the Irish Loop (no local service districts participated):

- ❖ 11 municipalities comprising the Southern Shore Joint Council, and
- ❖ 4 municipalities comprising the St. Mary's Bay Joint Council.

Southern Shore Joint Council	**St. Mary's Bay Joint Council**
Aquaforte	Gaskiers – Point La Haye
Bay Bulls	Riverhead
Cape Broyle	St. Mary's
Fermeuse	St. Vincent's – St. Stephen's – Peter's River
Ferryland	
Port Kirwin	
Portugal Cove South	
Renews-Cappahayden	
St. Shott's	
Trepassey	
Witless Bay	

Not for-Profit Organisations

An advertisement calling for Expressions of Interest (EoI) by NPOs in the Irish Loop was carried in local papers. (see Appendix 3).

Participating not for-profit organisations (there are no "for-profit" businesses included) fall into three groups:

- ❖ agencies established to promote tourism and / or conservation activities – representing the majority of participating organisations,

- ❖ groups providing community services, such as to various segments of the population or within selected districts, and

- ❖ organisations with a broad business or developmental mandate.

Tourism / Conservation NPOs

Cape Race-Portugal Cove South Heritage Inc.
Colony of Avalon Foundation
Fisherman's Museum Committee
Holyrood Pond Development Inc.
Renews River Conservation Society
Southern Shore Folk Arts Council
Southern Avalon Tourism Association

NPOs Providing Community Services

Bay Bulls-Bauline Athletic Association
Community Youth Network, South East Avalon (Bay Bulls-Cappahayden)
Father Val Power Centre
Irish Loop 50+ Association
Witless Bay CAP Site

Business / Development NPOs
Irish Loop Chamber of Commerce
Irish Loop Development Board
Southern Avalon Development Association

1.2   Methodology

Because of innate differences between municipal councils and NPOs, the two groups were approached differently. Whereas there may be some elements of e-technology use that transcend both municipalities and organisations, generally we would expect most comparisons to be made within the two sample groups rather than across them.

Calls for Expressions of Interest were placed in newspapers for organisations to participate in the Study. Responding NPOs were asked to fill in an information sheet providing basic details of the organisation (see Appendix 4). NPOs were invited to a morning briefing workshop at the Bay Bulls Town Office (although at that time, not all organisations had been selected). Participants discussed the Study, and they outlined their e-technology needs and constraints. A more detailed questionnaire was circulated (see Appendix 5) which solicited rudimentary information on each organisation's e-technology resources and usage.

Once the final selection had been made on NPOs' involvement, an introductory letter and the questionnaire (distributed at the Bay Bulls session) were sent to each group by Connections Research through the ILDB. Although some organisations did not complete the questionnaire, participating organisations were contacted by telephone (at least once) to work through various e-technology issues.

Similar letters and questionnaires were sent to the 15 municipalities, but several municipalities did not return completed questionnaire forms. Personal representations were subsequently made to the municipal sector by Connections Research via meetings of the two regional Joint Councils – the St. Mary's Bay Joint Council (held in Riverhead) and the Southern Shore Joint Council (held in Renews-Cappahayden). At those meetings, it was determined it would be more beneficial for the Consultant to talk to Council staff – Town Clerks, Managers and Administrators – considering Mayors, Deputy Mayors and Councillors do not normally utilise municipal e-technology resources. Telephone interviews were then held with municipal staff – except for one municipality where the Mayor, rather than the Town Clerk, was the point of contact.

The results of the basic questionnaire and the more detailed, largely qualitative interviews were recorded and tabulated. Aggregated findings are reported in this document whereas individual results are contained in summary documents prepared for and provided to each municipality and organisation.

1.3   E-Technology

We have taken a very broad interpretation of e-technology to include all "electronic" resources and equipment for such uses as communications, office administration, word processing, financial recording, marketing, promotions and publicity, data management, and so on. For this study, therefore, e-technology comprises:

Office equipment
- ❖ telephones and other communication systems:
  - ○ hands free conference calling
  - ○ pagers and blackberries
  - ○ cell phone technology, including texting and photography
- ❖ fax machines
- ❖ copiers

Computerised systems
- ❖ hardware – tower / laptops, monitors, printers, scanners, webcams
- ❖ wireless (LAN) connections, routers
- ❖ Internet connections – dial up, broadband
- ❖ accounting, financial management, tax / payment recording

Applications for
- ❖ word processing
- ❖ spread sheets, data collection and display – Microsoft Excel and Access
- ❖ pdf document readers, composers, modifiers
- ❖ project planning, logistics
- ❖ engineering systems, architecture, landscape planning, graphic design
- ❖ archives, document / data storage
- ❖ entertainment – video , audio, animation

E-technology applications
- ❖ website
- ❖ interactive electronic marketing systems
- ❖ global mail-outs – notices, product information, ad distribution
- ❖ automatic payment capabilities – Paypal, Visa, etc.
- ❖ electronic banking connections

Audio and visual conferencing
- ❖ MSN and other Internet-based group conversation systems
- ❖ Skype and other Internet-based group video-conferencing
- ❖ video-conferencing

Training and Human Resource Development
- ❖ skills development, distance education
- ❖ workshops, seminars, courses, webinars
- ❖ region-wide training

2.0 The Context

In 1998, the region's Strategic Economic Plan Creating a Vision for the Irish Loop identified the provision of high speed Internet access as a development priority. In March 1999, community and regional stakeholders endorsed the Irish Loop Communications Infrastructure Accord that committed partners to work towards enhanced communications infrastructure within the region. Aliant began the process in 2000 of upgrading its current system in the Irish Loop from analog to digital and commenced installing a dark fibre network throughout the region.

2.1 Community Access Points

Under the auspices of Industry Canada and the provincial Department of Education, a series of Community Access (CAP) sites were established at Riverhead, Trepassey, Ferryland, Witless Bay and Bay Bulls. For a time, supports were provided to the Board to facilitate activities at these locations, again in partnership with government. Additional connectivity was provided at Trepassey and Ferryland through the Canada-Newfoundland and Labrador Business Service Centre. While these efforts provided a certain level of public access to the Internet, the region was still hampered by a reliance on dial-up technology both at these locations, in business and in homes.

2.2 E-Merge

In 2000, the region partnered with other REDBs on the Avalon and Operation On-line to carry out an e-commerce initiative known as e-Merge. This effort provided connectivity to ten businesses in the region and over 30 on the Avalon – although applications were limited primarily to web page development. None of those participating developed a capacity for e-business transactions, in part due to the limited skills of staff and the level of connectivity available. In 2003, following a positive evaluation and review of the project, an additional phase of development was identified which recommended the establishment of regional hubs for the development and delivery of e-commerce applications. The ILDB deferred on moving forward with this initiative while it addressed the issue of broader connectivity and determined the needs of business within the Irish Loop[2].

2.3 BRAND Programme

In September 2002, the Board initiated an analysis of the potential for high speed Internet access in the Avalon in partnership with other REDBs in the area. The recommendation was to focus on the Irish Loop region as an Avalon-wide project was

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[2] For background information see "The Southern Shore, An Economy in Transition". Atlantic Canada Opportunities Agency, May 2002

deemed too expensive. Concurrent with this recommendation, Industry Canada announced the BRAND programme and an application was made to support the preparation of a Business Plan.

In December 2002, the Board received support for the Business Planning process under BRAND and commenced preparing an RFP. Following an open competition, a fibre-based solution was deemed preferable and Aliant was identified as the Internet Service Provider (ISP). The Business Plan was submitted and in September 2003, the Irish Loop was identified in the first round of approvals for implementation under the BRAND programme. Installation of the network commenced within the year and the full network was installed by mid-July 2005.

In developing the business case for BRAND investment, the Board established an Innovation Task Force with representatives of local and community partners in the areas of health, education, government, business and community groups. An extensive research programme was carried out to determine levels of interest and potential applications for the new technology. As the process moved from business planning to implementation, the Task Force remained in place to oversee the installation of the network and prepare an Innovation Strategy to drive demand and usage of the new technology.

Concurrent with the development of an Innovation Strategy, the Board was finalising a Business Retention and Expansion (BR&E) Initiative that clearly identified a need to invest in skills enhancement in technology and computer applications for staff. This need was further reinforced through research conducted in 2004-2005 in relation to overall human resource development requirements in the tourism and retail sectors.

2.4 Innovation Strategy

The Innovation Strategy for the Irish Loop Development Board was prepared in April 2005 by Tor Fosnaes of Mobile Words. The Strategy – essentially founded on the concept of the Irish Loop region acquiring broadband Internet service within a short period – comprised 37 recommendations set within 7 core strategies.

In the Introduction to the Strategy, Mr Fosnaes suggests:
> This document reports the broadband access facilitation activities conducted as background for seven strategies to enhance ILDB's involvement in broadband. The strategies are anticipatory, dealing with things yet to be. Forward thinking and a lot of preparation are needed to manage societal change.

> (**Here Comes the Broadband: IT Strategies for the Irish Loop**, Page 10)

The seven sub-strategies described in the Innovation Strategy are outlined here since many of them have direct application to the current Needs Assessment study conducted with 15 local governments and 15 NPOs:

Strategy 1: **Leadership** – to establish, support and commit the Irish Loop Development Board to a broadband development leadership role (largely by creating e-ILDB).

Strategy 2: Staff Development – to create a systematic professional development environment to bring Irish Loop Development Board members, staff and stakeholder groups to a new recognition of, and commitment to, the principles of e-ILDB.

Strategy 3: Funding – to establish funding to effect ILDB's transition to e-ILDB. Relevant recommendations include:

- ❖ fund an IT Manager position for five years,
- ❖ fund a professional development programme for ILDB Executive and staff,
- ❖ fund an investigation of the potentials in selling IT services and access, and
- ❖ fund exploration of the potential for involving regional government in e-ILDB development.

Strategy 4: Coverage – to develop a multi-lateral integration of municipal and development agency networks to regionalize Irish Loop communities and communities of interest.
Relevant recommendations include:
- ❖ develop a technical plan to increase coverage using ILDB (or an ILDB/partner approach) as a service provider, and

- ❖ establish a leadership position and form a coalition of community and other groups with one specific goal – universal service.

Strategy 5: Government and Development Integration – to develop a multi-lateral integration of municipal and development agency networks to regionalise Irish Loop communities and communities of interest.

Relevant recommendations include:
- ❖ establish, develop and support a single, shared municipal network, and
- ❖ establish, maintain and update an on-line social and economic development library.

Strategy 6: Training and Jobs – to inventory, update, and coordinate training opportunities with links to job banks and employment opportunities.

Strategy 7: Public Access – to increase opportunities for pubic access to broadband, particularly in areas without BRAND built accessibility.

Other key points raised in the Innovation Strategy of immediate relevance to this Study include:

- ❖ future strategies should include raising entrepreneurial / agency productivity by developing information and communications technology (ICT) and broadband infrastructure for Businesses, Organisations and people in the region,

- ❖ there is a role for all stakeholders – business, government, education, and special interest groups – in facilitating greater digital engagement,

- ❖ understanding disengaged needs and potential uses is essential – efforts should be made to market Internet and ICT skills to persuade non-users of the benefits,

- ❖ new technology requires implementation designs involving the disengaged – the technology needs to understand the disengaged, not the other way around,

- ❖ technology costs must become more affordable, and where access issues are difficult, social programmes must intervene, and

- ❖ to understand fully the power of broadband, policy makers, businesses, and community groups must ensure broadband is at the centre of debate about:

  - o the way public services are delivered,
  - o the way people engage in their communities, and
  - o how they pursue their interests.

Voluntary organisations have an important and pivotal role in how broadband reforms society in the Irish Loop. Organisations should be encouraged, trained and facilitated to become connected with:

- ❖ website presences,
- ❖ on-line meetings,
- ❖ improved communications systems,
- ❖ increased ability to recruit volunteers,
- ❖ a broadening of participation by individuals, and
- ❖ the growing integration between organisations with similar interests.

Specific computer and Internet training for volunteer group leaders should be identified and offered as part of a training inventory and coordination programme.

All organisations will benefit from the increased ease of contact under broadband. They should be encouraged to develop broadband tactics and communications immediately. E-ILDB's example will go a long way to engaging voluntary group adoption of broadband methods.

The research compiled through each of the initiatives of the Irish Loop over the last decade has enabled the Board to conclude that:

> While the BRAND project has resulted in greater levels of high speed Internet connectivity, there is a gap between the potential the technology might afford in relation to business, municipal and community development and the skills and awareness required to maximise it use.

2.5 Innovation Irish Loop

The Innovation Strategy clearly identified a series of initiatives that must be undertaken if the region is to benefit from the recent investment in high speed and foster innovative approaches to economic development. To this end, in 2007, the Board prepared a proposal to conduct Innovation Irish Loop – Supporting Innovation in Zone 20 and which would incorporate programmes in a number of key areas including:

- ❖ e-business,
- ❖ e-government,

- ❖ e-organisations,
- ❖ innovation / technology hubs,
- ❖ awareness, and
- ❖ monitoring and evaluation.

This e-technology needs assessment study is a component of the Innovation Strategy and was funded under Phase I of Innovation Irish Loop.

The Board noted that the long-term sustainability of activities proposed under Innovation Irish Loop is paramount. The intent is to support existing capacity in innovation and build capacity where none presently exists. This will be accomplished by:
- ❖ strengthening existing service providers,
- ❖ facilitating unique partnerships between those providers and the private sector, and
- ❖ raising awareness and driving demand for new technology applications.

Further, at present, the innovation capacity of key partners and the general public is not being maximised. Upon project completion, it is envisioned that a new capacity will exist within the region to foster innovation – a capacity that will be self-sustaining, maximise resources, and serve to link the Not-for-Profit sector with private service providers. The vision is not to develop a capacity that will compete with the private sector – but rather, to create a partnership that provides the private sector with an opportunity for collaboration and new market growth.

Below is a summary of potential private sector engagement in relation to programme components:
- ❖ design of individual e-business, e-government and e-community strategies,
- ❖ design of individual websites and web hosting,
- ❖ development and delivery of training associated with the programme and other requirements,
- ❖ technology procurement, installation and service,
- ❖ development of marketing strategies and related collateral materials,
- ❖ ICT consulting for businesses, organisations and individuals, and
- ❖ provision of space and access through technology incubation for emerging ICT companies.

The Innovation Irish Loop Initiative represented an exciting opportunity for businesses, municipalities and organisations to grow and strengthen their longer term prospects.

3.0   Use of E-Technology

In this section, we review the similarities and differences between the two sample groups (municipalities and NPOs), as well as outline e-technology uses and needs – for participating groups as a whole and for each of the two sample populations.

3.1 Municipal Similarities and Differences

Unlike NPOs, municipalities tend to be more homogeneous in terms of:

> ❖ mandate and governance,
> ❖ their constituents,
> ❖ adherence to legislation – especially the Municipalities Act,
> ❖ principal functions and services provided, and
> ❖ they are all run by elected officials.

Thus, municipalities do very similar things, whereas NPOs are varied and diverse in what they do and who they represent. Despite this, however, municipalities' usage of, and needs for, e-technology differs widely. Thus, participating municipalities can be divided into two groups:
> ❖ those serving larger municipalities by providing a greater number of, and more diverse, services, and
> ❖ those serving municipalities with smaller populations by providing a set of basic services.

Using this distinction as a basis, the 15 municipalities can be divided as follows:

> ❖ 5 municipalities in larger group, and
> ❖ 10 municipalities in smaller group.

Irish Loop municipalities, divided into the two groups by population are shown in table 3.1 below.

Table 3.1: Population of Irish Loop Municipalities (2006)

<u>**Large**</u> (population = 500+)	**(Pop)**	<u>**Small**</u> (population = <u>**<500)**</u>	**(Pop)**
Bay Bulls	1,078	St. Mary's	482
Witless Bay	1,070	R e n e w s – Cappahayden	421
Trepassey	783	St. Vincents–St. Stephen's–Peter's River	383

Cape Broyle	545	Gaskiers-Point la Haye	302
Ferryland	529	Fermeuse	284
		Portugal Cove South	222

Large (population = 500+) **(Pop)**		**Small** (population = <500) **(Pop)**
		Riverhead	220
		Aquaforte	103
		St. Shotts	100
		Port Kirwin	88

Source: Population by Census Subdivision, Newfoundland and Labrador, Census 2006, Newfoundland Statistics Agency

Across all 15 municipalities (with a couple of exceptions) the consultations revealed that:

❖ municipal councils do see the benefit of better e-technology use, especially those technologies that assist councils and staff in doing things more effectively,

❖ upgrading Councils' e-technology equipment and use is simply not a high priority at this time,

❖ other commitments, such as Community Investment Plans, Public Sector Accounting Board compliance and Integrated Community Sustainability Plans are higher priorities that have definitive dates by which Councils must comply,

❖ financial constraints may not allow for e-technology upgrading that requires significant capital costs, such as for new hardware or staff training,

❖ acquiring better knowledge and skills for using existing e-technology effectively appears more important than acquiring new hardware, software or computer applications, and

❖ skills upgrading in e-technology use may be a lower priority for human resource training time and expenses than other skills related to municipal governance.

Largest Municipalities

The five largest municipalities in the Zone generally believe:

❖ office, computerised and communications equipment and systems are up-to-date and adequate, for the most part,

❖ there may be some room for upgrading and adoption of new software and applications,

❖ of these, stand-alone website development or upgrading of existing websites is a priority,

❖ the ability to develop and use virtual meeting technology for group and regional meetings would cut costs and improve participation rates,

❖ despite this, there is value in holding periodic face-to-face meetings, especially when Councillors in different municipalities rarely get to meet as a group, such as for Joint Council meetings, and

❖ new e-technology use requires skills training for staff and, sometimes, for Councillors and this, in the light of other municipal training requirements, places additional burdens on municipalities.

Smallest Towns

The ten smallest municipalities in the Zone generally reported:
❖ satisfaction with their use of basic office, computer and communications equipment,

❖ the provision of basic services to a small number of constituents does not require much e-technology,

❖ there could be improvements in Councils' knowledge and use of existing financial management and taxation software,

❖ the ability to communicate directly (and more inexpensively) with other municipalities in the region via video-conferencing would be beneficial, and

❖ skills training is needed for new e-technology adoption which is not a high priority – especially for municipalities with part-time Town Clerks or Administrators.

It must be remembered that despite classifying Irish Loop municipalities as "large" or "small", all 15 are small – even by provincial standards. They range in population from over 1,000 for Bay Bulls and Witless Bay to less than 100 for Port Kirwin. Of the five municipalities classified as "large" the populations range from 529 to just over 1,000, while for those classified as "small", the populations range from just under 500 down to 88. Given the size of these municipalities (and none are in any way "urban" in character) and the plethora of relatively new issues each has to deal with, it is understandable that there is not a lot of interest in developing or adopting more e-technology. On top of all this municipal elections will take place in September 2009 thereby adding further pressures to Councillors and staff alike.

3.2 Not for-Profit Organisations' (NPO) Similarities and Differences

The 15 participating organisations have three distinct mandates, as identified in Section 1.0:

❖ seven have a mandate to promote tourism and / or conserve special landscape features,

❖ five provide community-based services – either to specific age groups or through sponsoring selected activities, and

❖ three pursue developmental or business objectives, with two of these – Irish Loop Development Board and Irish Loop Chamber of Commerce – covering the entire Zone 20.

These distinctions above are made because an organisation's mandate may determine its current use of e-technology and / or future intentions to develop specialised e-technology capabilities. For example, an organisation that relies on tourist visitation will have a different set of priorities and e-technology goals than a group mandated to provide information and services to a particular segment of the population within the Zone.

Tourism and Conservation NPOs

The seven organisations within this group have extremely diverse mandates and scales of operation ranging from marketing an historic site internationally (Colony of Avalon Foundation, Ferryland) through to managing a small, local fisheries museum (Fisherman's Museum Committee, St. Vincents). They are:
❖ Cape Race-Portugal Cove South Heritage Inc,
❖ Colony of Avalon Foundation,
❖ Fisherman's Museum Committee,
❖ Holyrood Pond Development Inc,
❖ Renews River Conservation Society,
❖ Southern Shore Folk Arts Council, and
❖ Southern Avalon Tourism Association.

Probably the most enthusiastic e-technology users of all the participating municipal and organisational groups are some of the larger, or more prominent, NPOs in this category – primarily because they have a mandate to market tourism facilities or protect landscape features and must reach out to a global audience to so do.

These NPOs share the following e-technology characteristics:
❖ promotion of the organisations and the features they represent go beyond the Irish Loop Zone and, on occasions, are world-wide,
❖ these NPOs believe they need to raise their visibility and grow, and using e-technology is an effective way of doing this,
❖ they are limited in the manner by which they utilise e-technology largely by available financial and / or human resources, and
❖ these NPOs usually have links to regional, provincial or national organisations (such as the Southern Avalon Tourism Association's relationship with Hospitality NL) with which they need to communicate frequently.

NPOs Providing Community Services

These organisations are:

❖ Bay Bulls – Bauline Athletic Association,
❖ Community Youth Network (Bay Bulls-Cappahayden) Southern Avalon,
❖ Father Val Power Centre,

❖ Irish Loop 50+ Association, and
❖ Witless Bay CAP Site.

These organisations are relatively small with limited e-technology use. But the common bond is they provide services to their communities by focusing on certain segments of the population and / or specific parts within the Zone.

These NPOs share the following e-technology characteristics:
❖ while the NPOs' total constituencies are the people within the regions in which they work, most have a roster of members who avail of the services provided,
❖ these organisations' principal task is to disseminate information to members or constituents – such as details of upcoming meetings or available services,
❖ none of these NPOs have websites, and
❖ none of these organisations believe using e-technology will assist them in fulfilling their mandates.

Developmental and Business NPOs

These organisations are:

❖ Irish Loop Chamber of Commerce,
❖ Irish Loop Development Board, and
❖ Southern Avalon Development Association

Arguably, the Southern Avalon Tourism Association could also be classified as a Business / Development Organisation since, in addition to promoting Irish Loop tourism establishments / operators, it also provides basic tourism-related business services throughout the region.

Further, the Irish Loop Development Board is the innovator for e-technology projects in the Zone, and it has spearheaded the region's quest to have broadband Internet access installed a couple of years ago. The ILDB has fostered collaboration among business, governments and organisations, and has taken a pro-active role in encouraging these groups to adopt and utilise new e-technologies. As is to be expected, the ILDB is not only a participant in this study, but the apex for most e-technology initiatives in the Irish Loop – as evidenced by the Board being the sponsor for this study.

3.3 General Results from Surveys and Consultations

Table 3.1 on the following page shows the generalised results of municipalities' and NPOs' current use of e-technology derived from the survey completed by participants and subsequent telephone consultations. Results showing equipment that is shared with other organisations (such as telephones, fax machines and computers) are excluded from the Table.

Of the 30 groups offering to participate in the study, three (all of them municipalities) were not available to complete either the written survey or take part in a personal consultation. However, all three of these municipalities have:
❖ an extremely limited scope of operation,

❖ clerks who are employed for a day a week or less,

❖ a limited schedule for Council meetings, and

❖ virtually no e-technology available for Council use.

In one of these cases, material destined for the Town has to be sent by Canada Post as the Council does not own a computer or fax machine. In another case, the Town Clerk lives in a community outside of the Irish Loop Zone and does the work of the Town from her home .

With regard to Table 3.2 the following points are made.

Communications Equipment
❖ almost all participating groups use basic communications equipment – landline telephones – but pagers and cell phones are generally used only if the Councils support Volunteer Fire Departments or when NPOs employ students in the summer.

Office Equipment
❖ some municipalities, and even more NPOs, do not own or lease fax machines or copiers, but they either:
  ○ use or share equipment with neighbouring organisations or businesses, or
  ○ use equipment owned by volunteer members, and

❖ almost all participants use fax machines and copiers as standard office equipment, but with increasing use of Internet and e-mail, fax machines and copiers are being used less and less.

Computer Systems
❖ on the two occasions where laptops are used, they are owned by municipalities that also have tower computers,
❖ this means that three municipalities do not own computer systems,

Table 3.2 – Current E-technology Use by Category

E-technology type	Municipalities		NPOs	
	#	%	#	%
Communications				
Telephone	13	87%	10	67%
Cell / Pager	5	33%	4	27%
Office Equipment				
Fax	13	87%	8	53%
Copier	8	53%	5	33%

Computer Systems				
Tower	12	80%	10	67%
Laptop	2	13%	5	33%
Printer	11	73%	5	33%
Broadband Service	11	73%	8	53%
Wireless Network	0	0%	4	27%
Word Processing Software (e.g. WORD / WordPerfect)	11	73%	10	67%
Accounting / Taxation Software (e.g. Simply Accounting)	11	73%	5	33%
Spreadsheet and Data Management (e.g. Excel / Access)	5	33%	5	33%
Website	4	26%	7	47%
Electronic Banking	1	7%	3	20%
Payment Software (e.g. PayPal / VISA)	2	14%	0	0%
Computer to Computer Communications (e.g. MSN)	0	0%	2	13%
Audio / Video Communications (e.g. Skype)	0	0%	3	20%
Webinar Capacity	0	0%	2	13%

- ❖ this does not necessarily mean these three municipalities do not use computers, simply that they use computers owned by the Town Clerk or Mayor, where the equipment is located in private households, and
- ❖ the same is generally true for NPOs – organisations that do not own computer systems often use personal equipment owned by volunteer members.

Broadband
- ❖ because of the recent installation and promotion of broadband services, about 90 per cent of the Irish Loop region has access to broadband service,
- ❖ all municipalities and NPOs that use the Internet are connected through broadband, and
- ❖ two NPOs are not connected to the Internet.

Wireless
- ❖ only four organisations are linked through wireless networks.

Word Processing Software
- ❖ for municipalities and NPOs owning computers, all have and use word processing software for correspondence, meeting minutes and preparing reports, and
- ❖ the overwhelming preference is for Microsoft Word.

Accounting / Taxation Software
❖ while eleven municipalities and five NPOs use financial or accounting software, such as Simply Accounting, McBee, TownSuite Municipal Software or STMS, four municipalities and ten smaller organisations continue to maintain ledgers by hand.

Spreadsheets and Data Management
❖ only a third of participating municipalities and organisations use spreadsheet software, such as Microsoft Excel,

❖ especially considering two thirds of participating groups use computers (and Excel software normally comes with new computer purchases) several municipalities and organisations have access to spreadsheet software, but do not use it,

❖ consultations with municipalities and NPOs reveal that whereas some groups do have a need for data spreadsheet software, generally they do not know how to use it, and

❖ one municipality uses Microsoft Access for data manipulation.

Website
❖ four municipalities and three NPOs maintain stand-alone websites,

❖ websites for three of these municipalities are not yet accessible,

❖ web access is possible for a further four NPOs through shared sites, and

❖ details on almost all municipalities and several of the NPOs in the Irish Loop can be found on the Irish Loop Development Board's website.

Electronic Banking
❖ one municipality and three NPOs formally use electronic banking services (electronic banking requires no special software – anyone with a computer and Internet access can bank on-line).

Payment Software
❖ no municipality or organisation uses any interactive or electronic marketing software for accepting fee payments, such as PayPal or VISA, although one municipality can take debit and credit cards while for another Town, an ATM machine is readily accessible, and

❖ at least one NPO engaged in product marketing is seriously considering electronic payment options.

Computer-Computer Communications
❖ there are many methods by which computers can "talk" to one another (simultaneously and at no cost) ranging from MSN through to Facebook, but only two groups (both organisations) reported they used such techniques for business purposes.

Audio / Video Communications
❖ several municipalities have experience in video-conferencing technology through an Irish Loop Pilot Project ,

❖ no municipality uses video-conferencing software (such as Skype that can allow two or more locations to hear and see one another in an audio-video conference environment),

❖ however, two municipalities have Skype on their computers, but are unable to use it (in one case because the Town does not have a webcam), and

❖ three NPOs have downloaded Skype and may use it, but not often.

Webinar Capacity

❖ all municipalities and NPOs with Internet connections have Webinar capabilities, but none use them, and

❖ one NPO did have video-conferencing equipment (for Webinars), but gave it up due to a lack of demand.

Table 3.3 below provides an indication of participants' receptivity to increasing usage of e-technology.

Table 3.3 – Degree of Satisfaction with Current E-technology Use

Sample Group	Don't Use / Don't Particularly Want to Use # %	Satisfied with Current Level of E-Technology Use # %	Receptive to Acquiring / Using More E-Technology # %
Municipalities (15)	4 27%	7 46%	4 27%
NPOs (15)	1 7%	1 7%	13 86%
Total	**5 16%**	**8 27%**	**17 57%**

Clearly, NPOs see e-technology usage as a higher level of priority than municipalities and several organisations have expectations for increasing both the adoption of e-technologies and skill levels among staff. But they are limited principally by the financial resources required to invest in e-technology. While some NPOs have direct access to skills development training opportunities (through affiliate or parent agencies), most do not.

The above Table comes with several caveats:

❖ some groups are already quite sophisticated technologically such that they are satisfied with their high level of e-technology use,

❖ for smaller municipalities and NPOs, there may be no requirement for more e-technology usage – in some cases where groups have a very small constituency, e-technology may not in any way increase efficiency or productivity,

❖ several municipalities and organisations are led by men or women who have been at the helm for many years and who may not be so embracing of e-technology as younger employees or volunteers, and

❖ in a couple of groups, e-technology is not used because "this (manually) is the way we have always done it" – which has implications for receptivity of human resource training as well as upgrading costs.

Areas cited by those interested in expanding their use of e-technology as priorities include:

- ❖ upgrades to hardware / equipment – newer computers that have expanded capacity / speed, and which allows the user to utilise more sophisticated programmes / applications,
- ❖ use of a scanner to make digital documents from hard copy that can then be disseminated electronically,
- ❖ audio and video-conferencing technologies for intra- and inter-agency meetings regionally, provincially and nationally,
- ❖ e-commerce capabilities – to take payments through PayPal, debit cards and credit cards,
- ❖ electronic banking – to make payments electronically (although any organisation with a computer connected to the Internet can engage in electronic banking), and
- ❖ website development or streamlining – not just to promote Municipalities and Organisations, but also to engage in e-marketing, e-commerce and interactive communications.

But the results displayed in Table 3.2 are not encouraging in terms of groups' levels of enthusiasm at improving or upgrading their utilisation of e-technology.

3.4 Basic Office Equipment

Participating municipalities and NPOs that routinely use office e-technology appear satisfied with what they have. Photocopiers and fax machines, even though they may be used on a lease or shared basis, tend to be fairly standard with few "bells and whistles". Municipalities and organisations use their office equipment frequently – including fax machines, copiers and communications devices (landline phones, cell phones and pagers). Cell phones and pagers are usually only used by the larger municipalities with a staff complement or that manage volunteer fire departments. Very few of the organisations consulted use these communications devices and even then, they are privately owned.

Several respondents noted that office technology is always changing and it is difficult for small municipalities and organisations to keep abreast of all the new "gizmos" available. The technological capabilities of most hardware may be governed by the operation of software or peripherals, such that new or updated software may not work on computers that are several years old. Therefore, users are forced to periodically upgrade their office systems or, if they do not, software applications may be incompatible with new hardware.

Most municipalities consulted, and a few of the smaller NPOs, are using office technology that is several years old – with most using computer operating systems that take Windows 98, or even earlier versions, rather than Vista – which suggests their hardware is over two years old. Conversely, municipalities and organisations that have purchased new computers loaded with Vista operating systems may find their older software (such as Word Perfect or Microsoft Office) is not compatible. Constraints revolving around limited perceived needs for e-technology, scarce financial resources

and competition for staff time mean that municipalities and organisations do not always maximise their use of e-technology.

The important lesson here is that it may be more important for municipalities and organisations to make sure staff and volunteer users know how to use existing computer hardware and software effectively before seeking to acquire new e-technology. Productivity levels within town Councils and NPOs can be raised and maintained if computer hardware (computers, printers, scanners, etc.) is used that matches users' needs, and if users become familiar with its operational abilities.

The above issues point to:
- ❖ the need for due care and attention in determining what hardware systems might be most appropriate for each town's / organisation's requirements prior to purchase,
- ❖ ensuring staff and other users are fully trained in e-technology operations so as to maximise the resources available, and
- ❖ most of the larger municipalities and organisations should develop their own in-house e-technology plans.

3.5   Software Applications

All municipalities and organisations using computerised systems have word processing software. Increasingly Word is selected over Word Perfect – in part a reflection of the technological dominance of Microsoft, but also because Word Perfect is rarely used outside of Canada. Word for Windows 2000 is used most frequently, but some municipalities and NPOs are using Word 1997 and earlier versions.

Most municipalities maintain their financial records through accounting software, but two municipalities prefer to keep manual ledgers. These are the same municipalities that keep hand-written minutes of meetings and choose not to purchase office computers. Their claim is that purchasing expensive computerised systems is not warranted considering:
- ❖ small populations the municipalities serve,
- ❖ limited services provided to constituents,
- ❖ the municipalities' one staff-person spends minimal time in the office,
- ❖ limited Council business to conduct over the course of a year,
- ❖ Councils meet only a few times a year, and
- ❖ other financial commitments are more pressing.

The larger NPOs use packages like Simply Accounting – the rest do manual book-keeping / accounting. Although some municipalities employ software packages for budgeting purposes, none of the municipalities or organisations use any financial modelling software.

For creating spreadsheets and data management, Microsoft Excel is used by about 20 per cent of municipalities and NPOs, with only one reported using Microsoft Access.

Towns and organisations generally use Portable Document Format (PDF) readers (usually Acrobat Adobe), but none we consulted have invested in the moderately

expensive, but more versatile, Adobe reader-writer package that allows users to view, create, manipulate and manage PDF files.

We also found that in many instances, municipalities and organisations possess software that could be useful to them, but they do not know how to use it. For example, most municipalities and several organisations have Power Point software as part of a Microsoft Office package – and this is a popular means for preparing visual presentations. But other Microsoft Office packaged software, such as Excel or Publisher, are not used that often. You would think that Excel – a data spreadsheet package – would be very useful to municipal governments, in particular, in keeping track of their constituents / taxpayers.

For the few municipalities / organisations with WordPerfect Office packages, it seems that the Presentations, Presentations Graphics and Quatro Pro software which are included in the package are rarely used.

3.6   The Internet

All municipalities and organisations that use the Internet have broadband connections.

Five municipalities – Bay Bulls, Cape Broyle, Ferryland, Trepassey and Witless Bay (five of the largest municipalities in the region) – had MRON-IT Services of Carbonear develop stand-alone websites as part of a demonstration project under the auspices of the Irish Loop Development Board. Similarly, a few NPOs have their own websites – especially those working in the tourism field, such as the Colony of Avalon Foundation, Southern Shore Shore Folk Arts Council and the Southern Avalon Tourism Association.

Further, information about the Cape Race-Portugal Cove South Heritage Inc. can be found under the Government of Newfoundland and Labrador's Natural Areas Division's home page and the Fishermen's Museum in St. Vincent's is described in the Government of Canada's Virtual Museums' website.

The ILDB's website hosts home pages for four organisations:
- ❖ Irish Loop Chamber of Commerce,
- ❖ Irish Loop 50+ Association,
- ❖ St. Mary's Bay Joint Council, and
- ❖ Southern Shore Joint Council.

The Board's website also provides direct links to, or hosts information on, several regional attractions represented by NPOs (such as the Irish Loop Tourism Association, Colony of Avalon Foundation and the Fishermen's Museum in St. Vincent's). Nineteen communities around the Loop are described on the Board's website – including all 15 municipalities participating in this Study. As one would expect given NL's regional zonal board system, the ILDB is the apex of developmental matters in the Irish Loop

Zone and it is prepared to host and pioneer new e-technology initiatives that benefit communities, organisations and businesses in the region.

To be recommended is that municipalities that are members of one of the region's Joint Councils provide information for the Joint Councils to post on the ILDB's website – information that does not simply outline the history and status of the communities, but provides municipal details, such as tax rates, fees and planning codes for each of the municipalities. Towns that have their own websites may still want to provide basic information as well as a direct hyperlink to their own site.

NPOs that do not have their own website can also provide information to the Board for it to post on its website – details of the organisation's mandate, operations, membership, times of operation and admission fees, if appropriate.

Only a few municipalities and organisations engage in electronic banking and / or subscribe to commercial financial payment schemes. To bank on-line requires no special software or skills, and any town or organisation can do so – if it believes there are benefits. Several municipal administrators and NPO staff stated they prefer to go to the bank to conduct financial transactions, but in some cases the nearest bank is many miles away. Therefore, setting up an on-line banking arrangement can lead to greater productivity and allow the time taken to personally visit a bank to be used for other tasks.

Several municipalities see some benefit from receiving payments via credit or debit cards from constituents for taxes and other fees. In particular, in communities where Town Office hours are limited to normal business hours or to a couple of days a week, it may be difficult for residents to visit the Council Office to make payments. However:
  ❖ the service fees municipalities would pay (of anywhere from 2 per cent to 5 per cent) may be too high a price for such a convenience,
  ❖ all municipalities will accept payments by personal cheques where associated bank fees are absorbed by the user,
  ❖ cheques for payment of taxes and other fees can, therefore, be mailed to the Town Office, and
  ❖ personal contact associated with residents coming to the Town Office to make payments is seen as a plus by many administrators.

A few municipalities – the larger communities in particular – expressed interest in allowing their residents to pay taxes and fees on-line through an arrangement with VISA, Mastercard, etc. The set-up for this is not that complex, but it does take a commitment on the part of staff to maintain such a system and the points raised above may also apply. Simply, the effort to establish an electronic payment scheme may not be worth it, considering the size of the communities, the limited number of transactions that would be made over the course of any one year and the cost involved.

There was more interest in electronic banking and on-line payment schemes among the NPOs consulted – especially those depending on tourist visitation and which already have credit card or debit capabilities on-site. However, with the exception of the couple of organisations that rely on visitors' admission fees / advanced booking

reservations, most NPOs questioned whether the effort and cost associated with establishing electronic payment schemes are worth it.

Taking all of these points into consideration, and despite the reluctance of many participating municipalities and NPOs, we believe the capability for developing electronic banking and on-line payment schemes for municipalities and NPOs are worth exploring further. Therefore, it is suggested that the ILDB sponsor a one-day seminar for municipalities, NPOs and businesses in the Zone on:
- ❖ efficient electronic book-keeping and financial management,
- ❖ on-line banking,
- ❖ on-line electronic payment schemes, and
- ❖ alternative systems for e-marketing / e-commerce.

3.7 Communications – Audio and Video

Most of the municipalities and organisations consulted thrive on communicating with one another. The almost exclusive means of communications is the telephone, but given the geographical expanse of the Irish Loop, this normally incurs long distance charges. Most municipalities and some organisations have hands-free, three way calling teleconference capabilities, while the larger municipalities / organisations are set up to host multi-location conference calls through, for example, Bell Canada's Conference Calling service. For the most part, however, meetings take place at a centralised venue where people attend in person.

A recent video-conference pilot project in the Irish Loop left the impression among several smaller municipalities that video-conferencing can be difficult or inconvenient, primarily because participants had to travel to a local school which has video-conferencing facilities. Some pilot project participants reported they would be interested in further use of video-conferencing if the meetings could be held in their own offices or adjacent buildings.

Most municipalities and several organisations recognise the benefits of hosting teleconferences and video-conferences in terms of:
- ❖ cost
- ❖ convenience, and
- ❖ effectiveness.

However, people are used to face-to-face meetings where a degree of socialisation takes place – even in the winter where travel may be inhibited by weather conditions. This means that often, participants who travel the furthest distances to reach a centralised location may end up missing many meetings over the course of a year. As outlined in the following section, teleconferencing, and especially video-conferencing, can help ensure expected participants join in all meetings.

3.8 Human Resource Development

Primary considerations for enhancing e-technology usage by municipalities and organisations – especially interactive e-technology like e-mail, the Internet, e-marketing and e-commerce, and audio or video-conferencing – are:

  ❖ the proportion of a town's population or an organisation's membership / clientele who have computers and can work electronically, and / or
  ❖ the numbers and locations of municipalities and NPOs in the Zone that are interested in collaborative e-technology use and their attitudes towards communicating and doing business with their neighbours electronically.

The results of this study – drawn from direct consultations with 30 Town Councils and NPOs – reveal that these agencies are generally receptive to attending education and training sessions in order to upgrade staff expertise. However, they also show that acquiring additional human resource skills in the key areas of e-technology is not a high priority – especially within the municipal community. This is because:
  ❖ of the number and range of time-consuming planning-related and financial tasks municipalities have to address in 2009-2010 that require training sessions, and
  ❖ town Councils see frequent training sessions and symposia focusing on routine municipal operations aimed at improving the experiences of Councillors and Town Clerks / Managers – sponsored by MNL, Local Action for Developing Regions (LADR), the NL Association of Municipal Administrators (NLAMA) and the Department of Municipal, Affairs – as necessary.

Participating organisations are in a slightly different position and they reflect a variety of interests, including tourism, conservation, heritage, economic development and business promotion. But they, too, are run by volunteer boards with limited paid, and often volunteer, staff persons. Once again, the issue of human resource development in e-technology matters boils down to:
  ❖ range of priorities vis-à-vis other subjects relevant to NPOs,
  ❖ cost and time associated with e-technology skills upgrading, and
  ❖ NPOs' assessment that better use of e-technology, while beneficial, is not vital to the success of their organisations.

Until municipalities and NPOs arrive at the point where they believe further and more effective e-technology use will be of benefit to them, sponsoring formal e-technology skills upgrading sessions for staff and volunteer members will be pointless. This suggests certain awareness-raising seminars / workshops on key aspects of e-technology usage should be organised in the Zone for municipalities, NPOs and business. The most logical proponent is the ILDB, but the Board may also want to canvas Municipalities NL to see if that agency may wish to sponsor e-technology awareness-raising sessions across the Avalon, or even the province, especially considering:
  ❖ the high turn-over of municipal staff and impending, anticipated retirements of Town Clerks / Managers in the next year or so, and
  ❖ the upcoming municipal elections in September 2009 that are expected to result in a large number of new municipal councillors.

3.9 E-Technology Pros and Cons

E-technology improvements at the individual community and organisation level can be valuable in terms of:
  ❖ greater communication among Councillors / organisation volunteers and staff,

❖ more frequent communication between municipalities and organisations / agencies,
❖ better communication with municipalities' / organisations' constituents or members,
❖ more effective use of staff and volunteers' time,
❖ cost savings (in many instances), and
❖ increased opportunities for skills training and human resource development, for example, through webinars

E-technology improvements at the individual community and organisation level can be constraining in terms of
❖ capital costs involved in some e-technologies,
❖ need to continually be on top of e-technology improvements / upgrades,
❖ IT expertise to maintain systems in good order and / or to troubleshoot problems,
❖ training – time and cost – for municipal and voluntary organisation users, and
❖ "simplicity is better" – quote – depending on needs

The ultimate conclusions from this analysis can be boiled down to the following:
❖ there are significant potential benefits from using e-technology to make municipal governments and organisations in the Irish Loop Zone more efficient, cost-effective and responsive to their constituents / members,
❖ but, most municipalities and NPOs may not particularly want to adopt and learn new e-technology procedures despite these potential benefits,
❖ understandably, the overall cost, competition for Councils' / NPOs' time and resources, system maintenance and training needs (especially for staff) are barriers, and
❖ if municipalities and organisations in the Irish Loop are only lukewarm to adopting and using new e-technology systems, is this something the Irish Loop Development Board or other proponent groups should continue to promote?

4.0   Collaborative Opportunities

The Vision for e-technology use in the Irish Loop Zone as expressed in recent documents prepared for the Irish Loop Development Board involves creating an awareness within the Zone of the benefits of e-technology for:

- ❖ improving service delivery by municipalities and NPOs,
- ❖ increasing business opportunities within the Private Sector, and
- ❖ enhancing the productivity of all businesses, municipal governments and organisations in the Zone.

The 2005 Irish Loop Innovation Strategy laid the foundation for achieving this Vision – largely by addressing the benefits and shortcomings associated with the introduction of broadband service within the region – and the subsequent 2007 Innovation Irish Loop proposal would incorporate programmes / initiatives in a number of critical areas, such as:

- ❖ strengthening e-technology use by service providers,
- ❖ facilitating partnerships among the private sector, NPOs and municipalities, and
- ❖ generally raising businesses', groups' and individuals' awareness of the productivity benefits from e-technology.

This e-technology study of Irish Loop municipalities and organisations is supposed to be a key component of Innovation Irish Loop – it would highlight the needs of these two groups and, based on those needs, determine future e-technology initiatives. Then, if the same could be done for the private sector, a solid foundation will have been laid for building the Zone's e-technology capabilities in line with the Vision outlined above.

Collaborative Benefits

The real benefits to be conferred from e-technology may be best sought at the collaborative level – that is, where two or more municipalities or organisations (such as all municipalities in either Joint Council or all NPOs within a localised part of the Irish Loop) participate in the use of an e-technology, for example:

- ❖ website development and maintenance,
- ❖ joint use of a regional IT specialist, and
- ❖ sharing files / documents through electronic messaging, such as:
  - ○ audio or video-conferencing,
  - ○ interactive posting of information, commentaries or feedback, or
  - ○ e-distance learning and skills development.

Collaborative Leaders

To embark on collaborative e-technology initiatives requires someone to take the lead. Clearly, the Irish Loop Development Board has proposed and led past e-technology

projects and is the obvious agency to initiate and manage new e-technology developments for its constituents – municipalities, NPOs and businesses. Indeed, several of the twenty regional economic development boards across NL have embarked on promoting broadband initiatives.

4.1 Towns, Organisations and Collaboration

Most municipalities and some NPOs participating in this Study appear less than enthusiastic about their use of e-technology and, in fact, very few needs were expressed. However, most NPOs that did express an interest in expanding their use of e-technology recognised this as not a high priority compared to the many other things they have to attend to. We suggest, therefore, this apparent reluctance to expand or improve on the use of e-technology is primarily a reflection of competing demands (on staff and volunteer Councillors' / Board members' time and resources) and a lack of awareness of the benefits to be derived from e-technology.

Table 4.1 below illustrates the responses from municipal and organisations' representatives to probing questions regarding levels of collaboration between their town / organisation and others in the region. The two main headings (categories) are:
- ❖ respondents who do not believe there are benefits to their town or organisation arising from collaboration with other municipalities, organisations or agencies and, thus, their municipalities / organisations are unlikely to formally co-operate or partner with neighbouring groups, and
- ❖ respondents who do believe there are benefits from collaboration with other agencies – especially with like-minded municipalities / organisations in the region – and, therefore, are likely to work closely with others in a number of issue areas.

Issues arising from table 4.1 include:
- ❖ all municipalities are willing to collaborate to find solutions to current waste management issues and in developing Integrated Community Sustainability Plans (ICSPs) – two issues that are demanded of town councils by government and have restrictive time frames, and
- ❖ while 12 municipal respondents claimed they did not see any significant benefits from collaborating with other municipalities or organisations in the region, most of them did note that inter-municipal / regional collaboration on waste management and the preparation of ICSPs would be critical,

Table 4.1   – Groups' Receptivity to Further Collaboration

Sample Group	Don't Believe there are Benefits from Collaboration / Unlikely to Collaborate		Believe there are Benefits from Collaboration / Likely to Collaborate	
	#	%	#	%
Municipalities	12	80%	3	20%
Organisations	3	20%	12	80%

Total	15 50%	15 50%

❖ most (but not all) municipalities see value in belonging to the Southern Shore or St. Mary's Bay Joint Councils where issues like waste management and ICSPs can be resolved collectively and through a unified voice for the region,

❖ one of the three municipalities receptive to collaboration recognises that co-operation with other municipalities is constrained by distances to neighbouring communities,

❖ similarly, two of the municipalities that do not see any benefits from collaboration cite distance to other municipalities as a principal reason,

❖ the other two municipalities receptive to collaboration already work closely on several issues,

❖ for two of the NPOs that cannot see benefit in collaboration:
  ○ collaboration with other groups is not relevant to their mandates, and / or
  ○ these organisations operate under the auspices of another agency,

❖ several NPOs that see the benefits of collaboration already engage in co-operative activities – with municipalities, other regional organisations or provincial / national agencies,

❖ on rare occasions municipalities or NPOs did see the benefits of collaboration in terms of e-technology use,

❖ municipalities favouring collaboration and / or expansion of e-technology use cited video-conferencing and equipment upgrades as high priorities, and

❖ NPOs see e-commerce and audio / video-conferencing as high e-technology priorities.

4.2 Broadening Groups' Contacts / Linkages

There are two avenues to promoting collaboration among municipalities and NPOs:
  ❖ activities within the Zone, and
  ❖ initiatives / linkages with municipalities and organisations outside of the Zone.

Municipalities and NPOs in the Irish Loop rely to a considerable extent on contacts outside of the region:

❖ municipalities are members of Municipalities NL and the NL Association of Municipal Adminstrators – both based in St. John's,

❖ tourism-based organisations are linked to Destination St. John's or Hospitality NL,

❖ conservation-oriented NPOs are allied with a range of provincial associations – Historic Sites Association, NL Legacy Nature Trust, Salmonid Association of Eastern NL, etc,

❖ development / business organisations have strong links with pan-provincial groups, such as the NL Regional Economic Development Association, NL Chamber of Commerce / St. John's Board of Trade or the NL Rural Development Council, etc, and

❖ municipalities and organisations all deal at one time or another with various departments of the provincial and federal governments in St. John's.

The following are examples of collaborative e-technology Best Practices that are cited here to stimulate municipalities and NPOs in the Irish Loop to adopt and utilise e-technologies in an effort to:

- ❖ increase their operational efficiencies,
- ❖ reduce costs,
- ❖ increase collaboration and co-operation among municipalities and organisations within the Zone, and
- ❖ increase collaboration and co-operation between municipalities and organisations in the Zone and with their counterparts elsewhere in NL.

4.3 Collaborative Best Practices – Smart Labrador

SmartLabrador Inc. is an incorporated social enterprise that reflects a co-operative development strategy of the five regional economic development corporations of Labrador. It was founded in 1997 to ensure effective utilisation of ICT in business, human resources and community economic development in Labrador. The goals of SmartLabrador include:

- ❖ increased awareness of the benefits and potential of information technology,
- ❖ equal access to the information highway for all communities,
- ❖ skilled population to meet the demands of the knowledge economy, and
- ❖ increased development of ICT business opportunities and partnerships.

SmartLabrador Inc. offers consulting services provincially, nationally and internationally regarding the use of technology and community partnership models by rural communities for economic and social development. It has been instrumental in developing services and training initiatives throughout Labrador to encourage adoption and innovation in the use of broadband access. SmartLabrador has significant experience in developing and managing a physical network, including land and satellite connections, and developing capacity and capability in rural and remote communities to utilise ICT access such as the Internet, video-conferencing services and on-line applications for community development.

Since the conclusion of the pilot Smart Communities project in Labrador, SmartLabrador has continued its work in building ICT capacity. Current services and projects include:

- ❖ Coastal Heritage Experience Project,
- ❖ North Atlantic Knowledge Network,
- ❖ Creative Solutions for Coastal Communities Conference,
  - ○ ICT Support,
  - ○ CAP Site Support,
- ❖ Zone Board ICT Support,
- ❖ Internet Services Division,
  - ○ Website Development,
  - ○ Web Hosting,
  - ○ Custom On-line Applications Development,
- ❖ Networking Labrador,
  - ○ Broadband Access,

- OurLabrador Community Portal,
- Labrador's Virtual Museum, and
- Labrador Heritage Mall

Below is an extract from the list of Labrador websites that have adopted the SmartLabrador approach to website management. The list below contains municipalities and organisations that have counterparts in the Irish Loop Zone:

- ❖ Aboriginal Sports and Recreation Circle,
- ❖ Battle Harbour Historic District,
- ❖ Central Labrador Economic Development Corp,
- ❖ Combined Councils of Labrador,
- ❖ Community Voices – L'Anse au Clair,
- ❖ Destination Labrador,
- ❖ Employment Assistance Services, Forteau,
- ❖ Labrador Heritage Society,
- ❖ Labrador Virtual Museum,
- ❖ Red Bay Heritage Group,
- ❖ Tourism Labrador,
- ❖ Town of L'Anse au Loup, and
- ❖ Tshikapisk Foundation.

Perhaps the municipalities in the region (perhaps through the two Joint Councils) may wish to play a leadership role in developing collaborative e-technology projects for their sector in association with the ILDB and either the Avalon Development Alliance or MNL. Similarly, several of the organisations consulted may participate in collaborative e-technology projects, if they can be convinced that the benefits outweigh the financial and human resource costs.

As presented by the ILDB in its Innovation Strategy, now that virtually the entire region has broadband access to the Internet, the rationale for developing something akin to "SmartLabrador" in the Irish Loop is to achieve similar goals as outlined for Labrador above (that is to create the "Smart irish Loop") such as:

- ❖ to ensure effective utilisation of information and communications technologies (ICT) in business, human resources and community economic development in the Irish Loop.

4.4 Collaborative Best Practices – Skype

Skype is an Internet-based communication system that allows for teleconferencing or video-conferencing between / among parties anywhere in the world. All users need is a computer with broadband access, a microphone and speakers, and a webcam. Skype software can be downloaded free of charge and all calls between / among Skype users are free – no matter where participants are located. Therefore, time and distance are not issues for Skype users.

At any one time, between 15 and 20 million people are using Skype to communicate. Often television news channels use Skype for their correspondents to file live reports from distant locations – easier and cheaper than traditional video communications. On

occasions, visual images from afar may appear to be slightly out of synch with the correspondent – a function primarily of distance and broadband capacity.

Calls can also be made via Skype to any land-line or mobile phone globally, although there is a modest pay-as-you-go charge for calls to non-Skype users – but at rates significantly lower than telephone company charges.

Skype calls can also be supplemented by instant messaging through the Skype system, so users can talk, or make video calls while at the same time sending typed messages – for free. Skype calls can also be routed to and from mobile phones such that users do not even need to use a stand-alone computer. Skype conference calls can be made with up to 24 other people, although the reception quality of calls may lessen with many users connected.

Any municipality or organisation could be set up to use Skype, and the benefits are obvious:

- ❖ if all municipalities in the Irish Loop downloaded Skype, instead of using the telephone and incurring long distance fees, a Town Clerk in one town could speak to (and see) his / her counterpart(s) in any other community anytime he / she had business to transact,
- ❖ if Irish Loop organisations were connected by Skype, any manner of business could be contracted for free – for example, should an NPO want to discuss issues with the ILDB, and
- ❖ while Skype's use may never substitute for face-to-face meetings, with both audio and video communications capabilites, it can become a close second, and there would never be any times when a meeting could not go ahead because of bad weather, poor road conditions or excessive travel time.

The cost-benefit of setting up Skype (the business case) is very easy. Assuming users have a computer and broadband Internet access, the only outlay is $30 for a webcam. This easily offsets monthly long distance telephone charges, travel costs or hiring a venue for a meeting.

Figure 4.2 shows a mock-up of Skype's main view screen.

Figure 4.2: Skype Viewing Screen
(where the main screen features the person to whom you are talking and the smaller inset screen shows how other users see you, with the list of Skype contacts down the left hand side- note that with a press of a button, the viewing screen can fill up the entire monitor)
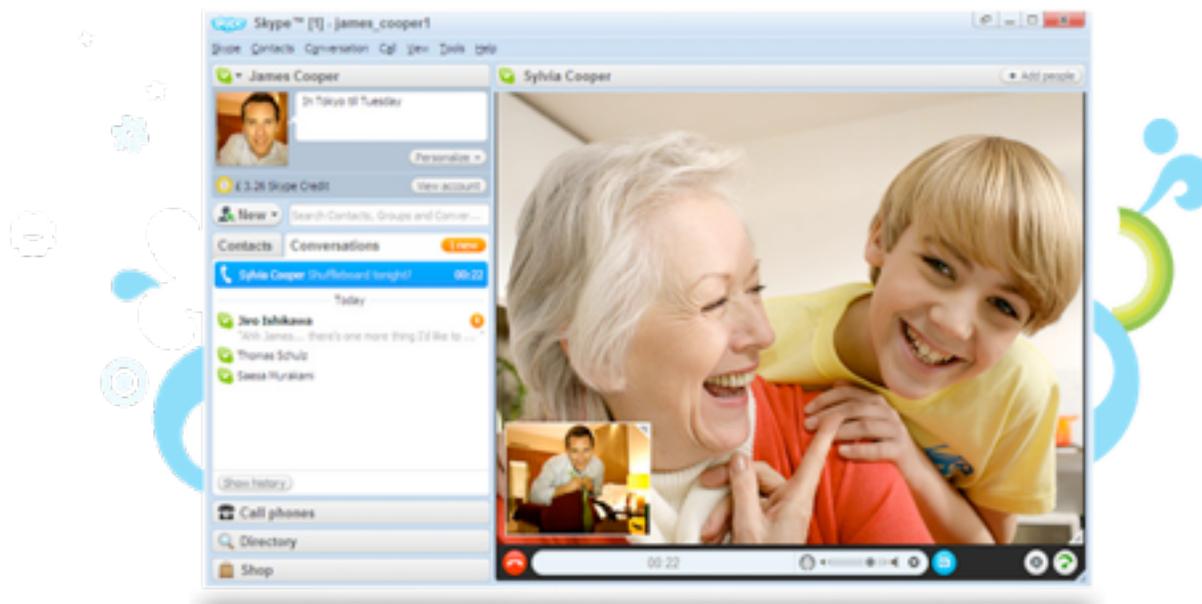
Considering several municipalities appeared interested in video-conferencing, but the main draw-back with the recent pilot project being that users had to go to another building to participate, the ILDB may wish to seriously consider introducing Town Councils / staff and participating NPOs to Skype. A half-day seminar would be sufficient to introduce the technology to potential users and demonstrate its use. Thereafter, trial conference and video calls could take place with potential users participating from their own offices.

4.5 Collaborative Best Practices – GMail

Gmail is a free web-mail service provided initially by Google In the United Kingdom and Germany, and it is officially called "Google Mail". Gmail was launched in 2004 as an invitation-only service, and became available to the general public in 2007. As of July 2009, it has 146 million users monthly.

With an initial storage capacity of one gigabyte per user, Gmail significantly increased the webmail standard for free storage from its two to four megabyte competitors. It has a search-oriented interface and a "conversation view" similar to an Internet chat forum. While most users sign up for Gmail for personal communications, increasingly the service is being used for professional and business reasons. Gmail is particularly applicable to a group of individuals, groups or agencies that wish to work collaboratively and simultaneously (in real time) on preparing a presentation.

While we did not perceive a high degree of co-operation among Irish Loop municipalities or NPOs, nor between them (the exception being the ILDB which has a pivotal role in the Zone), it appears that inter-agency co-operation is increasing, especially in the municipal sector. Here the two Joint Councils are assuming central roles as town Councils grapple with common issues. Municipalities' concerns over the Avalon Waste Management Strategy and the increased costs associated with transporting garbage to the Robin Hood Bay landfill in St. John's is a cause all Irish

Loop communities are dealing with. Similarly, government's requirement that incorporated communities across the province prepare Integrated Community Sustainability Plans (ICSPs) in order to receive their Gas Tax monies, along with the possibility that several groups of Irish Loop municipalities may collaborate and complete joint or regional ICSPs, suggest most of the region's municipalities are talking to one another more than they have done in the past – hence the popularity of the two Joint Councils.

Adoption of Skype technology, described above, may well go to helping co-operating municipalities communicate with one another. However, even using Skype, if several parties are jointly preparing a letter, brief or report – perhaps destined for a government agency – the process can get quite time-consuming. The traditional process may go like this:

❖ at a Joint Council meeting, municipalities decide to prepare a common brief on a topic like waste management for submission to a government agency,

❖ a staff person in one town is charged with developing the first draft, with initial input to be provided by participating municipalities,

❖ the staff person prepares a first draft in Word format and circulates it to the other participating municipalities,

❖ the other municipalities, using the "Track Changes" feature in Word, suggest several revisions and make comments, which are then sent back to the author,

❖ the author filters through all suggested revisions and comments after which participating municipalities hold a meeting or conference call (or talk through a Skype call) to discuss several issues raised in the draft and the proposed revisions,

❖ a second draft is prepared and the document sent out again for municipalities' approval, from which there may be a couple of cosmetic, editorial changes suggested, and

❖ finally all parties agree on the final version of this waste management brief.

This multi-party report writing process is cumbersome because of the need to shuffle drafts of the document around to several participants in an iterative fashion. This could be speeded up and made more fluid if participants each had universal access to the draft document and could make changes or comments in real time. There are several ways of doing this, but a simple, easy-to-use and free software is Gmail. Gmail allows an infinite number of people who are signed on to a common site (Username) to correspond with one another in real time through instant messaging (or in static time through e-mail).

Further, site registrants can post documents on the common site for all other participants to see, call up, edit and replace. Registrants who are on the site at the same time can all see any changes any other on-line registrant may be making to that document. Through the instant messaging, they can make comments to all other participants as changes may be made. Assuming a manageable number of participants are making comments at any one time, participants can in essence discuss the form of the document and suggest changes via instant messaging, and each gets to see revisions to the document as they are made.
So, using the same example above of a waste management brief to be written by several municipalities:

- ❖ the original author sends out the first draft for review by participating municipalities,
- ❖ participating municipalities agree to sign on to Gmail at an appointed time,
- ❖ they all register at a common site through an agreed-to User Name, for example southernshore@gmail.com, and a common Password, say, "Trepassey" so that all municipalities are at the same site,
- ❖ here all participants see the same e-mail Inbox, Outbox, Sent List, Contacts, etc. and all messages sent in and out of the site – like any Microsoft Outlook, Express Outlook or Netscape e-mail site,
- ❖ they can also see any documents posted by any participant as an instant message / e-mail attachment – in this case, the draft waste management brief – which gets translated as a Google Document,
- ❖ participants can then open that document on the Gmail site so that all can see it,
- ❖ any changes made directly to the document will be seen by all participants in real time, such that if a revision is being made that another participant disagrees with, he / she can send an instant message to that effect as well as type in their suggested revision,
- ❖ in no time, the participating municipalities can arrive at a final document.

The key features of using Gmail, therefore are:
- ❖ participants can save an editable copy on-line as a Google document for all users registered to a common site to see,
- ❖ Google Documents allows participants to create and edit documents, spreadsheets and presentations on-line, from anywhere that has Internet access,
- ❖ documents can be shared with others, and multiple users can collaborate on the same document at the same time – in real time,
- ❖ newly revised documents can be stored under an updated name so that all or some of the previous drafts are also easily accessible,
- ❖ users' documents are safe since they are stored on Google's secure servers – even if something happens to participants' hard drive, the document is protected, and
- ❖ users can always get back to Google Docs directly at http://docs.google.com.

If the Gmail users described above also have Skype, they can not only use Gmail's instant messaging / e-mail and document retrieval system, but they will also be able to talk to one another by audio and / or video-link. Thus, while at the same time participants are working collectively on the brief, they can both hear and see one another as they combine Gmail with Skype.

4.6 Collaborative Best Practices – IGLOO Software Networking

The results of this study of Irish Loop municipalities and NPOs reveal that while most of them can see the benefits of e-technology, especially to improve inter-agency collaboration, they do not have the time nor (for most of them) the expertise to do this. Prior recommendations to set up Skype calling and to use Gmail to collectively work on documents, spreadsheets and (for example Power Point) presentations demonstrate the power of e-technology and enhance collaboration across the Zone –

but these two systems are relatively low-level technology. We do not think municipalities and organisations are currently ready to engage in higher-level e-technology solutions. Nevertheless, we describe below and suggest consideration be given to establishing an e-technology based on a social networking system – one that can easily be used by municipalities, NPOs and for-profit businesses in the Irish Loop and / or other municipalities and organisations outside the Zone.

The system we advocate is provided by IGLOO Software (www.igloosoftware.com) – an e-technology networking company based in Kitchener, Ontario. But, as with most e-technology innovations, site location and distance from NL means nothing.

The Company

IGLOO is a Canadian software company that develops leading edge on-line community, business and social software solutions for groups, teams and organisations of any size. Services include:

- ❖ hosting Services — all community software solutions are delivered on-demand and hosted in IGLOO's CICA 5970 & SAS 70 (Type II) compliant data centre,
- ❖ consulting — industry proven methodologies and approaches for successful community deployments,
- ❖ design — flexible and affordable design packages, from simple to complex,
- ❖ e-engagement — proven community facilitation, management and engagement strategies, and
- ❖ support services — end user, facilitator and administrator support programmes.

Organisations use on-line community and social networking software internally to improve employee productivity or externally to foster relationships with members, customers, partners and suppliers. IGLOO currently supports over 550 on-line communities in the academic, financial, government, healthcare, hi-tech and not for-profit sectors.

IGLOO is supported by a strong management team with years of experience in both technology and management. Jim Balsillie, CEO of RIM Corporation, is the Chairman of the Board, with RBC Venture Partners providing venture capital funding.

IGLOO for Associations

IGLOO's on-line community and social networking software solutions are aimed at stimulating organisations to "transform their tired, old website into a vibrant, member-driven community aimed at optimising fundraising campaigns and other key objectives". It can also be used to:

- ❖ drive member retention – attract new members and increase membership loyalty and trust,
- ❖ engage in social fundraising – move existing membership and fundraising initiatives beyond traditional direct mail, newsletter or print-based campaigns, and
- ❖ optimise programme delivery – improve the efficiency and effectiveness of organisations' projects and initiatives.

Recruiting new members or clients is a priority for many groups. Funds are invested in recruiting and membership campaigns – often with little or no success. But while membership recruitment is important, so too is retention of existing members, and this is a key performance indicator of how well an association is doing in meeting the needs of its members. In the case of the Irish Loop, "members" can mean the same as "constituents" – for those NPOs like the Irish Loop 50+ Association and the Community Youth Network, South East Avalon, and even for the municipal sector.

Moreover, organisations engaged in promoting tourism, conservation and heritage activities do not rely so much on "members", but on attracting paying visitors. But they can all benefit from improved communications with each other which in turn may lead to better, more effective programmes aimed at reaching out to visitors.

Using IGLOO's custom designed networking system, members, constituents and other users become connected and engaged through:
   ❖ on-line discussion groups,
   ❖ experts blogs,
   ❖ on-line polls,
   ❖ private peer-to-peer messaging, and
   ❖ professional networking.

Figure 4.3: IGLOO Software's On-Line Networking
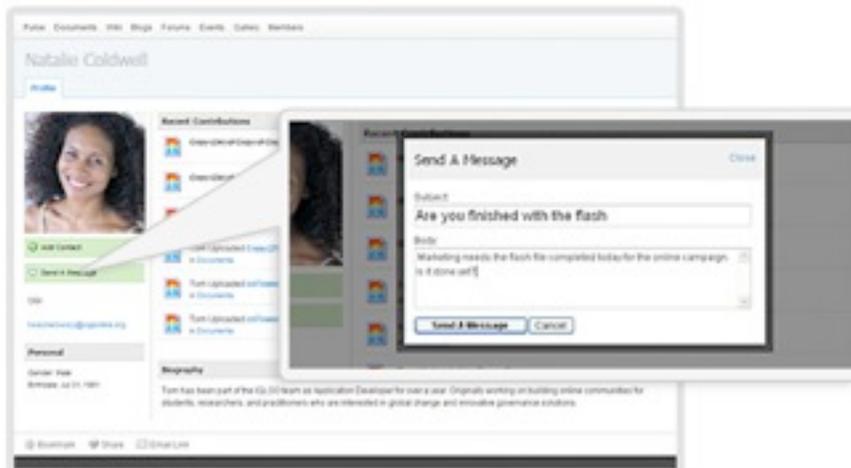
Users also rely on their communities to augment and extend existing programmes, such as monthly newsletters, face-to-face meetings and conferences, and direct outreach.

Figure 4.3 above illustrates IGLOO's on-line networking screen.

The key elements of IGLOO's social networking are:
   ❖ creation of a centralised on-line member directory – a user driven directory where members can quickly connect and find each other,

- ❖ establishing personal profiles – to encourage members to complete their on-line profiles just like they do on Linked-In or Facebook,
- ❖ allow members to share their expertise, knowledge, experience and ideas with other members,
- ❖ professional networking – to augment existing networking activities, such as social mixers, luncheons, meetings and conferences with on-line messaging, chat, peer-to-peer connections, blogs and forums,
- ❖ conversations – to stimulate dialogue and debate on important issues facing or concerning members using blogs and forums,
- ❖ governance – to ensure that member policies, privacy and guidelines are being followed by displaying them in a public wiki – just like Wikipedia,
- ❖ social marketing – to promote and publicise an association using new Web 2.0 social networking software tools like "sharing", "tell a friend" and "link to us" programmes,
- ❖ find champions who act as "pioneers" for the community / organisation, and
- ❖ e-commerce – to allow members to purchase and renew their memberships on line which involves quick, easy and simple credit card processing.

Fund Raising

IGLOO also offers services for organisations engaged in fund raising. Fund raising organisations have to be skilled at using all tools to attract donations. All of them need money. All of them are good causes. All of them have mission statements. But it is not enough simply to assume need alone will get someone to pledge.

Flat and static websites no longer work, whether a product is being marketed, a service offered or donations solicited. Many organisations are now moving to more interactive, participatory social networking software and on-line community sites. This is because they offer more ways to attract and engage donors on-line. More interaction creates traffic, loyalty and, ultimately, more donations. This can revolve around a place where supporters can connect, discuss and organise themselves for their cause. IGLOO Software aims to build a sense of "community" to attract members, involve them in the cause and convert contacts into donors. It creates a positive experience for donors – an on-line community that streamlines the donation process, making it easy, informative and compelling.

Programme Delivery

One of the most difficult tasks for any organisation is delivering programmes on time, on spec and within a tight budget. It is an operational imperative to stretch funds as far as possible and get the most out of every dollar without comprising the quality of those programmes. Many of IGLOO's customers are using on-line communities and social networking to help with the coordination, management and delivery of their programmes, such as:
- ❖ team rooms—to create private work areas where team members can work and collaborate on projects on-line, regardless of location or geography,
- ❖ document storage—using folders and sub-folders to store and manage project documents, securely and easily, which also involves authorised access to documents and monitored activities,

❖ publishing—sharing important company, organisation or municipal documents, such as employee manuals, benefits documents, policies / procedures manuals, and business standards with the entire organisation,

❖ knowledge sharing—taking organisational knowledge and discussions out of the e-mail Inbox into a community environment so it can be re-used and shared – avoids duplication of effort and being overwhelmed by e-mails and attachments,

❖ tracking—discovering who is using what information, and how they are using it; finding out who are the organisation's "champions" and which processes are or are not working,

❖ best practices—promoting employee suggestions and creating feedback loops which saves time and money by capturing, sharing and re-using best practices, and

❖ going green—eliminating the reliance on paper-based communications and publications since publishing is carried out on-line.

Below is a summary description of an on-line network set up by IGLOO involving manufacturing companies in southern Ontario.

4.7 Collaborative Best Practices – Manufacturing Innovation Network

The Manufacturing Innovation Network (MIN) is an on-line network built for Waterloo region manufacturing companies. Prior to MIN, the region's 150 manufacturing companies had identified the lack of an opportunity to collaborate effectively and network with other local manufacturers as a principal constraint. Consequently, IGLOO Software, the City of Kitchener and other partners established an on-line innovation network dedicated to the needs of the local manufacturing community.

Suggestions as to what companies would like the MIN to do included:

❖ incorporate a method to share best practices, lean manufacturing concepts, and other fabrication protocols,

❖ support supplier networking to help businesses to self-promote and connect with other local suppliers, and

❖ ensure the needs of sub-sectors are represented and they can connect with other similar companies to provide for focused networking.

Becoming a member of the Waterloo Region Manufacturing Innovation Network is quick, easy and free. Members receive access to vital industry information, upcoming events, research, job postings and more. The MIN is a resource tool and a way to make connections with peers, share information and interact with others in industry.

Membership privileges include up to $1,500 in free advertising on the MIN website.

The Network is the central place for local manufacturers in the Waterloo Region focusing on:

- ❖ promotions – build awareness of products and services manufactured in the region both on a local and global scale,
- ❖ network – improve collaboration and knowledge sharing between companies and industry professionals in an effort to create shared best practices, standard protocols and new innovations, as well as encourage members to join peer groups, create professional profiles and access experts in blogs and on-line discussion forums, and
- ❖ trade – a centralised e-marketplace for buying, selling and promoting goods and services on-line, such as classified ads, job boards and a comprehensive company directory.

Developed in partnership by local manufacturers, academic institutions, government, associations and manufacturing consortia, the MIN is intended to help manufacturers become more innovative by building awareness and innovation throughout the Waterloo Region and beyond. According to IGLOO Software which designed and set up the system, this can only be accomplished by improving the e-technology connections between people, information and expertise.

Using IGLOO's Services

It is difficult to pin a set cost on commissioning IGLOO since this would depend on:

- ❖ the degree of sophistication or depth of the on-line networking system to be established,
- ❖ whether the proponent group is exclusive – that is, comprising municipalities, organisations, businesses and / or others, as either one network or several compartmentalised networks under one banner,
- ❖ the range of activities required for the network – such as a focus on basic membership / constituent communications, members profiling, document access, e-marketing / e-commerce and / or fund raising, and
- ❖ numbers of participants in the network.

It is presumed that IGLOO could set up the required networking system through on-line and teleconferencing discussions and exchange of information, but it is possible the company would suggest on-site visits to the Irish Loop to consult and work with potential network members. IGLOO's role would be to set up and manage the system. For the most part, the network would be established to run itself with minimal intervention by IGLOO personnel – especially if an agency in the Zone (such as the ILDB) served as network leader, coordinator and trainer. This would mean Board staff would have to thoroughly familiarise themselves with the process, the technology and member requirements. However, this appears to be consistent with the ILDB's pivotal position with regards to the overall development of the Irish Loop as a region, as evidenced by:

- ❖ the Innovation Strategy,
- ❖ coordinating municipalities' preparation of ICSPs, and
- ❖ development of coordinated ICT initiatives in recent years, including this e-technology assessment for municipalities and NPOs.

Thus, we estimate it would take between $5,000 and $10,000 to set up the system and approximately $8,000 annually to maintain it. But we stress these are very rough figures based on previous and similar work undertaken by IGLOO Software.

Corporate Sponsorship

Also to be considered is that in setting up an IGLOO-designed on-line network, some of the costs can be offset by finding corporate sponsors in the Zone (or outside of it) that would be prepared to donate money in exchange for their logos to be featured on network sites and promotional materials. Note that IGLOO Software's web pages show the following companies (and others) as principal sponsors:

❖ Microsoft,
❖ RIM,
❖ Deloitte,
❖ RBC, and
❖ Helix Corporation.

It is conceivable that leading companies in the Irish Loop (and in the neighbouring capital city) – from fish processors to service companies to financial institutions – would be interested in sponsoring an innovative and "leading-edge" on-line network.

4.8 Collaborative Best Practices – BizPaL

BizPaL is an on-line service that simplifies the business permit and licence process for entrepreneurs, governments, and third party business service providers. Easy and convenient, BizPaL provides businesses with one-stop access to permit and licence information for all levels of government.

The service's primary goals are to slash document research time and help entrepreneurs start up faster.

For government, BizPaL provides the assurance that business clients will have the information they need to meet all permit and licence requirements quickly and efficiently. It also provides a way to improve the service experience for business clients.

BizPaL is currently being run as a project by Industry Canada in partnership with several provincial, territorial and local governments. The BizPaL service is tailored specifically to each partner's needs and business base, and is expanding rapidly across Canada. Most provincial jurisdictions have the majority of their cities and municipalities participating in the service – BC has 80 participating municipalities, Alberta has 36, New Brunswick has 13 (accessible through the Service New Brunswick website) and Nova Scotia has 13 cities and municipalities. In NL, only St. John's, Happy Valley-Goose Bay and Stephenville offer on-line BizPaL services in conjunction with the Government of Newfoundland and Labrador (see www.bizpal.gov.nl.ca).

Below is the opening page of the Town of Stephenville's BizPaL service (St. John's and Happy Valley-Goose Bay BizPaL's websites are very similar).

2.0Step 1: Where will you operate your business?

You have selected **Stephenville, Newfoundland and Labrador** as your location. [Change]

Step 2: What type of business will you operate?

Type of Business Search by keyword

[   ] [Search]

or browse by type of business

Abattoir
Accident and Sickness Reinsurance Carriers
Administrative Management and General Management Consulting Services
Advertising Agencies
Advertising Material Distribution Services
Aerobic Instruction
Aeronautical Equipment Wholesaler-Distributors

[Continue]

Can't find a suitable type of business?

Contact your local municipal offices or a government business service centre near you for more information on the permits and licences you may need.

You may also [search for specific permits and licences by level of government]

3.0 Step 3: Questions about your business

The North East Avalon Regional Economic Development Board (NEAREDB) is promoting BizPaL among the municipalities in the North East Avalon. As a final suggestion in this report on collaborative best practices in the Irish Loop, the participation of municipalities in BizPaL should be considered. Some municipalities, of course, will not want, or need, to become involved because of their small populations and business client base. There is an opportunity, however, for larger municipalities in the Zone to become on-line BizPaL partners – especially those with their own websites. Towns without stand-alone websites may use their links through the ILDB to offer BizPaL services. Indeed, we suggest the ILDB and Irish Loop Chamber of Commerce work in partnership with interested municipalities (and perhaps also both Joint Councils) to set up and manage the BizPaL service. It is conceivable also for BiZPaL to be offered as a regional / zonal service.

Providing BizPaL services within the Zone promotes collaboration:
  ❖ among participating municipalities,

❖ between individual municipalities and their businesses, organisations and individual taxpayers,
❖ among regional entities – the ILDB, Chamber of Commerce, Joint Councils, municipalities, etc,
❖ with federal and provincial departments and agencies, and
❖ with other cities, municipalities and business entities across NL.

Having the Board and Chamber lead several Irish Loop municipalities into participating in BizPaL would be consistent with the vision of creating a "Smart Irish Loop" as referenced earlier.

5.0 Next Steps

The lessons coming out of this Study fall into three categories:
- ❖ there is a need to raise the awareness of the benefits to be gained from e-technology usage to both the Municipal and NPO sectors,
- ❖ if effective use is to be made of available e-technology, municipalities' and organsations' staff (and volunteer Councillors and Directors where appropriate) have to participate in training workshops on the methods used and peoples' abilities to comprehend e-technological applications' usefulness, and
- ❖ special projects can be set up that require inter-agency collaboration, as well as the use of basic e-technology, to demonstrate in a pro-active manner the benefits to be gained by municipalities and organisations through:
  - ○ collaboration – working collectively to achieve common goals,
  - ○ networking – formalising efforts to collaborate. and
  - ○ e-technology – using whatever technological resources are within the region's capabilities to increase groups' efficiency, reduce their costs and labour, and improve productivity.

Ultimately, the objective for the region is to have all three major groups – municipalities, NPOs and the private sector – working collaboratively to maximise their use of e-technology. Hopefully, some of the messages arising from this project will spill over and be relevant for the business community in the Irish Loop, whether they be small home-based service companies or large, export-oriented fabricators, fish processors, etc.

The ILDB has been a major initiator of many programmes and projects within the Zone- not just in e-technology and broadband development, but in many economic, business and social fields. **In order that the Irish Loop can maximise the full range of benefits from e-technology usage, the Board should continue to serve in a pivotal role to encourage e-technology adaptation and collaboration across the Zone.**

5.1 Using & Upgrading Existing E-technology

While acquiring new e-technology systems for municipalities and NPOs holds considerable potential, **encouragement should be given to ensure municipalities and organisations know how to use existing computer hardware and software effectively.**

To this end, **municipalities and NPOs should ensure staff and other users are fully trained in e-technology operations so as to maximise the resources available.**

In upgrading existing e-technology resources, **due care and attention should be given to determine what hardware and software systems are the most appropriate for each town's / organisation's requirements prior to purchase.**

5.2 E-technology Awareness Raising

None of the municipalities or organisations consulted appear to have any coordinated, structured strategy for acquiring or upgrading their e-technology resources to fit with their objectives, mandates and future activities. E-technology updates and acquisitions are often made when current systems become out-dated or break down. Like virtually all other activities that municipalities and organisations engage in, e-technology usage should be planned over a set time period.

Most of the larger municipalities and organisations should develop and follow their own in-house e-technology plans.

All municipalities are members of one of the region's Joint Councils and hyperlinks to both Joint Councils can be found on the ILDB's home page. Moreover, several recent municipal issues have a "regional flavour" and will require municipalities to work together co-operatively. Therefore, **municipalities should provide information for the Joint Councils to post on the ILDB's website**.

Similarly, **municipalities that have their own websites may still want to provide basic information (to the Board) as well as a direct hyperlink to their own site.**

To foster close coordination between organisations and the ILDB, and among themselves, **NPOs that do not have their own web pages should also provide information to the Board for posting on its website.**

Considering the reluctance of most municipalities and NPOs to place greater emphasis on e-technology usage, **certain awareness-raising seminars / workshops on key aspects of e-technology usage should be organised in the Zone (especially by the ILDB) for municipalities, NPOs and businesses.**

The ILDB should sponsor a one-day seminar for municipalities, NPOs and businesses in the Zone on:
- ❖ **efficient electronic book-keeping and financial management,**
- ❖ **on-line banking,**
- ❖ **on-line electronic payment schemes, and**
- ❖ **alternative systems for e-marketing / e-commerce.**

The ILDB, on behalf of the two Joint Councils and Irish Loop municipalities should canvas Municipalities NL to sponsor e-technology awareness-raising sessions across the Avalon, or even throughout the province.

The rationale for the Irish Loop developing something akin to "SmartLabrador" is to achieve similar goals to ensure effective utilisation of information and communications technologies (ICT) in business, human resources and community economic development in the Irish Loop.

5.3 E-technology Demonstration

Considering the reluctance of many municipalities and NPOs to embrace e-technology more fully – which is likely the result of a lack of awareness of concrete benefits – **more (small-scale) e-technology demonstration projects should be developed within the Zone – for municipalities and organisations individually and collectively – to show first hand the actual and potential benefits of developing e-technology.**

Similarly, **more readily-accessible e-technology seminars / webinars and staff training opportunities should be made available within the Irish Loop Zone.**

A province-wide e-technology awareness raising campaign could be valuable (perhaps through MNL or NLREDA) to provide NL's municipalities some encouragement to use compatible e-technologies. Further, **consideration should be given to the specific e-technology usage and needs of the region's municipalities, NPOs and businesses, and if there are common technologies that all groups may be interested in pursuing.**

5.4 Collaboration

The demonstration projects suggested above should also be aimed at proving the benefits of inter-agency collaboration at the regional or sub-regional level – for both municipalities and organisations.

Demonstration / collaborative project(s) within the Zone for municipalities can use waste management and ICSPs to prove the benefits of collaboration and e-technology, preferably under the auspices of the two Joint Councils and / or the ILDB.

Several NPOs appear more receptive to collaboration and e-technology use. **For NPOs representing Irish Loop business interests (for example, the Irish Loop Chamber of Commerce, Southern Avalon Tourism Association and the Southern Avalon Development Association), there is a need to link them to the private sector and establish strong connections between businesses and organisations.**

For NPOs with tourism, heritage or conservation products to promote, a priority may be to set up e-marketing and e-commerce demonstration projects to illustrate (not just to participating organisations, but throughout the region) just how valuable e-technology can be to not for-profit groups.

5.5 Skype

Skype is an easy and free means for groups to communicate with one another and it can be a good substitute for face-to-face meetings. But Skype's usefulness needs to be demonstrated and potential users shown how the system works.

A half-day seminar should be organised by the ILDB to introduce Skype technology to potential users and demonstrate its use. Thereafter, trial conference

and video calls could take place with potential users participating from their own offices.

5.6 Gmail

Gmail is also a free method for group collaboration in preparing documents, spreadsheets and presentations. It too is easy to install and use. Again, led perhaps by the ILDB, **a pilot project should be initiated whereby the Board leads two or more municipalities and / or organisations in developing a collaborative presentation in order to demonstrate Gmail's usefulness and to ensure participants become adept at using this system**.

This pilot demonstration project may have to be preceded by a half-day workshop which sets up the initiative and ensures all participants are engaged.

5.7 IGLOO

When the time is right – that is when municipalities, organisations and even businesses in the Irish Loop come to believe there is value in establishing a strong social, municipal and / or business network in the Irish Loop – contact should be made with IGLOO Software Networking, perhaps through its CEO, Dan Latendre, in Kitchener, Ontario.

IGLOO Software Networking should be asked to work with the ILDB and potential network members to prepare a proposal to develop a customised on-line networking system that will bring significant benefits to municipalities and NPOs in the Zone.

The private sector in the Irish Loop should be canvassed to determine business interests in participating in an IGLOO network – either in collaboration with other groups or specifically focused on business.

5.8 BizPaL

BizPaL is an on-line service that simplifies the business permit and licence process for entrepreneurs, governments and third party business service providers.

Partly to help the region fulfill its vision of becoming the "Smart Irish Loop", but primarily to assist towns and businesses, **consideration should be given to setting up Town councils in the Zone with BizPaL on-line service capabilities, led by the ILDB and Irish Loop Chamber of Commerce, with the co-operation of both Joint Councils, individual towns, organsations and the private sector.**

5.9 Moving E-technology forward

Consideration should be given to the following broad actions that serve to enhance municipalities and NPOs' use of e-technology in the near future:
  ❖ **an IT specialist should be commissioned – perhaps through the ILDB – to work with municipalities and NPOs (perhaps businesses also) to explore**

and demonstrate areas of useful e-technology development and provide training in their use,

❖ **in the near future, the Southern Shore and St. Mary's Bay Joint Councils should spend time at several consecutive upcoming meetings to discuss where they stand regarding e-technology and municipal governance in the Irish Loop** (but since municipal elections are to be held in September, it may be wise to schedule this discussion for October and beyond),

❖ **encouragement be given at the Zonal level to encouraging greater collaboration among NPOs with regard to e-technology usage – especially those that are neighbours, but also by organisations with similar mandates,**

❖ **at the next Irish Loop Municipal Symposium in 2010, a "Round Table" workshop session should be scheduled to review e-technology developments since submission of this report – especially efforts to introduce new e-technology and upgrade skills – and to examine specific areas where municipalities could benefit from collaborative e-technology opportunities,**

❖ **the ILDB to host a one-day workshop in the Zone for municipalities, NPOs and the business community which focuses on key aspects of e-technology and innovation, and**

❖ **an alternative would be to host such an e-technology workshop, but open it up to representatives of other zones – especially the neighbouring Avalon Gateway region.**

6.0 Summary of Recommendations

Below is a summary of the recommendations and suggestions contained in this Report.

1. Irish Loop Development Board's Central Role
In order that the Irish Loop can maximise the full range of benefits from e-technology usage, the Irish Loop Development Board should continue to serve in a pivotal position to encourage e-technology adaptation and collaboration across the Zone.

2. Developing a "Smart" Region
The following Vision Statement should reflect the Irish Loop Development Board's objective to transform the Irish Loop into a "Smart" region, and be supported by local municipalities, organisations and businesses: "to ensure effective utilisation of information and communications technologies (ICT) in business, human resources and community economic development in the Irish Loop."

3. New E-technology
Encouragement should be given to ensure municipalities and organisations know how to use existing computer hardware and software effectively.

Municipalities and NPOs should ensure staff and other users are fully trained in e-technology operations so as to maximise the resources available.

4. E-technology Planning
Most of the larger municipalities and organisations should develop and follow their own in-house e-technology plans.

5. Upgrading Existing E-technology
Due care and attention should be given when determining what hardware and software systems are the most appropriate for each town's / organisation's requirements prior to purchase.

6. Web Page / Site Connections
Municipalities should provide information for the Joint Councils to post on the Irish Loop Development Board's home page.

Towns that have their own websites may still want to provide basic information (to the ILDB) as well as a direct hyper-link to their own site.

Organisations that do not have their own websites should also provide information to the ILDB for posting on its site.

7. Awareness Raising

Certain awareness-raising seminars / workshops on key aspects of e-technology usage should be organised in the Zone (especially by the Irish Loop Development Board) for municipalities, NPOs and businesses.

The Irish Loop Development Board should sponsor a one-day seminar for municipalities, NPOs and businesses in the Zone on efficient electronic book-keeping and financial management, on-line banking, on-line electronic payment schemes and alternative systems for e-marketing / e-commerce.

The Irish Loop Development Board, on behalf of the two Joint Councils and Irish Loop municipalities, should canvas Municipalities NL to sponsor e-technology awareness-raising sessions across the Avalon, or even throughout the province.

8. E-technology Demonstration

More (small-scale) e-technology demonstration projects should be developed within the Zone to show first hand the actual and potential benefits of developing e-technology.

More readily-accessible e-technology seminars / webinars and staff training opportunities should be made available within the Irish Loop Zone.

Consideration should be given to the specific e-technology usage and needs of the region's municipalities, NPOs and businesses, and if there are common technologies that all groups may be interested in pursuing.

9. Increased Collaboration

Demonstration / collaborative projects within the Zone for municipalities can use waste management and Integrated Community Sustainability Plans to prove the benefits of collaboration and e-technology.

For NPOs representing Irish Loop business interests, there is a need to link them to the private sector and establish strong connections between businesses and organisations.

For NPOs with tourism, heritage or conservation products to promote, a priority may be to set up e-marketing and e-commerce demonstration projects to illustrate just how valuable e-technology can be to not for-profit groups.

10. Skype

A half-day seminar should be organised by the Irish Loop Development Board to introduce Skype technology to potential users and demonstrate its use

11. Gmail

A pilot project should be initiated whereby the Irish Loop Development Board leads two or more municipalities and / or organisations in developing a collaborative presentation in order to demonstrate Gmail's usefulness and to ensure participants become adept at using this system.

This pilot demonstration project may have to be proceeded by a half-day workshop which sets up the initiative and ensures all participants are engaged.

12. Software Networking
When the time is right, IGLOO Software Networking should be asked to work with the Irish Loop Development Board and potential network members to prepare a proposal to develop a customised on-line networking system that will bring significant benefits to municipalities and NPOs in the Zone.

The private sector in the Irish Loop should be canvassed to determine business interests in participating in an IGLOO network – either in collaboration with other groups or specifically focused on business.

13. BizPaL
Consideration should be given to setting up Town councils in the Zone with BizPaL on-line service capabilities, led by the ILDB and Irish Loop Chamber of Commerce, with the co-operation of both Joint Councils, individual towns, organisations and the private sector.

14. Zonal IT Specialist
An IT specialist should be commissioned – perhaps through the Irish Loop Development Board – to work with municipalities and NPOs (perhaps businesses also) to explore and demonstrate areas of useful e-technology development and provide training in their use.

15. Joint Council Discussions
In the near future, the Southern Shore and St. Mary's Bay Joint Councils should spend time at several consecutive upcoming meetings to discuss where they stand regarding e-technology and municipal governance in the Irish Loop.

16. Collaboration Among NPOs
Encouragement be given at the Zonal level to encouraging greater collaboration among NPOs with regard to e-technology usage – especially those that are neighbours, but also by organisations with similar mandates.

17. irish Loop Municipal Symposium
At the next Irish Loop Municipal Symposium in 2010, a "Round Table" workshop session should be scheduled to review e-technology developments since submission of this report – especially efforts to introduce new e-technology and upgrade skills – and to examine specific areas where municipalities could benefit from collaborative e-technology opportunities.

18. Zonal E-technology Workshop

The Irish Loop Development Board should consider hosting a one-day workshop in the Zone for municipalities, NPOs and the business community which focuses on key aspects of e-technology and innovation.

19. E-technology Workshop with Other Zones
An alternative would be to host such an e-technology workshop, but open it up to representatives of other zones – especially the neighbouring Avalon Gateway region.

Appendix 1: Terms of Reference

<u>Scope of Work</u>
e-Communities and e-Organisations
Needs Assessment and Economic Benefits Analysis

Background

The **Irish Loop Development Board** is the lead economic development agency in the Irish Loop region. The Board has led the development of the Innovation Irish Loop Strategy to promote innovation in groups, organizations and communities utilizing technology adaptation and speed Internet access. An important component of the strategy is focused on local governments and not for-profit organizations who might wish to utilize technology to enhance their operations, improve their competitiveness, feature community strengths and market their goods and services to local, provincial, national and international markets.

The Board is currently seeking proposals from qualified consultants for the completion of a Needs Assessment and Economic Benefits Analysis on behalf of communities and organizations in the Irish Loop region.

Scope of Work

- An assessment of projected needs for technology and website development in fifteen (15) local governments and fifteen (15) not for-profit organizations in the Irish Loop. The Irish Loop Development Board will assist in identifying appropriate target groups and communities;
- An economic benefit analysis of investment in this activity in relation to business development, investment, sustainability and engagement;
- A notional costing on fulfilling the needs identified along with an analysis of the cost of collective versus individual approaches in addressing these needs;
- Development of individual community/organization summary reports and related costing; and
- Development of a business case to support these investments.

Appendix 2:   Municipalities and NPO Consultations

People contacted / consulted and meetings held, during the course of this study include representatives from the following:

<u>MUNICIPALITIES</u>
Town of Aquaforte
Town of Bay Bulls:
Town of Cape Broyle
Town of Fermeuse
Town of Ferryland
Town of Gaskiers – Point La Haye
Town of Port Kirwin
Town of Portugal Cove South
Town of Renews- Cappahayden
Town of Riverhead
Town of St. Mary's
Town of St. Shott's
Town of St. Vincent's – St. Stephen's – Peter's River
Town of Trepassey
Town of Witless Bay
Monthly Meeting of the Southern Shore Joint Council at the Renews Cappahayden Town Hall
Monthly Meeting of the St. Mary's Bay Joint Council at the Riverhead Town Hall
Irish Loop Municipal Symposium 2009 at the Wilds Resort

<u>ORGANISATIONS</u>
Bay Bulls – Bauline Athletic Association
Cape Race PCH Heritage Inc.
Colony of Avalon Foundation
Community Youth Network, South East Avalon (Bay Bulls-Cappahayden)
Father Val Power Centre
Fisherman's Museum Committee
Holyrood Pond Development Inc.
Irish Loop 50+ Association
Irish Loop Chamber of Commerce
Irish Loop Development Board
Renews River Conservation Society
Southern Avalon Development Association
Southern Shore Folk Arts Council
Southern Avalon Tourism Association
Witless Bay CAP Site

NPOs Information Workshop in the Bay Bulls Council Chamber, Bay Bulls

Appendix 3:   Not for-Profit Organisations

Expressions of Interest
From
Not for-profit Organizations

Technology Needs Assessment and
and Economic Benefits Analysis

The **Irish Loop Development Board** is the lead economic development agency in the Irish Loop region and has led the development of the Innovation Irish Loop Strategy. An important component of the strategy is focused on not for-profit organizations who might wish to utilize technology to enhance their operations, build capacity, improve their competitiveness, feature community and organizational strengths and promote their goods and services to local, provincial, national and international markets.

The Board is currently seeking Expressions of Interest from not-for-profit organizations (excluding municipalities) in the Irish Loop to participate in a Needs Assessment and Economic Benefits Analysis on behalf of their organization. Up to fifteen (15) organizations will be chosen to participate in the initiative with an emphasis on those groups involved in tourism, community economic development and technology. The needs assessment and economic benefit analysis will contribute to a longer-term technology strategy for each organization.

Detailed copies of the Expression of Interest may be obtained by contacting Kate at the Irish Loop Development Board at 1-888-438-2898 or info@irishloop.nf.ca.

Deadline for receipt of Expressions of Interest is 4:30 pm, Wednesday, September 24, 2008

Appendix 4:   NPOs – Initial Survey

{Sent to organisations responding to the Irish Loop Development Board's Call for Expressions of Interest to participate in the e-technology study as outlined in Appendix 3)

Contact Information

Organization name: _____
Contact name: _____
Mailing Address: _____
                                   _____
                                   _____
                                   _____

Phone Number: _____
Fax Number: _____
e-Mail Address: _____

Organization Mission and Mandate

Briefly describe your organization
_____
_____
_____
_____
_____

Why does your organization wish to be part of the needs assessment and economic benefit analysis?
_____
_____
_____
_____
_____

Does your organization currently use technology and if so, describe.
_____
_____
_____
_____
_____

Organizational Commitment

Is your organization prepared to assign a lead contact person to assist in the assessment of your organization?

Yes____   **No____**

Is your organization prepared to attend possible focus group meetings and other sessions in relation to the needs assessment?

Yes____   **No____**

Will your organization require financial assistance (i.e. travel subsidy) to enable you to participate in possible meetings?

Yes____   **No____**

Do you have any other questions in relation to this project? If so, please note those questions below.

_____
_____
_____
_____
_____

Note on Selection

Although the Irish Loop Development Board appreciates the interest of all organizations, only 15 will be chosen to participate in this needs assessment. Considerations on selection will include relevance of the organization to the priority sectors of tourism, community economic development and technology, regional balance, interest of the organization in the program and level of commitment to the project.

Appendix 5: Municipalities & NPOs – Questionnaire

E-Technology in the Irish Loop Zone
Municipalities & NGO Consultations

Please will you provide us information on your municipality's or organisation's use of the following technologies.

Identify:
- if you have and use such technology,
- if you have the technology available, but do not or cannot use it,
- the reasons why you use it or do not / cannot use it, and
- any future plans or desires for upgrading the technology.

Please provide information on your use of the following:
1. Office equipment
    a. Telephones and other communication systems:
        - Hands free conference calling
        - Pagers and blackberries
        - Cell phone technology, including texting and photography
    b. Fax machines
    c. Copiers

2. Computerised systems
    a. Hardware – tower / laptops, monitors, printers, scanners.
    b. Wireless (LAN) connections, routers, peripherals
    c. Internet connections – dial up, broadband
    d. Accounting, financial management, tax / payment recording
    e. Other applications for:
        i. Word processing
        ii. Spread sheets, data collection and display
        iii. Pdf document readers, composers, modifiers
        iv. Project planning, engineering systems, graphic design
        v. Logistics
        vi. Archives, document / data storage
        vii. Entertainment – video , audio, animation

3. E-Technology applications
    a. Website
    b. Interactive electronic marketing systems

    c. Global mail-outs – notices, product information, ad distribution
    d. Automatic payment capabilities – Paypal, Visa, etc.
    e. Electronic banking connections

4. <u>Audio and Visual conferencing</u>
    a. MSN and other Internet-based group conversation systems
    b. Skype and other Internet-based group video-conferencing
    c. Video-conferencing

5. <u>Training and Human Resource Development</u>
    a. Skills development, distance education
    b. Workshops, seminars, courses, Webinars
    c. Region-wide training

Please also outline the following

1. If you have any need for further E-Technology skills upgrading or training in any of the areas listed above?

2. Preferences for how such skills upgrading / training should be delivered?

3. Do you have any specific plans at the moment to upgrade, or acquire new, communications or computer technologies for your organisation?

4. Are there other municipal councils or organisations (in the Zone or outside of it) that could help you acquire, adapt, develop or learn new technologies?

5. If so, in what areas and how could this be arranged?

_____

Please return as soon as you can, preferably by e-mail attachment, to:

Chris / Colleen
Connections Research
info@connectionsresearch.com
Tel: 335-8272

All information provided to us will remain strictly confidential and will not be disseminated or otherwise given to anyone else.