



**Information
Society Commission**

eInclusion: expanding the Information Society in Ireland

October 2003



eInclusion

• expanding the
• Information Society
• in Ireland



Report to the Information Society Commission

Dr. Susan O'Donnell *Itech Research*

Helen McQuillan *Ennis Information Age Services*

Dr. Anna Malina *Itech Research*

> September 2003

This report is the outcome of an independent study commissioned by the Information Society Commission and the Department of the Taoiseach. The views expressed are those of the authors and should not be regarded as the official position of the Information Society Commission or the Department of the Taoiseach.

Contact Information:

Itech Research

Abbey House
15-17 Upper Abbey Street
Dublin 1
info@itech-research.ie
T: (353) 01 872 4911
F: (353) 01 873 3917
www.itech-research.ie

EIAS

Information Age Centre
Ballymaley Business Park
Ennis, Co. Clare
info@eias.ie
T: (353) 65 686 9200
F: (353) 65 686 9244
www.eias.ie

Information Society Commission

Department of the Taoiseach
Government Buildings
Upper Merrion Street
Dublin 2
info@isc.ie
T: (353) 01 619 4344
F: (353) 01 619 4340
www.isc.ie

This report may be downloaded from the Web:
www.itech-research.ie/publications/list.html

Report and web design by www.activelink.ie

Preface from the Information Society Commission

Building the capacity to learn

There is increasing recognition that information and knowledge are now at the very core of socio-economic development. We are moving from an economy based principally around the production and distribution of physical goods to one driven primarily by the production and application of knowledge. Our understanding of the societal implications of this shift in patterns of economic activity is still developing. But it is likely that these implications are far-reaching.

The dramatic developments in the field of information and communication technologies (ICTs) are at the heart of this transition. The scale of progress in information processing has been phenomenal since the advent of the computer in the middle of the last century. It is estimated that we have experienced a 4 billionfold increase in the world's raw computing power over the past 40 years or so – representing an average annual growth rate of around 56 percent. More recently, we have seen the Internet become the fastest growing communications medium in history. The impact of these advances can be understood in terms of facilitating a dramatic extension of brain-power, building on a parallel with the manner in which energy-related technologies provided a dramatic extension of muscle-power to drive industrial era development.

This rapid evolution and diffusion of ICTs is bringing about an increasingly networked, knowledge-based global economy, in which innovation has become the defining competitiveness factor. The single most striking characteristic of this dynamic is arguably the acceleration in the rate of change it has brought about – a rate of change that is without historical precedent.

In looking back at previous socio-economic transitions through feudal, agrarian and industrial stages of development, we can see clearly a gradual obsolescence of traditional skills and sources of employment in tandem with a wider adjustment to higher value economic activity. However, the acceleration in the rate of change associated with post-industrial development means that contemporary knowledge and skills are being exposed to a depreciation that is more rapid than has previously been experienced. The capacity to learn (and unlearn) has become crucial to the socio-economic success of individuals, firms, regions and national economies.

It is evident therefore that we must be alert to a clear risk of polarisation based around the capacity to learn, and to a tendency for the costs and benefits of development to be distributed in a manner that may reinforce prevailing socio-economic inequalities. A new focus is needed on building and distributing appropriate learning capabilities across society – with a particular focus on

supporting the learning capacity of those least well equipped to adjust to accelerated change. This presents a key set of public policy challenges to which we will be returning, including through the Knowledge Society Foresight process initiated by the Commission and established through the *Sustaining Progress* social partnership agreement.

eInclusion

In this report, the focus is on a more narrowly defined set of issues relating to access and usage of ICTs themselves – or what has become known as ‘e-inclusion’. This has become an important policy focus internationally, including through fora such as the UN Information and Communication Technologies and G8 Digital Opportunity Task Forces. Its importance is appropriately reflected in Government’s *New Connections* Information Society Action Plan, and has more recently been acknowledged by the social partners through the *Sustaining Progress* partnership agreement.

Earlier this year the Commission engaged the services of Itech Research to examine the issues involved, and to support the development of appropriate recommendations to Government. We now welcome the opportunity to present the findings of that research.

As might be expected, there have been significant increases in levels of engagement with ICTs in recent years. Nearly 1 in every 2 adults now have access to the Internet, compared with only 1 in 20 in 1996. There has been a fourfold increase in mobile phone users over the same period – now representing 4 out of every 5 adults.

However, as this growth has slowed in the past couple of years, it is accompanied by indications that many simply do not see a value or relevance in these technologies. Just over 1 in 5 of those currently without access to the Internet express an interest in having such access, representing a drop from 2 out of 5 such adults in 1999. The available evidence also suggests that this segment of the population is disproportionately concentrated among more marginalised groupings, pointing to the influence of a range of socio-economic factors that warrant further examination. It is nonetheless clear that a wider societal engagement with the potential of information and communication technologies is needed to support a sustainable path of cohesive socio-economic development, and to prevent the emergence of new risks of exclusion.

Key messages for Government

It is the Commission’s view that there are essentially 2 sets of issues that need to be addressed. We must build the capacity to use these technologies on the one hand, while seeking to create the conditions that make their use more relevant to peoples’ lives on the other. In a climate of budgetary constraints, we must also be

careful to ensure that available resources are targeted towards those at greatest risk of marginalisation. The following are the key messages that the Commission wishes to highlight to Government in this context:

Building ICT capacity

1. Mainstream ICT literacy: Ensure that ICT literacy is developed as a core focus of all government-funded education and training provision. This should include a strong emphasis on its role in ‘second-chance’ programmes targeted at disadvantaged groups, building on the work of the Educational Disadvantage Committee.

2. Build community-based programmes: Develop structured and sustainable programmes to promote engagement with ICT among disadvantaged groups and individuals, including supporting the ICT capacity of relevant community and voluntary sector organisations. A specific priority should be given to the roll out of a successor to the CAIT initiative by the Department of Community, Rural and Gaeltacht Affairs, appropriately informed by project evaluation experiences. This new community-based programme should build on existing local development structures, be aligned closely with wider social inclusion objectives, and draw on the higher education sector for appropriate logistical and technical support.

3. Create local partnerships: Promote recognised ‘eChampions’ in the local government sector to foster appropriate partnership-based ICT initiatives involving the business community, the education/training sector and community development groups, grounded in responding to recognised local-level needs.

Making ICT relevant

4. Leverage the potential of eGovernment: Adopt imaginative ways of making ICT relevant through the e-government process, and give clear recognition to the transformative impact that this will have. Include a strong focus on community and local-level needs by recreating the spatial environment online. Develop a solution centrally and mainstream it through the local government sector.

5. Get local content online: Help community and voluntary groups get relevant content online by rolling out an easy-to-use solution through the local government sector. Develop a solution centrally and mainstream it.

6. Ensure accessibility for people with disabilities: Monitor levels of compliance with the NDA’s IT Accessibility Guidelines, and keep under review the need for further compliance measures.

Contents

Executive summary	7
Recommendations	13
Introduction	
1: Introduction	25
Policy Framework	
2: Developing the policy framework	33
Understanding the Challenge	
3: Measuring inclusive information society development	43
4: Identifying target groups for public policy intervention	52
Engaging Late Adopters	
5: Motivating the target groups to engage with ICT	62
6: Supporting local and community content development	70
7: Providing online Government services and information for the target groups	80
Ensuring ICT Access, Learning and Skills	
8: Ensuring ICT access, infrastructure and broadband	88
9: Ensuring ICT learning and skills for the target groups	98
Building Capacity	
10: Developing ICT capacity in community and voluntary organisations	107
11: Consolidating knowledge about an inclusive information society	117
Ways Forward	
12: Ways forward	128
Appendices	
Appendix 1: DEX scores	131
Appendix 2: International projects	134
Appendix 3: References and reading list	147
Appendix 4: Stakeholders consulted and acknowledgements	156

Executive summary

1: Introduction

This report is the outcome of a study and consultation process exploring how a more inclusive information society can be developed in Ireland. The key to an inclusive information society is ensuring that citizens from all demographic groups - such as the elderly and retired, women at home, people with disabilities, farmers, skilled tradesmen, the unemployed and others - have the opportunity to participate. The three core aspects are:

- Citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.
- Citizens from all demographic groups should have the opportunity to contribute to a knowledge-based economy and society.
- Citizens from all demographic groups should have the opportunity to use the Internet to engage with Government services and participate in democratic processes.

An inclusive information society also includes the active participation of the community and voluntary sector, which has a unique ability to reach out to and understand the needs of marginalised groups.

The study methodology included:

- Developing a policy framework
- Analysing survey data and developing new indicators
- Identifying target groups for public policy intervention
- Consulting with key stakeholders and analysing projects
- Identifying good practice internationally
- Supporting the development of recommendations to Government

A major element of the methodology was the consultations. The research team heard from or discussed priorities for an inclusive information society with more than 60 people from stakeholder organisations: Government departments and agencies; public authorities and bodies working at national, regional and local levels; community and voluntary sector organisations; and social partners and others.

2: Developing the policy framework

Current policy for an inclusive information society has developed on three levels: national, local and regional, and EU-level.

The key national-level policy and strategies with inclusive information society objectives are: the NAPincl (National Action Plan Against Poverty and Social Exclusion) and Ireland's Employment Action Plan, both of which are policy mechanisms responding to objectives and guidelines agreed at EU-level. Both policies are currently being revised; the new NAPincl will incorporate the current National-Anti Poverty Strategy (NAPS).

Other national-level strategies include the Government's Action Plan on the Information Society, *New Connections*, in which eInclusion is one of the seven pillars, and the new social partnership agreement (Sustaining Progress) which for the first time articulates a specific concern for "including everybody in the information society."

A key strategy at local level is guidelines developed by the Department of the Environment and Local Government for the County/City Development Boards (CDBs). The guidelines recommend developing social inclusion strategies at local level in coordination with key national and public policies such as national anti-poverty strategy and information society policy.

Many City and County Councils and CDBs have developed integrated ICT strategies and also social inclusion strategies. At regional level, two active information society strategies and initiatives - in the South-East Region and the Shannon e-Region - articulate inclusive information society goals.

At EU-level, ICT and social inclusion have been addressed across a number of policy areas. eEurope 2005, the core EU-level information society policy, makes eInclusion a priority. In addition the ESDIS High Level Group of representatives from Member States produced a strategy framework to promote eInclusion at Member State level.

3: Measuring information society development

Before developing strategies to foster an inclusive information society, the extent of the challenge needs to be understood. The study conducted an independent analysis of MRBI survey data from late 2002. The analysis developed new indicators, including a DEX score (Digital Equality Index) which can be used to measure inclusive information society development.

The analysis found that 55 percent of Irish adults are late adopters - defined as "adults without Internet access or using it less than once a month." The analysis identified the extent to which different demographic groups and geographical areas are included in the information society and highlighted the groups most at risk of exclusion.

4: Identifying target groups for public policy intervention

The study matched the results of the survey analysis with CSO statistics from the same period (November 2002). This allowed estimates to be made of the numbers of late adopters in the groups most at risk of exclusion from the information society.

Five demographic groups were identified as priority targets:

- *Women with home duties.* An estimated 425,000 women with home duties in Ireland are late adopters - 78 percent of all women with home duties.
- *Retired people.* An estimated 235,000 retired people are late adopters - 90 percent of all retired people.
- *Tradesmen/skilled workers* (e.g. electrician, carpenter). An estimated 145,000 tradesmen/skilled workers are late adopters - 68 percent of all tradesmen/skilled workers.
- *Workers in agriculture, forestry or fishing.* An estimated 95,000 workers in agriculture, forestry or fishing are late adopters - 85 percent of all workers in these sectors.
- *Unemployed.* An estimated 90,000 of all unemployed people are late adopters - 73 percent of all unemployed people.

In addition, a large number of workers in other occupational categories are late adopters and a smaller number of students.

5: Motivating the target groups to engage with ICT

Finding ways to motivate late adopters to use the Internet is a considerable challenge. Late adopters need to be encouraged to get over barriers such as: "*The Internet is too complicated,*" and "*I don't know enough about it.*" The stakeholder consultations identified the main priorities as:

- Raising awareness of the benefits of ICT
- Focusing communication strategies on a simple message, delivered by peers
- Building in learning supports to all ICT 'taster' programmes
- Addressing confidence and trust issues
- Stimulating demand for ICT among late adopter groups

Current Irish projects that motivate late adopters are highlighted. International projects include awareness-raising campaigns in Germany aimed at women and senior citizens.

6: Supporting local and community content development online

A good way to stimulate Internet use is to increase the availability of relevant local content online. A major US study found that most of all, late adopters want local information about their communities. The stakeholder consultations identified the main priorities as:

- Ensuring quality and promoting good practice in online content development
- Leveraging the knowledge base

- Engaging users and addressing their needs through local consultations
- Developing joined-up approaches to community publishing
- Funding groups to develop content
- Expanding awareness of local government

Irish projects that promote local content development are highlighted. International projects include "Netmums" in England, Scotland, Northern Ireland and Wales - web-sites developed and run by mums at home that provide support information for anyone caring for children.

7: Providing online Government services and information for the target groups

The study analysis found that large numbers of late adopters are interested in gaining access to Government services and information through the Internet, suggesting that if delivered with late adopter groups in mind, online Government could be a good way to motivate late adopters to use the Internet. The stakeholder consultations identified the main priorities as:

- Consulting users about their information and service needs
- Raising awareness of e-inclusion in the public sector and government
- Transforming the processes for delivering government services
- Engaging citizens in the vision for e-government
- Developing standardised, user-friendly interfaces
- Providing mediated access and information services suited to target groups

Among the international projects highlighted is the Government of Canada online service - rated top by Accenture - which has an integrated user research and consultation process.

8: Ensuring ICT access, infrastructure and broadband

For most late adopters, Internet access refers initially to free, public Internet access points. A large number of late adopters are library users and could be motivated to gain access to and use the Internet in libraries. However most late adopters never visit a library and other kinds of access are needed for them. The stakeholder consultations identified the main priorities as:

- Ensuring affordable, flat rate home Internet access
- Making public Internet access more widely available to late adopters
- Strengthening the Internet access capacity of libraries
- Considering schools as centres for community access and learning
- Ensuring broadband connections for late adopters
- Articulating the needs of users to service developers

Broadband projects across Ireland are highlighted. Among the international projects is the Community Broadband Concept devised by British Telecom to test delivery of ADSL to low demand areas not normally considered viable for upgrade to ADSL.

9: Ensuring ICT learning and skills for the target groups

Large numbers of late adopters are interested in ICT training. Many have literacy difficulties. Providing adequate learning and training opportunities and supports is a considerable challenge. The stakeholder consultations identified the main priorities as:

- Prioritising ICT learning capacity over ICT skills acquisition
- Recognising community education's important role in informal ICT learning
- Supporting formal education settings in delivering ICT training
- Focusing on workplace and apprenticeship programmes for ICT learning
- Considering certification and accreditation

Among the international projects highlighted is a community information technology programme in Australia for unemployed people that blends literacy skills, training in computer skills and work experience - aimed at recycling computers for use by non-profit organisations.

10: Developing ICT capacity in community and voluntary organisations

The European Commission has called the voluntary sector "an essential stakeholder for eInclusion." The Information Society Commission has highlighted the vital role of the sector in numerous reports and has in the past made key recommendations to build ICT capacity in community and voluntary sector. However the poor ICT capacity within the sector continues to be a barrier to inclusive information society development. The stakeholder consultations identified the main priorities as:

- Providing ICT advice and supports
- Developing ICT training programmes for staff and volunteers
- Raising the public profile of community ICT
- Developing funding mechanisms that community and voluntary organisations can gain access to directly
- Encouraging and brokering partnerships for large-scale projects

Among the international projects highlighted is the "Direct Support" programme funded by the UK Department for Education and Skills that offers a free advice and mentoring service for the community and voluntary sector in England.

11: Consolidating knowledge about an inclusive information society

Understanding the needs of late adopters and their engagement with ICT is a major priority for inclusive information society development. However knowledge about

late adopters in Ireland is very underdeveloped. The stakeholder consultations identified the main priorities as:

- Designing cost-effective and useful solutions by understanding user needs
- Raising the profile of research activities and strengthening research co-ordination
- Disseminating and promoting research
- Ensuring standardisation of indicators and audits
- Researching the capacity and needs of the community and voluntary sector
- Leveraging the community and voluntary sector's knowledge
- Evaluating ICT pilots and projects

Current Irish research projects in this area are highlighted. Among the International projects is action research conducted with local residents by a university in Finland, to identify their requirements and support them in producing online publications tailored to need.

12: Ways forward

Inclusive information society development is a dynamic and ongoing process, shaped by opportunities, challenges and responses. This report presents a framework for reviewing progress and developing coherent strategies to ensure that citizens' needs and involvement are prioritised and social, civic and economic benefits can be achieved.

Recommendations

2: Developing the policy framework

Irish policy for an inclusive information society has made a good start but is weak and fragmented and urgently needs focus, strengthening and coordination. eInclusion policy needs to be developed into a strong national strategy with clear actions, targets and priorities. Recommendations focus on policy coherence and streamlining mechanisms.

RECOMMENDATIONS

2.1: Develop a National eInclusion Action Plan

The Information Society Policy Unit (ISPU) in the Department of the Taoiseach should develop a National eInclusion Action Plan with clear actions, targets and priorities. The Action Plan's main function should be to mainstream eInclusion actions and targets into existing policy mechanisms.

All the national, local and regional policies with eInclusion elements can be integrated into three policy mechanisms: the NAPIncl, the Employment Action Plan, and the Guidelines for the City/County Development Boards (CDBs). The eInclusion Action Plan should ensure that eInclusion actions are included in policies integrated into these three policy mechanisms.

The Action Plan should also coordinate eInclusion actions in the social partnership agreements, coordinate development of and responses to eInclusion policies at EU-level, and coordinate the inputs from research, surveys and evaluations on eInclusion into eInclusion policy. Chart 2 illustrates the linkages between the eInclusion Action Plan and these various elements.

2.2: Ensure evidence-based policy on eInclusion

The eInclusion Action Plan should be evidence-based: grounded in survey data, evaluations of eInclusion programmes and projects, and Irish and international research on an inclusive information society. There should be a direct link between the eInclusion Action Plan and the eInclusion data gathered by the CSO (recommendation 3.1) and the information coordinated by the eInclusion Research Information Center (recommendation 11.1).

2.3: Develop an eInclusion policy website

Develop an eInclusion policy and strategy website that links all the policy documents engaging with eInclusion at national, local and regional levels and at EU-level - this information can help to strengthen the three primary policy mechanisms, allowing them to draw on a wider range of resources. Much stronger linkages could be developed between national policies, local authority strategies, and EU-level

policies. The eInclusion policy website should be linked to the eInclusion research website (recommendation 11.1) that also links to eInclusion projects in Ireland.

3: Measuring inclusive information society development

Before developing strategies to foster an inclusive information society, the extent of the challenge needs to be understood. If inclusive information society is an economic, political and social priority, benchmarks need to be established and clear indicators developed to ensure progress is measurable and the impact of investment and actions can be evaluated. Recommendations focus on eInclusion indicators and surveys.

RECOMMENDATIONS

3.1: Conduct eInclusion surveys through the Central Statistics Office (CSO)

Regular surveys on Internet use by different demographic groups and areas should be carried out by the CSO, with data integrated with CSO figures for employment and occupational categories. The data should feed directly into the eInclusion Action Plan. The CSO data should also be presented in a way that helps local and regional authorities to assess the impact of and develop strategies for eInclusion and broadband deployment.

3.2: Use inclusive information society indicators for benchmarking and monitoring inclusive information society development

The three indicators described in Chapter 3 of this report can be used for at least the next five years to measure basic levels of inclusion in the information society. They can be used now to develop public policy for an inclusive information society. eInclusion benchmarking and monitoring activities should be coordinated with the CSO, the Combat Poverty Agency, and the Government's Steering Group on Social and Equality Statistics.

3.3: Include eInclusion indicators in the new NAPS strategy

The Information Society Commission recommended in its latest report that Government should ensure that the National Anti-Poverty Strategy (NAPS) and all other social inclusion measures include appropriate indicators to reflect new risks of social exclusion associated with the emergence of the knowledge society. This study endorses this and recommends that the indicators developed by this study should be considered for NAPS in Ireland and the NAPIncl at EU-level.

3.4: Develop new indicators and improve data collection

In the medium term, new indicators will be needed to develop a more complex understanding of the extent to which Internet use makes a difference in peoples' lives and the ways in which adults use and benefit from a variety

of digital technologies. To develop these new indicators and to improve the data for the current indicators, future Irish surveys commissioned by the Government on ICT use can be improved in the following ways:

- Collect data that identify the following groups known to be at risk of social exclusion: lone parents, people with disabilities, people with low literacy levels, ethnic minority groups and travellers.
- Coordinate data collection efforts by the CSO and surveys commissioned by commercial companies (i.e. MRBI surveys). All eInclusion surveys should collect employment and occupation data in the categories used in the QNHS surveys: persons classified by ILO economic status, persons in employment (ILO) classified by broad economic sector, and persons in employment (ILO) classified by NACE economic sector.
- Improve the data related to ICT skills. The current data are vague and do not distinguish between IT training and ICT (Internet) training. Training should be broken down into informal learning and formal training. Questions related to IT skills certifications should be included.
- Improve the data related to use of e-government. The current data are restricted to a specific set of online government services. The data should be coordinated with eEurope 2005 indicators for use of eGovernment. New indicators should be added related to use of online local government information and services and e-democracy.
- Start collecting data on access to and use of broadband and other Internet infrastructure.
- Start collecting data on use of e-learning and e-health, with indicators coordinated with eEurope 2005 indicators.

4: Identifying target groups for public policy intervention

Focused public policy interventions achieve measurable outcomes. The late adopter and high risk groups have been identified in this study. Recommendations focus on developing co-ordinated actions to monitor their progress in information society development and identify new target groups for public policy interventions.

RECOMMENDATIONS

4.1: Prioritise specific target groups

The five short-term target groups should be given priority in the national eInclusion Action Plan and all eInclusion activities. They are: women with home duties, retired

people, tradesmen/skilled workers, workers in agriculture, forestry and fishing, and unemployed people. Within these target groups, those experiencing multiple exclusions and those most excluded should be given particular attention. The most excluded groups are identified in the NAPincl - National Anti-Poverty Strategy.

4.2: Set targets for increasing engagement with the Internet

In the National eInclusion Action Plan, targets should be set for increasing the engagement of these groups with the Internet. These targets should reflect the expected outcomes of eInclusion initiatives.

4.3: Monitor changes in levels of engagement

Using the indicators developed in this report (DEX scores), monitor the changes in the levels of engagement with the Internet and other ICT by these target groups on an annual basis. The annual review may identify new priority target groups.

5: MOTIVATING THE TARGET GROUPS TO ENGAGE WITH ICT

Engaging late adopters in the information society can result in individual and collective economic, civic and social benefits but finding ways to motivate late adopters is a challenge. Recommendations focus on raising awareness of the benefits of the Internet among late adopters, policy makers and the public.

RECOMMENDATIONS

5.1: Hold a national conference on eInclusion

Hold a national conference and networking event on eInclusion for community ICT projects, policy-makers and researchers. This conference should highlight the outcomes of eInclusion projects - such as CAIT Initiative and other community projects - and eInclusion research and promote the exchange of key learning. Conference highlights should be published and widely distributed.

5.2: Conduct an awareness campaign

To motivate the target groups to engage with ICT, a national awareness and motivation campaign aimed at the two largest target groups - women with home duties and retired people - should be developed. The messages for the campaign should be based on the results of the needs analysis of the target groups (recommendation 7.1). Sponsorship from private sector companies and partnerships with media outlets - such as magazines and radio programmes aimed at women and seniors - should be considered.

5.3: Leverage existing government communications with the target groups

Review the types and frequency of Government communications with the target

groups to leverage existing interactions. This should include, for example, postal mailouts to pensioners and those receiving other social allowances and benefits. The review should consider how these communication processes can be used for raising awareness of information society benefits to the target groups, for example through leaflets as part of information campaigns and by highlighting Government websites on printed literature to particular target groups.

5.4: Promote safe Internet use

The Information Society Commission's Legal Affairs group is developing an awareness raising campaign, building on the recommendations of the ISC / LAWG Building trust through the Legal Framework (Dec 2002), encouraging a common approach and language, to build confidence and trust and ensure safe use of the Internet. This study strongly supports their Empowerment initiative and recommends that the fears of late adopters be specifically addressed.

5.5: Promote greater societal engagement with ICT

The Information Society Commission recommended in its latest report that Government needs to consider the introduction of specific measures to promote greater societal engagement with Internet technologies as a key element of overall strategies designed to bring about greater engagement with these technologies in the enterprise sector. This study endorses this and recommends that the measures outlined in this report should be considered as key to promoting greater societal engagement with Internet technologies.

6: Supporting local and community content development

The Internet can provide a means of access to diverse social, cultural, civic and commercial information. The demand is increasing for relevant local information. Recommendations focus on developing a strategic approach, building capacity to develop quality content, and encouraging a joined up, sustainable approach to local and community publishing.

RECOMMENDATIONS

6.1: Support CDBs to develop capacity in eInclusion and content for late adopter groups

Support City/County Development Boards to develop a strategy for eInclusion and community publishing, including online community content for late adopter groups. The Social Inclusion Coordination (SIM) group should draw up an ICT plan with each CDB for their county/city to address eInclusion. Plans need to be developed in partnership with the community and voluntary sector fora, other community groups, partnerships, leader groups and community enterprise boards. All the groups on the local SIM groups need to also buy into it, i.e. health boards, agencies and social partners. Seed funding needs to be provided for these plans.

6.2: Prioritise community partnerships for eInclusion for IS funding

The Information Society Fund should prioritise projects that focus on community partnership initiatives for eInclusion and knowledge exchange - i.e. partnerships between community organisations, CDBs, Government departments or social partners. National voluntary organisations may not find it easy to find government partners and partnerships may need to be facilitated. Criteria for funding should include the incorporation of best practice guidelines and eInclusion evaluation.

6.3: Develop guidelines for local and community content

Develop a strategy document with guidelines for publishing local and community content for local authorities and community organisations. The strategy should also advise on developing co-ordinated approaches to community publishing, and ensuring usability, accessibility and sustainability.

6.4: Explore new business models

A strong business model must underpin the development of community/county web portals. New ways of doing this need to be explored, such as linkages with the IT sector and the Chambers of Commerce to share map-related data. The development of community web portals that provide comprehensive local information for citizens should be driven by strong local partnerships.

7: Providing online Government services and information for the target groups

E-government services are central to information society development and can act as a key stimulus to engage the public. An EU benchmarking survey found that use of online Government services in Ireland is among the lowest of the Member States. Recommendations focus on establishing user needs and developing best practice to ensure effective delivery of government services.

RECOMMENDATIONS**7.1: Conduct a needs analysis**

Conduct an analysis of the needs for Government services and information of the five target groups. National voluntary organisations working with these groups should be funded to give feedback on the research methodology and the draft research report. The analysis should focus on how using the Internet can meet these needs and be beneficial to the target groups. The knowledge gained from this project should be used to improve delivery of online Government services and information and also to develop key messages for awareness and motivation activities.

7.2: Ensure compliance with the NDA IT Accessibility Guidelines

The Information Society Commission recommended in its latest report that the NDA should establish a monitoring process to determine levels of compliance with the IT

Accessibility Guidelines and whether further actions may be needed to promote their adoption. This study endorses this recommendation and proposes that the monitoring process incorporate a review of accessibility action plans and procurement practice in public funded bodies. This is in line with recommendations from *Equal Citizens*, the Disability Legislation Consultation Group (2003) proposal on core elements for disability legislation.

7.3: Develop a quality assurance symbol

Quality standards and guidelines for usability of public websites need to be established and a quality seal/ symbol developed to highlight compliant sites. REACH, the public service broker needs to be supported to be an exemplar, and flagship projects for citizens and integrated services pilots should aim for compliance.

7.4: Encourage achievement of NDA Accessibility Award

The NDA is developing an accessibility award to promote and acknowledge the accessible public services in public funded bodies. This award will incorporate all aspects of accessibility including the built environment, customer service and information and communication technologies. Achieving this award is integral to the delivery of a quality customer service, as outlined in the Department of the Taoiseach's *Sustaining Progress* (2003) report. Public bodies should be encouraged to achieve this award.

8: Ensuring ICT access, infrastructure and broadband

ICT and broadband are enabling tools and infrastructures for accessing, developing, using and sharing information and knowledge. Recommendations focus on developing coherent and inclusive strategies to ensure involvement of community interests in infrastructure development and consultation on user needs.

RECOMMENDATIONS

8.1: Audit current public Internet and broadband access, provision and support

Conduct an audit of current public Internet and broadband access, provision and support to determine national capacity to provide Internet and broadband access to late adopters. This audit should inform and help to develop the eInclusion Action Plan. The audit should examine if the ICT support structure for this provision is keeping pace with ICT developments. A roadmap for future provision should include short-term and long-term targets for home access, work access and public or community access (libraries, schools, community centres and commercial options). Disadvantaged communities, such as the RAPID and CLAR areas should be targeted for community access. Public Internet points should be seen as an interim objective, with long-term objectives focused on home access. The audit could also assess the scope for an ICT bank (using a foodbank model) to distribute surplus PCs to those in need.

8.2: Expand the capacity of libraries for outreach to late adopters

Conduct an audit of the current and future capacity of the public library system to provide broadband Internet access to late adopters. This audit should determine the potential for expansion of the current public Internet provision in libraries. Specifically, assess the ability of the public library system to provide broadband access to the huge number of late adopters without Internet access - both library users and those who never visit libraries. This analysis should include surveys of non-library users in the target groups to determine why they do not visit libraries. The outreach capacity of public libraries to these target groups should be explored and funded.

8.3: Assess the status of schools' engagement with community ICT

Determine the potential of schools as broadband and Internet access points for their local communities and assess value for investment of broadband in schools. Working with the Department of Education, conduct a study to examine how schools - both primary and secondary - could be supported to develop visions of themselves as centres for community learning, community Internet access, and community ICT learning and training, and to provide value for investment in broadband capacity in schools. Possibilities to be explored include: supervised open Internet access for the local community after school hours, and access for community-based ICT learning and training programmes.

8.4: Develop digital maps of each county

In its most recent report, the Information Society Commission recommended that Government should put in place appropriate arrangements to ensure that good quality independent information on telecommunications infrastructure is available, including quality mapping to support ongoing planning and policy development. This study endorses this and recommends that digital profiles of each county and region should be developed that map current telecommunications and broadband infrastructure, Wireless Local Area Networks and ICT pilots. These should be used to benchmark and monitor broadband infrastructure and services and be updated regularly to keep the public informed of progress.

8.5: Conduct a public consultation on broadband for community ICT

To help establish and stimulate demand for broadband services, a public consultation should be conducted to raise awareness of national and regional plans for broadband and to investigate how communities' needs could be addressed by service providers and content producers.

9: Ensuring ICT learning and skills for the target groups

Lifelong learning has become a key public policy focus, with the need for ICT literacy widely recognised. For late adopters of ICT there are many challenges to gaining competency in ICT. Recommendations focus on developing a coherent and strategic approach to ICT skills and learning.

All these recommendations endorse and strengthen previous recommendations in this area that have not yet been implemented by Government. The most recent Information Society Commission report (ISC, 2002) highlighted that a significant structural shift is needed in the education and training sector to support a culture of lifelong learning. The current study underlined that without a commitment to making this structural shift, inclusive information society development cannot be realised.

RECOMMENDATIONS

9.1: Prioritise late adopters for ICT literacy programmes

Develop a strategic approach to increasing learning and skills in the target groups. The Information Society Commission recommended in its latest report that the Government must give high priority to the establishment of a national ICT literacy programme. This study endorses this and recommends that late adopters should be prioritised in this programme. Working with national literacy and community-based training bodies, a five-year strategy for increasing ICT learning and skills in the five target groups should be developed. The document should include: outreach and motivation strategy; development of ICT skills and core skills; social and cultural supports; guidance and mentoring and literacy supports. Targets should be set for the next five years.

9.2: Develop a strategy for increasing ICT skills by late adopters in the workforce

Develop a more strategic approach to increasing ICT skills in the workplace by late adopters. In its latest report, the Information Society Commission endorsed the recommendations of the Taskforce on Lifelong Learning in relation to workplace learning. This study also endorses these and recommends that working with social partners, industrial development agencies and national training organisations, a five-year strategy should be developed for increasing ICT skills in late adopters in the labour force. The strategy should in particular focus on older workers who could increase their level of Internet skills which would be useful to them in new careers or retirement.

9.3: Support employers to develop ICT training plans

The Information Society Commission recommended in its latest report that where it is appropriate in the workplace, support and assistance should be provided through the National Training Fund for the development of an ICT training plan to include basic computer skills and for the encouragement of companies to undertake training by alternate means such as online and distance learning. This study endorses this and recommends that training should be aimed at increasing skills to use the Internet for a range of practical purposes.

9.4: Integrate ICT into mainstream and informal education

The Information Society Commission recommended in its latest report that basic ICT

skills training for adults should be established as a key component of the Back to Education Initiative and should also, as far as possible, be integrated as a core component of mainstream education and training. This study endorses this and recommends that training should be aimed at increasing skills to use the Internet for a range of practical purposes.

10: Developing ICT capacity in community and voluntary organisations

The community and voluntary sector is widely recognised as an essential stakeholder and catalyst for inclusive information society development. Poor ICT capacity in the sector poses a serious challenge in this context. Recommendations focus on resourcing and supporting the community and voluntary sector and encouraging and recognising leadership.

The first recommendation, for a technical support system for the sector, has been made in previous information society reports but has not yet been implemented by Government. This study highlighted that the lack of technical support in the sector and the lack of movement by Government in this area are barriers to inclusive information society development.

RECOMMENDATIONS

10.1: Develop a technical support system and service for the community and voluntary sector

Conduct a feasibility study for the development of an ICT advice and technical support service for the community and voluntary sector. This should explore both a telephone-based support structure and face-to-face supports. Based on the study results, the technical support system should be put in place as rapidly as possible.

10.2: Support wider community development objectives with ICT

The Information Society Commission recommended in its latest report that the Minister for Community, Rural and Gaeltacht Affairs should bring forward early proposals in relation to the role of ICT in supporting wider community development objectives, building on the evaluation of the CAIT initiative. This study endorses this and recommends that a technical support system for the community and voluntary sector (recommendation 10.1) should be developed as a way of ensuring that ICT can support wider community development objectives.

10.3: Provide a fund to encourage leadership and innovation

ICT Champions who have the commitment, dedication and ideas need to be supported. An ICT Champion Fund should be established to support mentors and champions working with community and voluntary organisations. Priority

should be given to projects building capacity in community publishing, encouraging collaboration with the private sector and encouraging secondment of personnel from ICT industry and research institutes.

11: Consolidating knowledge about an inclusive information society

New imperatives, challenges and opportunities for government and society shape the development of an inclusive information society. Recommendations focus on the consolidation of knowledge, the development of knowledge networks and co-ordination and dissemination of research on inclusive information society.

RECOMMENDATIONS

11.1: Support the development of centralised information on eInclusion research

An eInclusion Research Information Centre - virtual or physical - to share information on eInclusion research in Ireland, at EU-level and wider internationally should be developed and supported. This resource should be located in an academic research unit or department. The Centre should develop a website with links to eInclusion research and projects in Ireland. This repository could be developed into an information society research centre - which again could be physical or virtual - that could act as a central contact point and knowledge base, facilitating information society research and networks, linking policy, research and practice.

11.2: Fund research on ICT and social inclusion

Fund a national research project exploring the relationship between ICT and social inclusion in Ireland, with a particular focus on how the Internet can increase social inclusion by marginalised groups. Groups such as lone parents, people with disabilities, migrants and ethnic minorities, and people with literacy difficulties should be included. The research project should be managed by a public body with a social inclusion remit and research capacity, such as the Combat Poverty Agency.

11.3: Encourage qualitative research

We remain largely uninformed about actual experiences of change and the impact of having access or not to ICT and the Internet. Qualitative studies would help promote greater understanding of ICT and their real-life use. Comparative research is recommended to look critically at the consequences of access and non-access to ICT and the Internet, contrasting routine community and voluntary sector and resident experiences in opposite communities, i.e. communities with wide access and high use of ICT and the Internet and communities with little access and low use of ICT and the Internet. Such research should also highlight perceived problems resulting from use and non-use and identify barriers to digital inclusion in the two different sites.

11.4: Incorporate social inclusion into technology research

All publicly funded research with an ICT or information society dimension should be required to include social inclusion objectives and incorporate appropriate indicators into their evaluation processes. Research guidelines need to be developed to facilitate this.

11.5: Encourage research partnerships with the community and voluntary sector

A proportion of all public R&D funding should be ringfenced for eInclusion research. Priority should be given to action research projects that involve community and voluntary organisations and encourage capacity-building in ICT by the community and voluntary sector.

11.6: Develop guidelines for project evaluations

Guidelines for evaluating eInclusion projects should be developed. They should include common indicators for measuring engagement with ICT by specific target groups.

11.7: Hold an EU-level conference on eInclusion

Hold a high profile EU-level conference on eInclusion during Ireland's Presidency of the EU. A major international research conference, with emphasis on inclusive information society development could engage many stakeholders and citizens in the debate and process and provide an opportunity to showcase some of Ireland's successes and explore collaborative research and project opportunities.

Introduction

This report is the outcome of a study and consultation process that explored ways to develop an inclusive information society in Ireland. An inclusive information society has been a Government priority for at least three years. Now for the first time "including everybody in the information society" is part of the social partnership agreement - Sustaining Progress (2003-2005).

Including Everybody in the Information Society

The growing influence of information and communication technologies in our daily lives is transforming the way we interact and do business. As more and more economic and social activities, such as education, commerce, learning and entertainment, move to digital forms of delivery, people who cannot access ICT are potentially at a growing disadvantage. The Government's strategy to realise the potential of the Information Society prioritises the development of an inclusive information society and recognises individuals, communities and businesses as key stakeholders in this regard. This extends beyond raising awareness and providing points of public access to the Internet. Measures are needed to build the capacity necessary to support inclusive Information Society development, to facilitate access and to actively promote participation. The Government and the Social Partners will work to develop coherent strategies to promote participation among those on low-income and late adopters.

Department of the Taoiseach (2003b), *Sustaining Progress Draft Agreement*

The study explored and developed 10 priority actions for an inclusive information society in Ireland:

- Develop a policy framework to ensure strong eInclusion policies and strategies at national and local levels
- Measure the levels of engagement with ICT by different demographic groups and areas and identify those most at risk of exclusion in information society development
- Identify target groups for public policy intervention, to ensure that policies and programmes can be targeted precisely
- Motivate the target groups to engage with ICT
- Support online local and community content development to encourage the target groups to engage with ICT

- Ensure that online Government services and information consider the needs of the target groups
- Ensure that late adopter groups have access to ICT, infrastructure and broadband
- Ensure that late adopter groups have access to ICT learning and skills
- Develop ICT capacity in community and voluntary organisations
- Consolidate knowledge about an inclusive information society and the needs of late adopter groups

This chapter introduces the context of the study - outlining the core aspects of an inclusive information society - and ends with a description of the study methodology. The following chapters discuss in detail the issues involved in the 10 priority actions listed above.

Three aspects of an inclusive information society

The key to an inclusive information society is ensuring that citizens from all demographic groups citizens from all demographic groups - such as the elderly and retired, women at home, people with disabilities, farmers, skilled tradesmen, the unemployed and others - have the opportunity to participate. The three core aspects are:

- Citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.
- Citizens from all demographic groups should have the opportunity to contribute to a knowledge-based economy and society.
- Citizens from all demographic groups should have the opportunity to use the Internet to engage with Government services and participate in democratic processes.

In addition, an inclusive information society includes the active participation of the community and voluntary sector, which has a unique ability to reach out to and understand the needs of marginalised groups.

Provide opportunities for improving the quality of life

The first aspect of an inclusive information society is that citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.

A number of studies have explored the impact that ICT can have on individuals and communities. The most well-known example in Ireland is the Ennis Information Age Town, the largest community technology project in the world. An analysis highlighted the potential of a virtual community to enhance social cohesion within a community which has an existing, strong physical community and a collective pride in its history, culture and technology (McQuillan, 2000 and 2001).

Scotland is a good example of a country taking a proactive approach to improving the quality of life through digital technology projects that focus on promoting inclusion in the information society (Malina and Macintosh, 2003). More generally, the UK has undertaken a variety of initiatives to explore how ICT can improve the lives of the socially marginalised and strengthen disadvantaged communities (Harris, 2000; Harris and Dudley, 2000).

However few studies have directly linked ICT use with improved quality of life. In particular little research has been conducted into the link between ICT and social inclusion. The discussion below is from a recent review of research outlining the perceived social, economic and political benefits of ICT (Foley et al, 2002).

Social benefits include increasing the feeling of belonging of socially excluded citizens as they develop skills in communication and handling information through ICT. Citizens can use email to connect with families and friends abroad. Community networking through the Internet can bring people together.

Citizens can use ICT to pursue leisure activities and purchase products and services online. The Internet provides access to learning materials that can be used by citizens who previously were unable to participate in education. The Internet also allows more flexible and individualised learning possibilities.

Delivery of health information and services are enhanced by the Internet. Citizens can use this health information and make better decisions about treatment and care. For citizens with disabilities, the Internet introduces a range of possibilities for improving quality of life and supplementing physical mobility. For those living in rural and remote areas, the Internet offers opportunities to engage in social interactions more frequently.

Economic benefits for citizens active in the labour force or returning to the labour force include building skills that can open up new employment opportunities and improve work processes. Internet skills also increase the chances of self-employment or success in starting a new business. Opportunities exist also to protect the environment by working from home more often and decreasing the number of commuting trips in cars.

Political benefits include improved access to public services and information at all hours and from any location. For people with physical mobility problems and those with poor

transportation facilities, the Internet allows better interaction with government. It also opens up potential opportunities for increasing political participation.

Foster a knowledge-based economy and society

The second aspect of an inclusive information society is that citizens from all demographic groups should have the opportunity to contribute to knowledge-based economy and society.

The National Economic and Social Council (NESC, 2003) has developed a vision for Ireland in which citizens foster innovation and both contribute to and gain from a knowledge-based economy and society. In this vision, a vibrant Irish society is capable of ongoing transformation by embracing diversity and initiating social and economic innovations. The NESC strategy includes raising the overall level of human capital in Ireland and providing opportunities for all demographic groups to freely participate in learning, education, and skill upgrading.

A comprehensive study of the role of ICT in economic growth was published by the OECD in 2001. The OECD Growth Project found that although the impact of ICT use should not be exaggerated, something new is occurring in the structure of OECD economies. ICT are enabling technologies that are transforming economic activities. However ICT alone are not the key factor in economic growth. What is needed is the right policy mix suited to each country or circumstance.

One of the OECD report's core recommendations to governments is to develop policies to increase the use of ICT. The rise in educational attainment among workers in the 1990s in all OECD countries was related to the labour productivity growth experienced during that period. However increases in the level of post-educational skills may be even more important.

A 2002 study for the European Commission on human capital in a global and knowledge-based economy made similar findings regarding post-educational skills. The study found that investment in people is both a crucial growth factor, particularly in the context of rapid technological change, and an important instrument for enhancing social cohesion.

The EU study's five recommended priority objectives include three related to inclusive information society development: give technology-related skills to a broad segment of the population, support life-long learning in order to counteract the accelerated depreciation of skills in times of rapid technological change, and focus on improving the educational opportunities and skills of individuals from disadvantaged backgrounds (de la Fuente and Ciccone, 2002).

One of the core issues this raises is whether citizens not using the Internet are included in the information society through their use of ICT of any sort (mobile

phones, digital television, text and voice messaging), and if "low-tech" solutions should be developed to support an inclusive information society. There is certainly merit in making all kinds of digital channels available to those not using the Internet.

However prioritising "low-tech" solutions will create a new kind of digital divide in which people without the resources, capacity and skills to use the Internet have fewer opportunities to adapt in the information society. Ability with computers, accessible Internet access, and ICT literacy are essential for maintaining adaptability, more sophisticated manipulation of information, employability, and for enabling economic and social benefit from online content and services.

New research suggests that it is important to prioritise using the Internet for learning and education programmes for disadvantaged groups. A recent analysis of ICT use in Irish schools found that "one of the most consistent patterns was the smaller proportion of ICT time devoted to the Internet in disadvantaged and vocational schools. This was matched by evidence from other indicators in Internet use. Although the disadvantaged and vocational schools had better Internet connectivity, they seemed to make less use of it. Fewer of the disadvantaged schools provided email accounts for students, and allowed students to use the Internet for research. Disadvantaged post-primary schools and vocational schools were less likely to have a website than other schools, and fewer of them had student work published on their websites" Mulkeen (forthcoming).

Irish research on ICT diffusion in rural areas also points to the importance of building skills and competencies with ICT rather than simply building the infrastructure: "Attempts to date to diffuse the new technology to rural areas and indeed throughout the indigenous sector generally, illustrates the fact that the associated investment, skills requirements and the level of enterprise required for a significant uptake in ICT services are still lacking in many rural areas" (Grimes, 2000).

It is becoming increasingly clear that developing ICT learning and skills in disadvantaged citizens requires an increased focus on understanding the needs of learners and the barriers that inhibit a learning culture. For example, a recent Irish study highlights the difficulties facing women wanting to return to work and education who find that the key barriers include poor information, lack of childcare, low levels of formal qualifications, inadequate recognition of skills obtained outside the workplace, limited opportunities for flexible work and training, and loss of self-confidence (Russell et al, 2002).

Similar barriers are experienced more widely by people with literacy difficulties in Ireland (Bailey and Coleman, 1999). Research on strategies to increase the levels of ICT awareness and skills among adult learners has highlighted the need to motivate learners and tailoring specific learning approaches to address their concerns about engaging with ICT (Clarke, 1999, 2001).

Improve engagement with online Government services and democratic processes

A third aspect of an inclusive information society is that citizens from all demographic groups should have the opportunity to use the Internet to engage with Government services and participate in democratic processes.

Online Government services offer considerable benefits to citizens. An OECD report on information, consultation and public participation in policy-making reports that all OECD countries regard ICT as a promising tool for strengthening government-citizen connections (OECD, 2001).

All governments are integrating ICT into the public administrations. All recognise the potential of ICT to provide better public services at lower cost, enhance the transparency and accountability of government, and promote greater citizen engagement in democratic processes.

A synergy exists between those who are heavy users of Government services and those who are not using the Internet. Citizens most in need of government information and services are the ones with the lowest levels of Internet use. The biggest challenge to effective delivery of online Government is ensuring that all citizens can avail of improved Government services delivery through the Internet.

Recognise the role of the community and voluntary sector in inclusive information society development

An OECD report on information, consultation and public participation in policy making suggested a strong role for community and voluntary organisations to play in development of online government and e-democracy processes (OECD, 2001).

In the same vein, a 2001 study for the European Commission found that voluntary organisations had an important role to play in encouraging a more inclusive information society in Europe (O'Donnell, 2001). Their role was in four different areas.

- Training and employment - voluntary organisations are an important source of employment and can provide ICT training to their staff, volunteers and clients, as well as introducing basic computer training and learning to disadvantaged groups.
- Democratic participation - voluntary organisations are using the Internet to interact with government on behalf of the disadvantaged groups they work with or represent; the content on many government websites is not directly accessible to people experiencing disadvantage, and voluntary organisations can mediate this content to make it more accessible and relevant.

- Online content - voluntary organisations are producing community media and other content online that responds to the specific needs of people experiencing disadvantage, or introduces their views and voices into a wider public sphere.
- Social capital and participation for all - voluntary organisations are increasing awareness of ICT among people experiencing disadvantage, especially in areas where they are the primary providers of information and services to disadvantaged groups. They can also build trust in ICT by using computer applications that are credible, accessible and affordable and meet the specific needs of people experiencing disadvantage.

In conclusion, the key to an inclusive information society is that citizens from all demographic groups should have equal opportunities to improve the quality of their lives and their communities, contribute to a knowledge-based society, and improve their engagement with Government services and democratic processes. When certain demographic groups are not afforded full opportunities for participation and benefits, social cohesion is weakened and information society development is uneven.

Study methodology

The current study explored ways to ensure that all demographic groups have the opportunity to participate in the information society. The methodology included six elements:

Developing a policy framework - The research team reviewed strategy and policy documents - in areas including information society policy, anti-poverty policy, social policy, economic policy, and adult education and learning at national level and from local authorities and regional bodies - and developed a policy framework for encouraging an inclusive information society. The policy framework is discussed in Chapter 2.

Analysing survey data and developing new indicators - The Government commissioned a market research company, the MRBI, to conduct a survey in late 2002 of engagement of the general population with ICT. This report includes an independent analysis of the MRBI data. The results of a previous MRBI survey in 2000 were also considered. Using this data, the research team developed new indicators to measure inclusive information society development in Ireland. The analysis of the survey data and indicators are discussed in Chapter 3.

Identifying target groups for public policy intervention - Through the survey analysis, target groups were identified. The latest data from the Central Statistics Office (CSO, 2002) was used to establish categories of late adopters and develop estimates of the numbers of late adopters. Further analysis of the survey data developed profiles of the target groups for policy and interventions. The analysis of the target groups is discussed in Chapter 4.

Consulting with key stakeholders and analysing projects - A major focus of the study was consulting with key stakeholders in inclusive information society in Ireland and identifying the lessons learned from projects and activities in which the stakeholders were involved. The research team developed an extensive list of stakeholders - including government departments and agencies; public authorities and bodies working at national, regional and local levels; research and education organisations; community and voluntary sector organisations; and social partners. Invitations were sent to about 100 stakeholders to participate in the consultation process, and 60 responded. A list of participating stakeholders is included in Appendix 4. The results of the stakeholder consultations are discussed in Chapters 5 to 11.

Identifying good practice internationally - The research team reviewed projects internationally that were either recognised by international or national award juries or highlighted as good practice by independent evaluations. Also reviewed were projects that were not independently evaluated or recognised by award juries but were innovative and considered suited to the Irish context. These good practice projects are presented in Chapters 5 to 11, with details outlined in Appendix 2.

Supporting the development of recommendations to Government - The research team developed recommendations to Government based on the results of the analysis and consultations. These recommendations are outlined at the end of each chapter.

Developing the policy framework

This chapter outlines the policy framework for building a more inclusive information society, describing the policy mechanisms at national, local and regional, and EU-levels. Initiatives and projects stemming from these policies are highlighted in Chapters 5 to 11.

The information society is still a fairly recent policy area. The first major EU policy statement on the information society (the Bangemann Report) was published in 1994. Information society policy came of age in Ireland when the first Information Society Commission was established in 1997. It was only at the end of 1999 that eEurope - the first cohesive information society policy at EU-level - came into being.

The Information Society Commission has published a number of documents outlining priorities for reaching the goal of "access for all." In 2003, however, many of the barriers to an inclusive information society remain, despite the work and recommendations of two Information Society Commissions. eInclusion objectives have been well intentioned, but implementation has been hindered by a lack of symbiosis between information society policy and other policy areas, notably social inclusion policy and employment policy

Policy mechanisms for inclusive information society development

Current policy for an inclusive information society has developed on three levels: national, local and regional, and EU-level. The policy mechanisms and strategy approaches at all levels are described below.

National level policy and strategies for an inclusive information society

NAPincl - National Action Plan Against Poverty and Society Exclusion

NAPincl is the core policy mechanism by which an inclusive information society could be developed in Ireland. However the information society elements within the current NAPincl are fragmented and not cohesive.

NAPincl is a comprehensive document prepared at national level in response to agreed EU objectives. The review of NAPincl currently underway in Ireland and all the other Member States should be completed by July 2003. In Ireland the new NAPincl policy will also incorporate Irish anti-poverty strategy; in other words the current NAPS (national anti-poverty strategy) will be merged into the one NAPincl strategy. The national anti-poverty strategy is a nationally agreed set of policy targets and programmes aiming at eliminating the main factors contributing to poverty and social exclusion.

The NAPincl could be developed into a mechanism that clearly articulates Irish policy for an inclusive information society, addressing EU social policy objectives. The new

NAPincl will include national policies in the following four priority areas:

- Policies to fully exploit the potential of the knowledge society and ensure that no-one is excluded
- Policies to help the most vulnerable
- Policies to mobilise all relevant bodies
- Policies to facilitate participation in employment and access to resources, rights, goods and services

Within these priority areas, the revised NAPincl is capable of integrating a wide range of strategies and policies for eInclusion. These include policies to: understand the challenge of eInclusion (measuring inclusive information society development, identifying target groups for public policy intervention); engage late adopters (motivating the target groups to engage with ICT, supporting local and community content development, ensuring online government services and information for the target groups); ensure ICT access, infrastructure and broadband for late adopters; ensure ICT learning and skills for late adopters; build ICT capacity in community and voluntary organisations; and consolidate knowledge about an inclusive information society.

Ireland's Employment Action Plan

Ireland's Employment Action Plan (EAP) is a second policy mechanism that could shape and drive inclusive information society development. Again, however, the information society elements within the current EAP are fragmented.

The EAP is also a comprehensive document prepared at national level but in this case in response to clear EU Employment Guidelines. The EAP is currently being revised to address new Employment Guidelines; the revision will be completed later this year. The new Employment Action Plan will include policies in the following three priority areas:

- Policies for a cohesive and inclusive labour market (including opportunities to acquire ICT skills)
- Policies for full employment
- Policies for quality and productivity at work (including improving human capital)

Ireland's current EAP focuses on life-long learning and thus shares many of the same strategies as the NAPincl mechanism. The new EAP could strengthen its focus on policies and measures to promote inclusion in the information society, in particular in the area of skills training for late adopters in the labour force and late adopters attempting to enter the labour force.

Information Society Policy and social partnership agreements

National information society policy and social partnership agreements share many synergies. The Government information society policy is *New Connections* (2002), which outlines seven policy areas for the information society, the last of which is eInclusion. More recently, the *New Connections Progress Report* was published (2003) and the *Information Society Commission* (2002) published a report which called for a range of measures to support eInclusion objectives.

The key aspects of eInclusion policy in the Government's *New Connections* strategy are: building on the strategy to build awareness and create new access opportunities; building the capacity necessary to support inclusive information society development; actively promoting participation among late adopters of new technologies; building on the potential of ICT to offer new solutions to traditional problems of disadvantage and exclusion; matching technology with need; encouraging the active participation of the community and voluntary sector in information society development; and positioning eInclusion strategy within the context of wider social inclusion objectives and implementation of the *White Paper on supporting voluntary activity*.

The last two social partnership agreements have contained information society objectives but the new draft social partnership agreement, *Sustaining Progress* (2003-2005), contains "Including everyone in the Information Society" as a goal for the first time. This suggests that future partnership agreements could include specific objectives to promote this goal.

Related national policies and strategies

In addition to the key documents described above, other national strategies have developed the inclusive information society agenda. All these policies and strategies could be part of the new NAPincl or *Employment Action Plan* mechanisms in an eInclusion context.

- Both the *White Paper on Adult Education* (Department of Education and Science, 2001) and the *Task Force on Lifelong Learning* (2002) recognised ICT literacy as a basic skill and highlighted the importance of integrating ICT into education and training programmes for adults. The 2002 report states that adults need to be in a position to undertake ICT training either within the workplace to keep abreast of changing technologies, or for those outside the workforce, in education and training centres where they can train in order to gain access to opportunities.
- The *White Paper on the community and voluntary sector* (Department of Social and Family Affairs, 2001) included a strong statement recognising the role of the sector in supporting vulnerable groups and using ICT to both increase the capacity of community and voluntary organisations and transfer ICT knowledge to late adopters. Future development of the *White Paper* activities could outline specific objectives to achieve this role.

- The Equality Authority has at least two publications in which preventing "technology exclusion" for vulnerable groups is addressed (Equality Authority, 2001a and 2001b). In particular their publication on implementing equality for older people contains a recommendation that national training bodies and third level education institutions address the IT training and education needs older people. Their focus on inclusion and IT in an equality context is important and could be strengthened.
- The National Disability Authority (2002) has published - on the Web - the Irish NDA IT Accessibility Guidelines for accessible products and services, including descriptions of high level accessibility goals and difficulties faced by users, and guidance on design techniques and testing methods.
- The Department of Transport (2002) published the report of the Advisory Committee on Information and Communications technology that recommends enabling all citizens and businesses to have equitable access to advanced and broadband ICT by 2005 in order to participate fully in the global knowledge society. The report specifies that broadband connectivity to public access points and other public bodies such as libraries and hospitals should be guaranteed.

Local and regional strategies for an inclusive information society

National level strategies for local level development

Three strategies have been developed at national level that are relevant to inclusive information society development at local level. The first is guidelines published by the Department of the Environment and Local Government (2000) for the County/City Development Boards (CDBs) that enable "horizontally" integrated service delivery across actors and agencies at local level. Social inclusion is a major focus of CDB strategies. One recommendation in the guidelines is to develop local CDB strategies in coordination with key national and public policies, including national anti-poverty policy and information society policy.

In a recent related development (February 2003), the Departments of Community, Rural and Gaeltacht Affairs, Environment and Local Government, and Justice, Equality and Law Reform formally recognised CDBs as the central bodies to coordinate local and community development programmes. Effectively this suggests that CDBs should be the bodies charged with delivering inclusive information society development at local level.

The second national-level strategy is the ICT Vision for Local Government developed in 2000 by the Local Government Computer Services Board (LGCSB - Department of the Environment and Local Government). The vision includes developing ICT systems

and processes to facilitate the work of local authorities, supporting strategic decision-making, improving service delivery to local citizens, and enhancing local participation in the decision-making process.

The third set of strategies have been developed by An Chomhairle Leabharlanna (Department of Environment and Local Government). They outline the role of public libraries in the information society and their specific role in an eInclusion context (An Chomhairle Leabharlanna 1998, 1999, 2002, 2003). Public libraries have been the central focus of policy to provide public access to the Internet.

Strategies at Local Authority level

Many City and County Councils, and County/City Development Boards have developed integrated ICT strategies and also social inclusion strategies, although few have explicitly developed inclusive information society strategies. In addition to the strategy documents, many other local authorities have developed specific initiatives to improve inclusive information society development in their local areas (discussed in Chapter 6). Exemplars of strategy documents are:

- The North Tipperary CDB Strategy (2002) which highlights the danger of creating a digital divide and outlines objectives and actions to improve awareness and access to ICT in County Tipperary, including research, marketing campaigns, conducting a technology audit, identifying target groups and a range of other measures.
- The Offaly CDB Strategy (2002) that discusses the digital divide and the need to tackle it in Offaly as well as highlighting some of the benefits of ICT for county residents. The Strategy contains objectives and actions for improving understanding of the issue in Offaly and also access to local information and lifelong learning opportunities.
- The Meath County Council Corporate Plan (2001) which highlights the importance of increasing ICT skills by vulnerable groups in society and describes using ICT for e-democracy activities and to improve local government information delivery. The Plan includes a strategy to foster the creation of an inclusive information society and proposes a range of actions to achieve this, including awareness of the potential of ICT to overcome social exclusion.

Other notable local authority strategy documents with ICT and social inclusion objectives include: South Dublin CDB (2002), Kilkenny CDB (2002), Donegal County Council (2001), Longford CDB, Galway CDB (2002), Wexford CDB, and Dublin City CDB (2002). The Kildare CDB strategy (2002) also includes a vision for ICT.

These local authority strategies indicate vision and leadership at local level that could be nurtured and encouraged at national level. Local strategies can drive standards at national level. In particular, the links and synergies could be strengthened considerably between local and national strategic visions and policy instruments for inclusive information society development. For example, the national NAPincl strategy could include examples of initiatives at local level, and local authority strategies could engage with NAPincl priorities for inclusive information society development.

Strategies at regional level

At regional level, two active information society strategies and initiatives have been developed largely through support of the European Commission. These strategies are fairly autonomous from national and local authority strategies and are guided by EU regional development policy that prioritises information society development.

The newest regional strategy is SEISS (2001) - the South-East Regional Information Society Strategy and Action Plan. The SEISS plan has six programmes for action: regional identity and coordination, ICT awareness-raising, ICT demand stimulation and support, ICT skills development, ICT supply sector support, and ICT access and infrastructure. Actions related to inclusive information society development include e-community initiatives, regional public access programmes, and awareness-raising in the community.

The second strategy is the Shannon e-region Information Society Partnership Programme Action Phase (SHIPP) which recently published its final report (Shannon Development, 2002). The SHIPP strategy was based on a collaborative approach between public and private sector organisations and had six action areas: infrastructure, awareness, learning, community, enterprise, and public services. Specific actions related to inclusion were a radio programme series for late adopters and delivering an Equalskills ICT training programme for late adopters.

EU-level policy and strategies for an inclusive information society

Since the Lisbon European Council in March 2000, achieving an "information society for all" has become a policy priority for the European Union. At EU-level, ICT and social inclusion have been addressed by: the European Social Agenda (the Union's work programme in the fields of employment and social affairs); the European Employment Strategy, backed up with financial support from the European Social Fund; regional development strategies; the eLearning Action Plan covering education and training; and the Social Inclusion Strategy. eInclusion is also a priority in the core EU-level information society policy, eEurope 2005.

The focus of eEurope 2005 is: connecting public administrations, interactive public services, online health services, development of broadband networks, and legislation for

e-business. Although eInclusion is a priority in eEurope, strategies for eInclusion are very underdeveloped in the policy. The strongest is the e-learning area of eEurope 2005 and the specific action: re-skilling for the knowledge society.

This action proposes that by end 2003, Member States, where appropriate using structural funds and supported by the Commission, should launch actions to provide adults (e.g. the unemployed, women returning to the labour market, etc.) with the key skills needed for the knowledge society, to improve their employability and overall quality of life. Key skills include basic computer skills (digital literacy) and higher-order skills.

In 2001, the European Council adopted a paper published by the European Commission that remains the most comprehensive policy statement on eInclusion in Europe (European Commission, 2001). It was developed by the ESDIS (Employment and Social Dimensions of the Information Society) High Level Group of representatives from Member States - including Ireland - who share information and develop common policy responses to the employment and social dimensions of the information society.

The eInclusion strategy is a framework for public policy across the EU. The policy framework has two main elements: tap the information society's potential for disadvantaged people, and remove barriers in the information society. The main features of the policy framework are described briefly below.

- Appropriate online content and services (accessible and understandable online public services, quality checks of public websites, interactive e-government services for disadvantaged people, encouraging development of online activities in the voluntary sector).
- Fostering local communities through online services and networks (stimulating the development of online communities especially in disadvantaged urban neighbourhoods, and serving the needs of peripheral areas).
- Realising ICT job opportunities for disadvantaged people (social partners ensuring that low-income workers and lower-educated workers are not left behind, incentives for acquiring a recognised certificate of basic ICT skills, ICT expert skills conversion courses, telework for disadvantaged people, online recruitment for workers with special needs).
- Raising awareness of the information society's opportunities (communicating the specific benefits for disadvantaged people, awareness and incentives for access and training, sensitising ICT producers, information providers and political actors to the special needs of disadvantaged people).

- *Developing the policy framework*

- Making access to ICT available and affordable (user-friendly public Internet access points favourable for disadvantaged people, onsite training facilities, targeted financial incentives for the individual purchase or use of ICT, ICT-infrastructures for remote or dispersed locations, exploring opportunities for mobile communications and digital TV).
- Promoting digital literacy for disadvantaged people (basic use of the Internet and public online services, networks of eLearning centres in disadvantaged communities).
- eAccessibility: tackling technical barriers for people with disabilities (accessibility of ICT equipment and web content, adoption of WAI guidelines, design-for-all standards).
- Partnerships of all stakeholders including the regional and local dimensions (public-private partnerships, regional and local actors, social partners, civil society organisations).

Irish national information society policy and eEurope 2005 policy are integrated across a range of priority areas. However the eInclusion strategy developed by the ESDIS group and the Commission has not been acknowledged or addressed in information society policy in Ireland and this is one area with considerable room for strengthening and developing linkages and synergies.

RECOMMENDATIONS

Irish policy for an inclusive information society has made a good start but is weak and fragmented and urgently needs focus, strengthening and coordination. eInclusion policy needs to be developed into a strong national strategy with clear actions, targets and priorities. Recommendations focus on policy coherence and streamlining mechanisms.

2.1: Develop a National eInclusion Action Plan

The Information Society Policy Unit (ISPU) in the Department of the Taoiseach should develop a National eInclusion Action Plan with clear actions, targets and priorities. The Action Plan's main function should be to mainstream eInclusion actions and targets into existing policy mechanisms.

All the national, local and regional policies with eInclusion elements can be integrated into three policy mechanisms: the NAPincl, the Employment Action Plan, and the Guidelines for the City/County Development Boards (CDBs). The Action Plan should ensure that eInclusion actions are included in policies integrated into these three policy mechanisms.

The Action Plan should also coordinate eInclusion actions in the social partnership agreements, coordinate development of and responses to eInclusion policies at EU-level, and coordinate the inputs from research, surveys and evaluations on eInclusion into eInclusion policy. Chart 2 illustrates the linkages between the eInclusion Action Plan and these various elements.

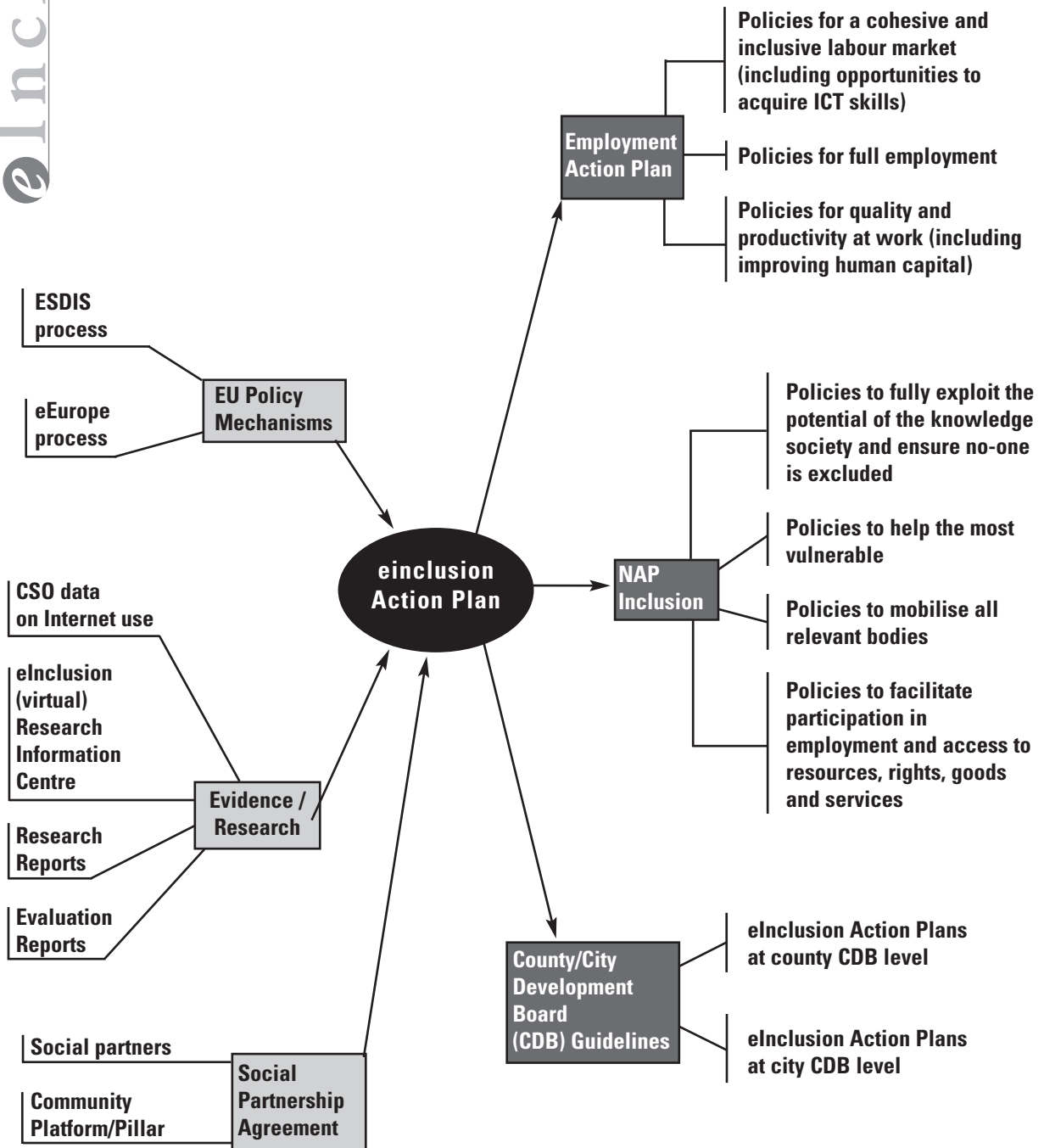
2.2: Ensure evidence-based policy on eInclusion

The eInclusion Action Plan should be evidence-based: grounded in survey data, evaluations of eInclusion programmes and projects, and Irish and international research on an inclusive information society. There should be a direct link between the Action Plan and the eInclusion data gathered by the CSO (recommendation 3.1) and the information coordinated by the eInclusion Research Information Center (recommendation 11.1).

2.3: Develop an eInclusion policy website

Develop an eInclusion policy and strategy website that links all the policy documents engaging with eInclusion at national, local and regional levels and at EU-level - this information can help to strengthen the three primary policy mechanisms, allowing them to draw on a wider range of resources. Much stronger linkages could be developed between national policies, local authority strategies, and EU-level policies. The eInclusion policy website should be linked to the eInclusion research website (recommendation 11.1) that also links to eInclusion projects in Ireland.

Chart 2:
Linkages between proposed eInclusion Action Plan
and policy and research mechanisms



Measuring inclusive information society development

Before developing strategies and initiatives to foster an inclusive information society, the extent of the challenge needs to be understood. This chapter outlines a way to measure inclusive information society development for at least the next five years. It introduces three basic indicators (measures) for determining the extent to which individuals, demographic groups and geographical areas are included in the information society.

These measures are based on Internet use. The premise is that using the Internet at least once a month is the basic requirement for inclusion in the information society.

Mobile phones, text messaging and other digital information and communication processes are also important to information society development. Measuring Internet use may initially seem a crude way of understanding the complex ways in which a range of digital technologies are imbedded in our daily lives.

However, as discussed in Chapter 1, people without the resources, capacity and skills to use the Internet have fewer opportunities to adapt in the information society. Ability with computers, Internet access, and ICT literacy are essential for maintaining adaptability, more sophisticated manipulation of information, employability, and for enabling economic and social benefit from online content and services.

Given that the Internet is the core technology of the information society, measuring access to and use of the Internet is the best way to measure information society development. For this reason, the European Commission will use regular Internet use as a core indicator of information society development in Europe for the foreseeable future.

Measuring inclusive information society development in the European Union

The European Commission uses two primary indicators for citizen access to and use of the Internet - regular use of the Internet and home access to the Internet - to measure information society development. These have been measured to date by a series of Eurobarometer surveys.

EU Indicator: Percentage of individuals regularly (at least weekly) using the Internet: The latest Eurobarometer survey found that the percentage of adults regularly using the Internet was higher in Ireland than the EU average (European Commission, 2002). Member States with a higher percentage of regular use were: Austria, Denmark, Finland, Luxembourg, the Netherlands, Sweden and the UK. Those with a lower rate of Internet use were: Belgium, France, Germany, Greece, Italy, Portugal and Spain.

Ireland's ranking within the European Union for household Internet access has remained fairly consistent in Eurobarometer surveys published over the past two years.

EU Indicator: Percentage of households having access to the Internet at home: The latest Eurobarometer survey found that the rate of household access in Ireland was higher than the EU average (European Commission, 2002). Ireland's ranking among Member States was similar to that for household Internet access, above.

In November 2002, the Commission published the eEurope 2005 benchmarking indicators for measuring information society development across the EU for the next three years. A new series of surveys to be conducted by Eurostat, the European Commission's statistical unit, will in the future include data on Internet access and use accompanied by background variables for age, gender, employment status, education level and location (Objective 1 and non-Objective 1 areas).

Beginning in 2003, the benchmarking indicators for eEurope 2005 will also include: broadband access; use of e-government, e-learning and e-health; and in 2004, levels of ICT skills. There will also be other indicators for individuals and enterprises. The first Eurostat survey using these indicators and background variables is due to be published in October 2003, with the second in October 2004 and the third in October 2005.

Measuring inclusive information society development in Ireland

The Central Statistics Office (CSO) does not collect regular data on Internet access and use in Ireland. Several commercial companies conduct surveys on Internet use from time to time but their results are not always available to the public.

The most comprehensive series of surveys of Internet access and use by the general public were commissioned by the Information Society Commission (ISC) and conducted in 1999 and most recently by the MRBI in 2000 and 2002. The 2000 survey results were published by the ISC (2000). The MRBI data from the 2002 survey were analysed independently for this report.

The 2000 and 2002 surveys have built a solid base of statistical data about Internet access and use in Ireland. However future surveys should be improved and strengthened to collect additional data and to refine certain variables.

In particular, no data are available on Internet access and use by many demographic groups at risk of social exclusion, including: people with disabilities, lone parents, people with low levels of literacy, and minority ethnic groups and travellers. Employment classifications are not coordinated with CSO classifications. Data on

ICT skills levels are unclear, and data on use of eGovernment are also weak. Recommendations for improving future Irish surveys are made at the end of this chapter.

The core weakness of the Irish surveys to date is that the term "late adopter" is not clearly defined and has been used in a vague way. Clear data exist on Internet access and use but there have been no indicators proposed by which "inclusion" in the information society can be measured.

The remainder of this chapter introduces three indicators using the existing Irish data which measure inclusive information society development.

Indicator 1: Percentage of adults accessing and using the Internet

The Irish surveys have a range of indicators for measuring Internet access and use. Indicator 1 gathers the most important into a set that clearly identifies the key features of access and use.

Indicator 1 is a set of five indicators. Together they recognise that Internet use is a developmental process. At one end are adults using the Internet regularly. At the other end are adults not using the Internet and not having a desire to do so.

This set of indicators builds and expands on a key indicator recommended by the European Commission for benchmarking eEurope 2005: the percentage of adults regularly (at least weekly) using the Internet.

The five stages in this development each have an indicator.

Indicator 1.1: Percentage of adults without Internet access and not interested in accessing it.

Indicator 1.2: Percentage of adults without Internet access and very or fairly interested in accessing it.

Indicator 1.3: Percentage of adults with Internet access and using it less than once a month.

Indicator 1.4: Percentage of adults with Internet access and using it once a month or every 2-3 weeks.

Indicator 1.5: Percentage of adults with Internet access and using it frequently - once a week or more.

This set of indicators does not differentiate where the Internet is accessed and used - at work, home, a public point of access, or another place. Chart 3.1 lists these indicators and presents the analysis of the Irish data.

Indicator 2: Percentage of late adopters

The Irish surveys to date have not clearly defined the term "late adopter." This report defines late adopters as: "adults without Internet access or using it less than once a month."

Chart 3.1 shows the percentage of late adopters nationally. The figures were derived from an independent analysis of the MRBI data from 2000 and 2002.

Chart 3.1: Internet access and use in Ireland and the percentage of late adopters

Indicator	MRBI 2000 n=1408	MRBI 2002 n=1394
Indicator 1.1: Adults without Internet access and not interested in having access	38%	36%
Indicator 1.2: Adults without Internet access and very or fairly interested in having access	19	11
Indicator 1.3: Adults with Internet access and using it less than once a month	9	8
<i>(Subtotal: Indicator 2: Percentage of late adopters)</i>	<i>(66)</i>	<i>(55)</i>
Indicator 1.4: Adults with Internet access and using it once a month or every 2-3 weeks	7	7
Indicator 1.5: Adults with Internet access and using it once a week or more	25	38
Totals	99	100

Chart 3.1 shows that the percentage of late adopters decreased from 2000 to 2002. During that time, many Irish adults moved from the first three stages of development into the last two stages. The percentage of adults using the Internet regularly increased from 25 percent in 2000 to 38 percent in 2002.

The national percentage of late adopters in 2002 was 55, meaning that 55 percent of Irish adults did not have Internet access or were using it infrequently.

Indicator 3: The Digital Equality Index (DEX) Score

The Irish surveys to date have not included indicators for inequalities in Internet access and use by different demographic groups or geographical areas.

The Digital Equality Index (DEX) is a new indicator developed for this report. It is flexible enough to be used in any country and could be replicated across Europe or internationally.

The DEX is a user-friendly way of identifying and ranking late adopters - demographic groups or geographic areas. The DEX assigns each demographic group or area a number, called the DEX score. The groups and areas with high DEX scores are those most at risk of exclusion in the information society. The DEX identifies the priority groups and areas for public policy intervention.

Most importantly, the DEX scores can be calculated after each new Irish survey. The new scores can be compared with the old, rapidly identifying if progress has been made.

The DEX was inspired by an indicator called the digital divide index developed in Germany as part of a European research project (Selhofer and Husing, 2002). The German indicator has defined four groups it considers most at risk of exclusion in the information society: women, people aged 55 plus, those with low levels of education, and low income groups. It then measures the extent to which Internet use by these groups varies from the national average.

In contrast, the DEX is more flexible. It does not pre-define the groups or areas at risk of exclusion but rather assigns a score to each demographic group or area for which survey data are available. In this way, each demographic group or area is assessed for risk of exclusion from the information society. New groups or areas may be added or removed from the DEX as new survey data become available.

The DEX uses as its baseline the percentage of late adopters nationally. The baseline for 2002 is 55. The DEX score is calculated as follows:

(Percentage of late adopters for demographic group or area) minus (percentage of late adopters nationally) equals the DEX score.

For example, Chart 3.2 shows the DEX for demographic groups related to employment and occupation. The percentage of late adopters for the demographic groups were determined through independent analysis of the MRBI data.

Chart 3.2 shows in **bold** the employment and occupational groups with the highest DEX scores: women with home duties (housewives), retired, unemployed, trades/skilled

workers, and workers in the agriculture, forestry and fishing sectors. These demographic groups are more at risk of exclusion from the information society than the others.

Some other workers may be in high risk categories not identified by the current data. In the employment and occupational categories with low or negative DEX scores, a percentage of workers and students also do not have access to the Internet or use it less than once a month.

Charter 3.2: Digital Equality (DEX) scores for employment and occupation in 2002

Demographic group	Percentage of late adopters in demographic group	DEX score
Retired	90	35
Women with home duties (housewives)	78	23
Unemployed	73	18
Self-employed at home	62	7
Part/full-time employment at home	61	6
Self-employed outside home	60	5
Part/full-time employment outside home	43	-12
Student	16	-39
<i>National average</i>	<i>55</i>	<i>0</i>
Agricultural, forestry, fishing	85	30
Others (unknown)	69	14
Tradesmen/skilled worker	68	13
Non-office/non-manual	60	5
Shop assistant, trade apprentice	59	4
Supervisory capacity	28	-27
Office employee	27	-28
Managerial capacity	22	-33
Support capacity	19	-36

DEX scores were calculated for all the demographic groups and geographical areas identified in the MRBI data. These included: employment and occupation, household income and class, education, gender, age and location of residence. Appendix 1 contains the DEX scores for all the demographic groups and geographical areas, as well as the sample size for these groups and areas.

Chart 3.2 ranks the demographic groups and geographical areas with a DEX score of 0 or above. A DEX score above 0 means the group or area is at risk of exclusion from the information society. The higher the score, the higher the risk.

Chart 3.2: Demographic groups and areas with DEX scores above zero in 2002

Group or area	DEX score
Retired	35
Class F50 (small farmers)	34
Age 55+	32
Primary school but no qualifications	31
Workers in agriculture, forestry or fishing	30
Women with home duties (housewives)	23
Unemployed	18
Trade apprenticeship	16
Class E (lowest level of subsistence)	15
Class D (unskilled workers)	15
Tradesmen/skilled workers	13
Age 50-54	13
<i>Groups most at risk of exclusion from the information society are above this level</i>	
Household income E20,001-E30,000	11
Household income E10,001-E20,000	10
Rural	9
Class F50+ (large farmers)	9
Class C2 (skilled workers)	9
Age 45-49	9
Group/Inter/Junior Certificate	8
Self-employed at home	7
Part/full-time employment at home	6
Self-employed outside home	5
Non-office/non-manual	5
Shop assistant, trade apprentice	4
Connaught/Ulster	4
Munster	3
Rest of Leinster outside Dublin	2
Women	2
<i>National average</i>	<i>0</i>

Chart 3.2 identifies the demographic groups most at risk of exclusion from the information society. The DEX scores can only be calculated for the demographic groups for which data exist.

Many of these demographic groups can be clustered in the five employment and occupational categories that are also most at risk of exclusion: retired, women with home duties, the unemployed, skilled workers, and workers in the agricultural,

fishing and forestry sectors. Many other late adopters are in other, low risk employment and occupational categories.

RECOMMENDATIONS

Before developing strategies to foster an inclusive information society, the extent of the challenge needs to be understood. If inclusive information society is an economic, political and social priority, benchmarks need to be established and clear indicators developed to ensure progress is measurable and the impact of investment and actions can be evaluated. Recommendations focus on developing eInclusion indicators.

3.1: Conduct eInclusion surveys through the Central Statistics Office (CSO)

Regular surveys on Internet use by different demographic groups and areas should be carried out by the CSO, with data integrated with CSO figures for employment and occupational categories. The data should feed directly into the eInclusion Action Plan. The CSO data should also be presented in a way that helps local and regional authorities to assess the impact of and develop strategies for eInclusion and broadband deployment.

3.2: Use inclusive information society indicators for benchmarking and monitoring inclusive information society development

The three indicators described in this chapter can be used for the next five years to measure basic levels of inclusion in the information society. They can be used now to develop public policy for an inclusive information society. eInclusion benchmarking and monitoring activities should be coordinated with the CSO, the Combat Poverty Agency, and the Government's Steering Group on Social and Equality Statistics.

3.3: Include eInclusion indicators in the new NAPS strategy

The Information Society Commission recommended in its latest report that Government should ensure that the National Anti-Poverty Strategy (NAPS) and all other social inclusion measures include appropriate indicators to reflect new risks of social exclusion associated with the emergence of the knowledge society. This study endorses this and recommends that the indicators developed by this study should be considered for NAPS in Ireland and the NAPIncl at EU-level.

3.4: Develop new indicators and improve data collection

In the medium term, new indicators will be needed to develop a more complex understanding of the extent to which Internet use makes a difference in peoples' lives and the ways in which adults use and benefit from a variety of digital technologies. To develop these new indicators and to improve the data for the current

indicators, future Irish surveys commissioned by the Government on ICT use can be improved in the following ways:

- > Collect data that identify the following groups known to be at risk of social exclusion: lone parents, people with disabilities, people with low literacy levels, ethnic minority groups and travellers.
- > Coordinate data collection efforts by the CSO and surveys commissioned by commercial companies (ie MRBI surveys). All eInclusion surveys should collect employment and occupation data in the categories used in the QNHS surveys: persons classified by ILO economic status, persons in employment (ILO) classified by broad economic sector, and persons in employment (ILO) classified by NACE economic sector.
- > Improve the data related to ICT skills. The current data are vague and do not distinguish between IT training and ICT (Internet) training. Training should be broken down into informal learning and formal training. Questions related to IT skills certifications should be included.
- > Improve the data related to use of e-government. The current data are restricted to a specific set of online government services. The data should be coordinated with eEurope 2005 indicators for use of eGovernment. New indicators should be added related to use of online local government information and services and e-democracy.
- > Start collecting data on access to and use of broadband and other Internet infrastructure.
- > Start collecting data on use of e-learning and e-health, with indicators coordinated with eEurope 2005 indicators.

Identifying target groups for public policy intervention

The previous chapter used DEX scores to identify and rank the groups at risk of exclusion from the information society. This chapter identifies target groups for public policy intervention and draws profiles of these groups.

The analysis uses two data sources: the MRBI data discussed in the previous chapter, and the latest available data from the Central Statistics Office (CSO, 2002). The MRBI data do not identify many social groups at risk of social exclusion: no data are available on the engagement with ICT by people with disabilities, people with low literacy levels, ethnic minorities and travellers, and lone parents. Thus many excluded groups may be excluded also from this analysis.

Employment and occupational categories as target groups

The CSO publishes quarterly surveys that classify Irish adults by principal economic status and occupational category. The principal economic status categories are: at work, unemployed, student, home duties, retired, and others. For those at work, further classifications are made by economic sector and occupation.

Five of the seven target groups are the employment and occupational groups most at risk of exclusion from the information society: the unemployed; women with home duties; retired people; workers in the agriculture, forestry and fishing sectors; and workers in the skilled trades.

The two remaining target groups are late adopters working in all other occupational categories, and students who are late adopters. Future Irish surveys could be improved to more precisely identify these workers.

Using these categories as target groups provides vital information about the focus of the policy interventions needed. Late adopters not at work, or working in occupations with low engagement with ICT, may be targeted through interventions developed with public bodies and the community and voluntary sectors.

Late adopters who are working or who want to be working may be targeted through workplace interventions developed with the social partners. Late adopters who are students may be targeted through interventions developed with training and educational institutions.

Addressing multiple exclusions

Using employment and occupational categories as target groups allows policy interventions to target adults experiencing multiple exclusions. Adults in the short-term target group employment and occupational categories comprise many of the other demographic groups with high DEX scores - high risk groups. For example, many women with home duties also have primary school education with no qualifications and are age 55 plus.

As new Irish data become available through future surveys, other multiple exclusions can be identified and targeted. For example, interventions can be developed to address specific groups of people with disabilities who are also unemployed or who are working in particular occupational sectors.

Identifying target groups and estimated numbers

The latest CSO report indicates there are 3,085,300 adults in Ireland. As previously discussed, 55 percent of Irish adults are late adopters, which means they do not have access to the Internet or use it less than once a month.

The margin of error for the estimates used in this chapter varies according to the sample size for each demographic group; sample sizes are listed in Appendix 1. These estimates should be considered the best available estimates subject to a margin of error.

An estimated 1,700,000 Irish adults are late adopters. Late adopters for 2002 can be classified into two categories: short-term targets and medium-term targets.

Late adopters in the following five demographic groups are the short-term target groups:

- *Women with home duties.* Women with home duties (housewives) are a high risk group (high DEX score). 78 percent of all women in Ireland with home duties are late adopters.
- *Retired people.* Retired people are a high risk group (high DEX score). 90 percent of all retired people in Ireland are late adopters.
- *Tradesmen/skilled workers* (e.g. electrician, carpenter). Tradesmen/skilled workers are a high risk group (high DEX score). 68 percent of all tradesmen/skilled workers in Ireland are late adopters.

- **Identifying target groups for public policy intervention**

- **Workers in agriculture, forestry or fishing.** Workers in these sectors are a high risk group (high DEX score). 85 percent of all workers in these sectors are late adopters.
- **Unemployed.** Unemployed people are a high risk group (high DEX score). 73 percent of all unemployed people are late adopters.

The five groups above could be immediately targeted for ICT training and Internet access programmes.

Late adopters in the following two demographic groups are the medium-term target groups:

- **Workers in other occupational categories.** These late adopters are adults working in all the other occupational categories (low DEX scores or negative DEX scores). In these other occupational categories, even those such as managers and office employees which have high numbers of Internet users, a certain percentage of workers do not have access to the Internet or use it less than once a month.

Classification of this group could be improved with improved survey design in the future. Some of these workers may be in high risk occupational categories that have not been identified by the current data. More work is needed to more precisely identify these workers.

- **Students.** Students as a group are very early adopters (negative DEX score) and thus students as a whole should not be a target for ICT training and Internet access programmes. However 16 percent of students do not have access to the Internet or use it less than once a month and so Internet access and use by this precise group of students should be addressed.

The short-term and medium-term target groups and estimates are outlined in Charts 4.1 and 4.2

Chart 4.1: Short-term target groups and estimated numbers in 2002

Target group	Estimated number of late adopters in target group
Women with home duties (housewives)	425,000
Retired people	235,000
Tradesmen/skilled workers	145,000
Workers in agriculture, forestry, fishing	95,000
Unemployed people	90,000
Estimated total number in the short-term target groups	990,000

Although no data are available on the engagement of ICT by people with literacy difficulties, it is known that 25 percent of Irish adults have literacy difficulties and it is reasonable to assume that many of these adults are in the short-term target groups.

Chart 4.2: Medium-term target groups and estimated numbers in 2002

Target group	Estimated number of late adopters in the target group
Workers in other occupational categories	650,000
Students	60,000
Estimated total number in the medium-term target groups	710,000

Classification of the medium-term target groups could be improved with improved survey design in the future. Some of the workers may be in high risk occupational categories that have not been identified by the current data.

Profiles of short-term target groups

Women with home duties (housewives)

Chart 4.1 illustrates that an estimated 425,000 women with home duties do not have access to the Internet or use it less than once a month.

Given that this target group is not in paid employment outside the home, policy interventions will need to focus on public provision and partnerships with the community and voluntary sector. Many of these women may be seeking paid employment and interventions could also be developed with the social partners.

- Only 20 percent of this target group have ever received IT training. About 33 percent would be interested in taking an ICT training course.
- About 86 percent do not have Internet access at home or any other place. This group would need to be motivated to use public Internet access points - 62 percent overall said they would not be interested in using public Internet access points. More than 66 percent never visit a library.
- More than a third of this group have completed their leaving certificate, and 26 percent have a junior certificate. Another 28 percent have primary school with no qualifications. Few have third level qualifications.

- **Identifying target groups for public policy intervention**

- The household income profile is: 42 percent under €10,000; 42 percent €10,001-€20,000; 9 percent €20,001-€30,000; 7 percent above €30,000. Most of this group are married. Almost half have at least one dependent child.
- The age profile is: 4 percent age 15-24; 12 percent age 25-34; 17 percent age 35-44; 23 percent age 45-54; and 42 percent age 55 plus.
- This group is fairly evenly divided between rural and urban residents and among the provinces, with a higher proportion in the rest of Leinster outside Dublin and also in Munster.

Retired people

Chart 4.1 illustrates that an estimated 235,000 retired people do not have access to the Internet or use it less than once a month.

Policy interventions for this target group will need to focus on public provision and partnerships with the community and voluntary sector.

- Only 14 percent have ever received IT training. About 14 percent would be interested in taking an ICT training course.
- About 90 percent do not have Internet access at home or any other place. This group would need to be motivated to use public Internet access points - 78 percent overall said they would not be interested in using public Internet access points. More than 66 percent never visit a library.
- Only 23 percent of this group have completed their leaving certificate, and 16 percent have a junior certificate. Almost 49 percent have primary school with no qualifications. Almost 11 percent have third level qualifications.
- The household income profile is: 31 percent under €10,000; 57 percent €10,001-€20,000; 7 percent €20,001-€30,000; 4 percent above €30,000. Just over half this group are married. Less than 4 percent have dependent children.
- Two-thirds of this group are men and one-third women. The age profile is: 5 percent under age 54; 95 percent age 55 plus. More than 63 percent of this group live in an urban location. There is a higher proportion in Dublin and also in Connaught and Ulster.

Tradesmen/skilled workers

Chart 4.1 illustrates that an estimated 145,000 tradesmen/skilled workers do not have access to the Internet or use it less than once a month.

Policy interventions for this target group could include partnerships with social partners as well as public provision and partnerships with the community and voluntary sector.

- About four percent use email at work but less than once per month. Only 13 percent have ever received IT training. About 31 percent would be interested in taking an ICT training course.
- About 87 percent do not have Internet access at home or any other place. This group would need to be motivated to use public Internet access points - 58 percent overall said they would not be interested in using public Internet access points. More than 88 percent never visit a library.
- Only 22 percent of this group have completed their leaving certificate, and 38 percent have a junior certificate. About 22 percent have primary school with no qualifications. Almost 12 percent have completed a trade apprenticeship and another 6 percent have third level qualifications.
- The household income profile is: 33 percent under €10,000; 38 percent €10,001-€20,000; 16 percent €20,001- €30,000; 13 percent above €30,000. Just over half this group are married. About 37 percent have at least one dependent child.
- Almost 90 percent of this group are men and 10 percent women. The age profile is: 15 percent age 15-24; 21 percent age 25-34; 18 percent age 35-44; 33 percent age 45-54; and 13 percent age 55 plus. The group is fairly evenly divided between urban and rural and among the provinces, with a higher proportion in the rest of Leinster outside Dublin.

Workers in agriculture, forestry or fishing

Chart 4.1 illustrates that an estimated 95,000 workers in the agriculture, forestry or fishing sectors do not have access to the Internet or use it less than once a month.

Policy interventions for this target group could include partnerships with social partners as well as public provision and partnerships with the community and voluntary sector.

- About four percent use email at work but less than once per month. About 38 percent have received IT training. About 41 percent would be interested in taking an ICT training course.
- About 82 percent do not have Internet access at home or any other place. This group would need to be motivated to use public Internet access points - 67 percent overall said they would not be interested in using public Internet access points. 77 percent never visit a library.

- Only 32 percent of this group have completed their leaving certificate, and 24 percent have a junior certificate. About 30 percent have primary school with no qualifications. Almost 14 percent have a third level qualification.
- The household income profile is: 39 percent under €10,000; 44 percent €10,001-€20,000; 8 percent €20,001-€30,000; 9 percent above €30,000. Just over half this group are married. About 41 percent have at least one dependent child.
- About 77 percent of this group are men and 13 percent women. The age profile is: 16 percent age 15-24; 23 percent age 25-34; 13 percent age 35-44; 23 percent age 45-54; and 25 percent age 55 plus. Almost none of this group lives in Dublin. 95 percent live in rural areas, with a higher proportion in Munster, Connaught and Ulster.

The unemployed

Chart 4.1 illustrates that an estimated 90,000 unemployed people do not have access to the Internet or use it less than once a month.

Policy interventions for this target group could include partnerships with social partners as well as public provision and partnerships with the community and voluntary sector.

- About 16 percent have received IT training. About 29 percent would be interested in taking an ICT training course.
- About 96 percent do not have Internet access at home or any other place. This group would need to be motivated to use public Internet access points - 67 percent overall said they would not be interested in using public Internet access points. 67 percent never visit a library.
- Only 15 percent of this group have completed their leaving certificate, and 35 percent have a junior certificate. About 44 percent have primary school with no qualifications. About 6 percent have a third level certificate or diploma or trade apprenticeship.
- The household income profile is: 55 percent under €10,000; 29 percent €10,001-€20,000; 6 percent €20,001-€30,000; 10 percent above €30,000. Just one-quarter of this group are married, and 63 percent are single. About one-third have at least one dependent child.
- About 65 percent of this group are men and 35 percent women. The age profile is: 23 percent age 15-24; 23 percent age 25-34; 25 percent age 35-44; 10 percent age 45-54; and 14 percent age 55 plus. About 67 percent live in an urban location. About 41 percent live in Dublin and 35 percent in Munster.

Profiles of medium-term target groups

Workers in other occupational categories

In all the other occupational categories - those with low DEX scores or negative DEX scores - a certain percentage of workers do not have access to the Internet or use it less than once a month. Classification of this group could be improved with improved survey design in the future. Some of these workers may be in high risk occupational categories that have not been identified by the current data.

Chart 4.2 illustrates that the estimated number of these late adopters in other occupational categories is 650,000.

Policy interventions for this target group could include partnerships with social partners as well as public provision and partnerships with the community and voluntary sector.

- About 10 percent of this group use email at work but less than once a month. About 76 percent of these workers are working full-time outside of the home. Another 8 percent are self-employed and working outside the home. About 10 percent are full-time working at home and 3 percent self-employed working at home.
- About 40 percent have received IT training. About 33 percent would be interested in taking an ICT training course.
- About 23 percent have Internet access at home or some other place. This group would need to be motivated to use public Internet access points - 50 percent overall said they would not be interested in using public Internet access points. 63 percent never visit a library.
- This group is better educated than the public at large. About 36 percent have completed their leaving certificate, and 24 percent have a junior certificate. About 15 percent have primary school with no qualifications. About 25 percent have a third level qualification or trade apprenticeship.
- The household income profile is: 28 percent under €10,000; 46 percent €10,001-€20,000; 8 percent €20,001-€30,000; 17 percent above €30,000. About half this group are married, and about half have at least one dependent child.
- Slightly more (51 percent) than half this group are women and slightly less than half are men. The age profile is: 14 percent age 15-24; 22 percent age 25-34; 28 percent age 35-44; 24 percent age 45-54; and 12 percent age 55 plus. About 57 percent live in an urban location. They are living all over the country in almost the same geographical spread among regions as the general population.

Late adopters who are students

Students as a whole are very early adopters (negative DEX score) and thus students in general should not be targeted for public policy interventions. However the 16 percent of students not using the Internet have to be addressed.

Chart 4.2 illustrates that the estimated number of students who are late adopters is 60,000. This includes secondary students age 15 plus and full-time students in third level or apprenticeship programmes.

Policy interventions for this target group could be developed in partnership with training and educational institutions as well as public provisions and partnerships with the community and voluntary sector.

- Most of these students, about 73 percent, have received IT training. About 70 percent would be interested in taking an ICT training course.
- About 33 percent have Internet access at home or school or college or another place. However those using the Internet do so less than once a month. About 64 percent of students who are late adopters are interested in using public Internet access points. They are more regular library visitors than other late adopter categories and only 27 percent never visit a library.
- Most of this group - 94 percent - are in the lowest household income bracket of under €10,000. Almost all are single and 91 percent have no dependent children.
- About 42 percent of this group are male and 58 percent female. The age profile is: 30 percent age 15; and 67 percent age 16 to 24. About 61 percent live in a rural location. Geographically, they live all over the country with a smaller percentage in Dublin and a higher percentage in Connaught and Ulster.

RECOMMENDATIONS

Focused public policy interventions achieve measurable outcomes. The late adopter and high risk groups have been identified in this study. Recommendations focus on developing co-ordinated actions to monitor their progress in information society development and identify new target groups for public policy interventions.

4.1: Prioritise specific target groups

The five short-term target groups should be given priority in the national eInclusion Action Plan and all eInclusion activities. They are: women with home duties, retired people, tradesmen/skilled workers, workers in agriculture, forestry and fishing, and unemployed people. Within these target groups, those experiencing multiple exclusions and those most excluded should be given particular attention. The most excluded groups are identified in the NAPincl - National Anti-Poverty Strategy.

4.2: Set targets for increasing engagement with the Internet

In the National eInclusion Action Plan, targets should be set for increasing the engagement of these groups with the Internet. These targets should reflect the expected outcomes of eInclusion initiatives.

4.3: Monitor changes in levels of engagement

Using the indicators developed in this report (DEX scores), monitor the changes in the levels of engagement with the Internet and other ICT by these target groups on an annual basis. The annual review may identify new priority target groups.

Motivating the target groups to engage with ICT

Chapter 1 discussed how citizens from all demographic groups should have the opportunity to use ICT - particularly the Internet - to improve the quality of their lives and their communities.

Finding ways to motivate late adopters to use the Internet is a considerable challenge for an inclusive information society. Large numbers of late adopters are currently interested in the Internet. However most are not and will need to be motivated. Chart 5 indicates the estimated number of late adopters interested in accessing the Internet.

Chart 5: Late adopters interested in accessing the Internet

Target group	Late adopters interested in accessing the Internet	Estimated total number of late adopters
Short-term target groups:		
Women with home duties (housewives)		
Retired people		
Tradesmen/skilled workers		
Workers in agriculture, forestry and fishing		
Unemployed people	180,000	990,000
Medium-term target groups:		
Workers in other occupational categories		
Students	220,000	710,000
Estimated total number	400,000	1,700,000

Source: Independent analysis of MRBI data (2002) and CSO (2002) figures.

The challenge is to find ways to move late adopters from the "not interested" category to the "interested" category. As discussed in Chapter 8, assuring home access and public Internet access is a priority. Even after Internet access is assured, however, late adopters will need to be motivated to use it.

The MRBI (2002) found that many late adopters believe the Internet is too complicated and they do not know enough about it. Demystifying the Internet for late adopters is thus at least as much of a priority as ensuring access to it. The MRBI found that the primary reasons late adopters do not access the Internet are:

- The Internet is too complicated (34%)
- I don't know enough about it (24%)

- I don't have the necessary equipment (20%)
- I don't have the time to learn how to use it (13%)
- I don't have the time to use it (11%)
- Too expensive (11%)

Stakeholders' priorities for moving forward

Raise awareness of the benefits of ICT

- Awareness should not be created in a vacuum. It needs to be tied in with local ICT activity in education, community, local development, business and employment.
- The benefits of using ICT should be demonstrated and portrayed realistically, not futuristically. Clear communication is needed, informing citizens what they can access and where they can access it.
- Developing awareness and promotion campaigns with national voluntary organisations working with the target groups is seen as the way to develop the most effective messages.

Focus communication strategies on a simple message, delivered by peers

- Simple, targeted messages should be used that communicate the specific benefits and advantages of ICT for individuals and late adopter groups.
- "What's in it for me" is a more important message than why society as a whole should "embrace the information age and its technologies." The relevance of ICT to everyday activities and interests needs to be apparent.
- A variety of media and dissemination methods should be explored to address the diverse information needs of late adopter groups. Promotional campaigns should be followed up by incentives to encourage access and training in areas where people live and socialise.
- Community champions should be encouraged, supported and made highly visible and audible. Peers and role models with similar values and communication styles can be used effectively to engage late adopters.

Build in learning supports to all ICT 'taster' programmes

- Building personal learning capacity facilitates the ICT adoption by late adopters. ICT development and pre-training programmes should include personal development training and an examination of why and how late adopters might use ICT.

- The context of ICT use needs to be considered. Courses should be personalised so people can first see the personal benefits of using ICT and then explore the skills or competencies they are interested in developing.
- Learning from other projects that have targeted late adopters can motivate and raise awareness. Testimonials and case studies can provide positive examples of late adopters overcoming learning barriers. Peers can play a strong advocacy role in encouraging late adopters. Training peers as trainers or champions is important to provide support and encouragement for others.

Address confidence and trust issues

- Confidence and trust can encourage late adopters to engage with the information society. Safety, security and privacy in online activity needs to be guaranteed. Awareness campaigns need to identify and address people's worries about real and perceived risks. For citizens and consumers, a safe online environment should be a priority.

Stimulate demand for ICT among late adopter groups

- Demand should be stimulated organically. This can take time, but will result in user-led initiatives. Organic growth can be built on by developing networks of people with similar interests.
- Local provision of information and services can stimulate demand. Local media are very important - i.e. radio and newspaper - and partnerships should be developed with these media to promote planned activities.
- Hands-on demonstrations, featuring relevant, fun activities, allied with incentives for learning can help stimulate demand.
- Internet access is not the only means of engaging with the information society. Access to other media - such as post, telephone and enhancements, radio, television, and texting - are also important means of engagement and should be incorporated into inclusive information society initiatives.

Irish projects

The study identified six Irish projects aimed at motivating late adopter groups to engage with ICT. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Raising awareness of the benefits of ICT
- Focusing communication strategies on a simple message, delivered by peers
- Building in learning supports to all ICT 'taster' programmes

- Addressing confidence and trust issues
- Stimulating demand for ICT among late adopter groups

CAIT

The CAIT (Community Application of Information Technology) project successfully engaged with hundreds of late adopters and their experiences could serve to inspire others. CAIT funded 120 community-based projects in Ireland to motivate late adopters to use ICT.

Summerhill: Awareness through demonstration

The Summerhill Active Retirement Association hosts Internet open days open to the whole community from their premises which is central and well known in the village. It is open to all, free and a tutor is available if needed. They provide a service not available anywhere else in the village. They also run Internet open days, organised and run by older people for older people in the village library. Their organisation is also involved in an intergenerational schools project which has web links between the Summerhill Active Retirement Group and a local primary school, acting as an alternative teaching model or innovative model for demonstrating the use of webcams. Topics discussed include "Days gone by," local and global history, current affairs, technology, and volunteering work and activities of our members.

Standardising messages to encourage Internet use

The Information Society Commission's Legal Affairs working group is consulting with a number of bodies and agencies to standardise and streamline messages aimed at encouraging the use of the Internet. They are developing a common approach and language at best practice guidelines for communicating messages to build trust and confidence.

Drogheda: Social inclusion

The Drogheda Partnership has committed "Local Development Social Inclusion Funding" to facilitate engagement with late adopter groups. The focus is on delivering ICT training in disadvantaged areas.

An Chomhairle Leabharlanna: Promotions

An Chomhairle Leabharlanna targets information sessions at seniors. They brand these to attract potential trainees, e.g. Dublin libraries' "Get With IT" for the over 55s. Internet services are also featured in general library promotional activities, including their new campaign "The public library: a space for all."

Ennis: Encouragement from peers

The Sunset Group in Ennis, Co. Clare publishes a monthly online magazine featuring health information, poetry, short stories and travel and technology articles. The editorial team, all senior citizens, consider themselves "converted" late adopters of

computers and the Internet. Inspired by a visit by the "Silver Stringers," a senior citizen publishing group from Melrose, Boston, and tutored by students from St. Flannan's College secondary school in Ennis, the group progressed from basic IT courses, to ECDL, to HTML publishing. Their website <http://sunset.ennis.ie> is positive proof of the impact of engaging late adopters through lifelong learning and their leisure interests. The group has recently produced a video to encourage others seniors to embrace and enjoy ICT.

International projects

Many projects around the world have been developed to motivate late adopters. Three considered suitable in the Irish context are described below. For contact details and more information, see Appendix 2.

Germany: "Frauen ans Netz" (Women to the Net)

The project's target group was women with low rates of Internet take-up. The project was cited in the World's most effective policies for e-economy (2002) by Booz/Allen/Hamilton. As part of an "Internet for All" scheme, which targeted specific user groups with lower rates of Internet uptake, this project aimed to motivate women and encourage their use of ICT and the Internet.

Training was offered in over 200 cities on a subsidised basis for a fee of 28 euro. The scheme was also supported by the popular women's magazine Brigitte. A key success factor was the cost. Women were willing to pay a little for training that could enable them to participate online.

The scheme was also enhanced through leveraging the private sector through exposure in magazines and also through government sponsorship which extended the scheme's reach. Over 100,000 women received training through the programme. A further 200,000 were enrolled for future courses at the end of 2001. The website received over 13 million hits during 2001.

The benefits included the partnership with private sector and mainstreaming ICT into existing processes. Many women were reached and were subsequently motivated to take part in ICT training through their existing engagement with a popular magazine.

Germany: Senior Info-Mobil

The project's aim is to motivate retired and senior citizens to use the Internet. The project provides access to new technology to Germany's senior citizens, motivation to use contemporary ICT in a range of different ways, and familiarisation with PCs and the possibilities of the Internet.

Initially launched in 1998, Senior-Info Mobil was funded by the German Federal Ministry for Research, IBM Germany, and various other private enterprises. The project is based on need to ensure retired people - especially the less wealthy - are socially included in virtual interactions and able to participate in the information society.

Designed as a mobile Internet cafe, a special bus spends about a week in different communities at the invitation of municipal institutions. Trainers give demonstrations and basic training to elderly visitors to the bus, indicating how a home PC and public access could provide new opportunities to extend their interests. The project has raised awareness and motivated use of ICT among older retired Germans.

Scotland: Community Champions

The project's aim is to encourage all late adopter groups in the most disadvantaged communities in Scotland to gain access to and use ICT and the Internet. Community Champions is a three-year 2.4 million euro programme managed by Scottish Enterprise.

It provides a network of digital "champions" to cover all eight Social Inclusion Partnership (SIP) areas, i.e. the poorest designated areas, in Scotland. Each champion is knowledgeable about the area to be covered and a ninth champion has a lead role in co-ordinating and overseeing overall development.

Each champion's role is to initiate new ICT projects, lead community consultation on ICT facilities, spread best practice on community access to the Internet, and increase the involvement of local people in the creation of Internet content. Champions are responsible for driving local activity forward by isolating and breaking down barriers and engaging all local people who do not already take advantage of ICT provision.

Champions encourage use of language that is easily understood to relate to the "unconvinced," and they encourage late adopter groups to use home PCs and "barrier-free" public Internet access points.

Benefits of these international projects

The benefits of these three international projects have been wide-ranging.

For Germany's Senior Info-Mobil project, benefits included:

- The tailored design of Senior Info-Mobil helped to enthuse and motivate retired citizens to use ICT
- Material tailored to senior needs offered a good way to address the economic, social and psychological barriers preventing older people from seeking out, gaining access to, and actually using new ICT
- Involvement of some seniors as peers in training was beneficial

- **Motivating the target groups to engage with ICT**

- A patient approach helped to address criticism of change and tackle fear and reticence felt by some retired people in regard to new ICT
- New skills to utilise electronic services offered new opportunities to improve future quality of life for senior citizens, particularly in rural areas where rural services might have been withdrawn

For Scotland's Community Champions project, benefits included:

- Ability to identify and motivate late adopters
- Ability to provide home PCs
- Ability to signpost public access
- Training may be tailored to individual need in the community
- Different types of training for developers and policy makers promotes widespread development of assistive technologies
- Best practice can be shared and incorporated into developments
- Language used is easily understood by target audiences
- Meaningful use of ICT may be introduced into existing local actions
- Collaboration with others helps to address needs in a relevant and innovative manner

RECOMMENDATIONS

Engaging late adopters in the information society can result in individual and collective economic, civic and social benefits but finding ways to motivate late adopters is a challenge. Recommendations focus on raising awareness of the benefits of the Internet among late adopters, policy makers and the public.

5.1: Hold a national conference on eInclusion

Hold a national conference and networking event on eInclusion for community ICT projects, policy-makers and researchers. This conference should highlight the outcomes of the eInclusion projects - such as CAIT Initiative and other community projects - and eInclusion research and promote the exchange of key learning. Conference highlights should be published and widely distributed.

5.2: Conduct an awareness campaign

To motivate the target groups to engage with ICT a national awareness and motivation campaign aimed at the two largest target groups - women with home duties and retired people - should be developed. The messages for the campaign should be based on the results of the needs analysis of the target groups. Sponsorship from private sector companies and partnerships with media outlets - such as magazines and radio programmes aimed at women and seniors - should be considered.

5.3: Leverage existing government communications with the target groups

Review the types and frequency of Government communications with the target groups to leverage existing interactions. This should include, for example, postal mailouts to pensioners and those receiving other social allowances and benefits. The review should consider how these communication processes can be used for raising awareness of information society benefits to the target groups, for example through leaflets as part of information campaigns and by highlighting Government websites on printed literature to particular target groups.

5.4: Promote safe Internet use

The Information Society Commission's Legal Affairs group is developing an awareness raising campaign, building on the recommendations of the ISC / LAWG Building trust through the Legal Framework (Dec 2002), encouraging a common approach and language, to build confidence and trust and ensure safe use of the Internet. This study strongly supports their Empowerment initiative and recommends that the fears of late adopters be specifically addressed.

5.5: Promote greater societal engagement with ICT

The Information Society Commission recommended in its latest report that Government needs to consider the introduction of specific measures to promote greater societal engagement with Internet technologies as a key element of overall strategies designed to bring about greater engagement with these technologies in the enterprise sector. This study endorses this and recommends that the range of measures outlined in this report should be considered as key to promoting greater societal engagement with Internet technologies.

Supporting local and community content development

Many late adopters need to be stimulated to use the Internet. A good way to do this is by providing relevant online information. The major study to date on this topic found that in the US, the most far-reaching barrier to disadvantaged communities using the Internet is the scarcity of the kind of information that users want (Children's Partnership, 2000).

Most of all, the low-income and disadvantaged late adopters in the US wanted local information about their community. This included practical information, such as local jobs requiring entry-level skills, local housing listings and community information. However in most communities this was exactly the kind of information that was difficult to find on the Internet.

In Ireland, local and community content on the Internet is very underdeveloped. Many projects exist but few are designed with the needs of users in mind. Finding ways to support development of relevant local and community content - especially for disadvantaged communities and late adopter groups - is a significant challenge.

Stakeholders' priorities for moving forward

Ensure quality and promote good practice in online content development

- Community and local authority websites have developed in an ad hoc manner and there is very little consistency in design, navigation and usability. Some sites are exemplars and many could benefit from advice on design, functionality and usability.
- Many websites do not follow usability guidelines, and bad design discourages many people from accessing or revisiting the Internet. Failing eyesight is a common complaint among older people and implementing these guidelines would help ensure a positive user experience.
- The development of guidelines and standards should be supported and incentives to incorporate guidelines into design of websites should be provided. For projects starting now, an opportunity exists to incorporate sound design principles and content management systems that will support content from diverse sources.
- Best practice in usability and accessibility needs to be publicly recognised. An Irish website quality assurance standard and symbol could be developed, along with advice on how to achieve the required standard. A condition of public funding for ICT projects should be the achievement of quality standards.

Leverage the knowledge base

- Many Irish projects are developing local content, with diverse designs, quality, functions and publishing platforms. There could be a lot of duplication and wasted resources if efforts are not made at a county level to co-ordinate web publishing activities.
- Organisations - public, private and community - are at different stages of development and many have made expensive mistakes and learnt valuable lessons. These lessons should be shared.
- The opportunity exists to develop partnerships in this area, between local authorities, government departments and community organisations, between industry, third level institutions and social partners. Each has a unique knowledge base and can contribute to the development of knowledge networks, to improve the supply and demand for relevant, useful and usable online information, produces and services.
- Advisory groups to local authorities and community ICT initiatives need to develop their knowledge in this area and encourage the sharing of knowledge among practitioners. Case studies of good practice nationally and internationally should be publicised and disseminated.

Engage users and address their needs through local consultations

- Researching information and communication needs at local level is essential. The community fora, under the aegis of county development boards, could ensure that their members' needs and information are considered in all county communication strategies, including websites.
- Delivering essential services and providing local, relevant content are key to ensuring that the information and services developed at local level are both useful and used.
- Literacy problems persist among late adopter groups and are known to be a barrier to engaging with computers and the Internet. Text predominates online and there is a lack of multimedia alternatives, e.g. audio. Involving late adopters in the development of content can highlight barriers and allow suitable formatting of information.
- Cultural and linguistic diversity should be recognised and supported. Local government and content providers need to involve diverse communities in the development of online services by setting up mechanisms to generate feedback and support contribution.

- **Supporting local and community content development**

- Not only should users be encouraged to gain access to online information, their own publishing efforts should be supported and their needs in this area identified also.

Develop joined-up approaches to community publishing

- Audits of community ICT activities should include measurement of local web content development among schools, community and voluntary groups, libraries and local authorities. County strategies should not be developed unless good baseline information is available on facilities, activities and gaps.
- Each county should aim to have a community portal which reflects the culture of the county and highlights local and community activities of each parish, village and town. This should complement and link to local authority information, local business and enterprise, essential services and education and learning information.
- Strategies at local level should address ways to create partnerships among communities, elected representatives, businesses, schools, public sector, libraries, community and voluntary organisations, and technology providers.
- Sustainability needs to be built into all community publishing initiatives. It is difficult to get people to contribute content on a regular basis. Sustainable web projects need dynamic news feeds and regular contribution, so organisations and individuals should be given funds to provide regular contributions.

Fund groups to develop content

- Building capacity for local content production is equally important as providing access and developing ICT skills. Resources are needed to support this activity.
- Web development and multimedia training facilities should be available locally. The opportunity exists to develop skills and employment opportunities and strategies around content development.
- ICT facilities, particularly for web design and content development, should be available to local communities and individuals. Multimedia skills should be developed to support community publishing. An opportunity exists to provide resources which could be shared or hired locally, e.g digital photography equipment, projectors, and so on.
- Skilled staff that can advise on web design, content production and formatting, usability, accessibility and Internet technologies should be available to local groups in each county who are developing websites and gathering content. Dedicated personnel would ensure consistency and quality of information and

design and advise on how to develop county-based information in a co-ordinated manner.

- Content development is a very labour intensive area. Collecting the information and keeping it up to date requires dedicated personnel. Until enough local people and organisations are trained to develop and maintain their own sites, the development of community portals will be slow.

Expand awareness of local government

- To create awareness of local authority websites nationally, a standard URL (e.g. countyname.ie) needs to be used and promoted. Currently, huge disparity exists in this area and this makes it difficult for people in each county to identify easily with their local authority website.
- It is easier to create awareness and stimulate demand for information and services that fulfil user needs. Projects that do this will gain popular support. User requirement analysis and usability and accessibility standards need to underpin all local authority ICT development.
- Local government services being piloted need to be rigorously evaluated by users, who should be involved throughout the development process. Before being rolled out nationally they should be audited for usability, accessibility and social inclusion. Then, positive publicity can be generated for pilots and projects.
- Promoting existing information and services locally can stimulate demand for local authority services. The URL of local authority websites should be displayed on all internal documents, stationery and local advertisements.
- As new online services are being implemented, user panels can encourage essential word-of-mouth promotion in the community. Efforts should be made to develop these panels and promote public discussion based on their feedback.
- Participation and transparency are essential for local government to be considered as citizen-centric. A focus on citizenship and the encouragement of civic engagement online provide opportunities for improving local democratic processes. Simple measures - i.e. publishing the contact details and email addresses of elected officials - can improve this process.

Irish projects

The study identified 13 Irish projects aimed at supporting local and community content development. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Ensuring quality and promoting good practice in online content development
- Leveraging the knowledge base
- Engaging users and addressing their needs through local consultations
- Developing joined-up approaches to community publishing
- Funding groups to develop content
- Expanding awareness of local government

Mobaile

South Dublin County Council has a broad vision of the role of local authorities in developing an inclusive information society, encompassing the integration of ICT into work practices, changing internal processes to exploit ICT and pilot innovative, GIS based interfaces. Mobaile is a working proof-of-concept being piloted in South Dublin, using maps and GIS (visual interface). Funding is being sought from the Information Society Fund for field trials in a small number of local authorities as pilot areas.

Community Exchange

Community Exchange is a very popular, regular email bulletin produced by and for the community and voluntary sector - with the production coordinated by Hyperlink. Information exchanged includes events and campaigns, news, training courses and workshops, publications and resources, and jobs and volunteer opportunities. The Community Exchange website is updated as soon as the information becomes available (www.activelink.ie/ce).

Muintir na Tire ICT Project

Muintir na Tire, working with the Department of Social and Family Affairs and with seed funding from the Government's Information Society Fund, delivered a project that developed template websites for their affiliate groups, email facilities, and databases for the centralisation of information. The final report gave a positive assessment of the project.

NDA: developing standards and guidelines

The National Disability Authority (NDA) developed a comprehensive 'IT Accessibility guidelines' website designed to be developed and updated as necessary. The Guidelines (accessIT.nda.ie) provide a comprehensive, easy-to-use way of ensuring that products, services and information are fully available to and usable by the widest possible range of people. Guidelines are offered for the Web, public access terminals, telecoms and application software.

The Wheel: Guide to Developing a Website

The Wheel has published a resource for websites for community and voluntary organisations. Getting Online: Guide to Developing a Website is available from: www.wheel.ie

Westmeath County Council: e-enabling council members

Since October, council meetings in Westmeath County Councils have been ICT assisted. Full ICT services are available to council members, including access to the council's network in the chambers, in their homes and in their constituency offices

Wexford County Development Board

Using existing county structures, the Wexford CDB has formed an information society task force and developed an information society strategy, with clear targets set for ICT training, particularly for marginalised groups. Building on audits of ICT facilities and existing ICT training provision, the strategy has a four-pronged approach: E-Government - REACH Initiative; ICT Access & Target Groups; ICT Training; Co-ordination of Services.

Clann Eire: developing a content management platform for communities

Clann Eire, Connected communities project is supported by SEISS (South East Information Society Strategy). The project, funded by the EU, has a budget of 300,000 euro to develop a content management platform for community groups across five counties, who will in turn act as test beds for the roll out of local e-government innovations on a county and localised basis.

Teagasc

As well as a public website, Teagasc has developed a client site and members portal. The site also provides local content on 28 county sites, linked to the client site. <http://client.teagasc.ie>

CRISP: supporting local community websites

Carlow Rural Information Society Project (CRISP) is at an early stage of developing websites with local communities. An important element is training local groups and individuals to design, publish and update their webpages. CRISP is working with members of the community forum to develop websites for member organisations.

Local authority/ local development websites

Examples of counties developing a co-ordinated approach to local and community online development include

Kildare.ie
Athlone.ie
Donegal.ie
Meath.ie

Information Age Town projects

The four prize winning towns in Eircom's Information Age Town projects developed community portals. These have all evolved over a five year period, incorporating many changes in design and format.

www.ennis.ie

www.kilkenny.ie

www.castlebar.ie

www.killarney.ie

Diversity Ireland

Diversity Ireland is developing a website for newcomers to Ireland and ethnic minority communities in Ireland. They commissioned a feasibility study last year (O'Donnell and Ni Leathlobhair, 2002) and are currently seeking funding for a website to hire a project manager and develop a prototype website.

International projects

Many local and community websites have been developed internationally. Three considered suitable in the Irish context are described below. For contact details and more information, see Appendix 2.

England, Scotland, Northern Ireland and Wales: "Netmums"

"Netmums" was started on a voluntary basis by local mums in Harrow. However, mums from Scotland, Wales, Northern Ireland and all over England who heard about the project have since started similar sites in their own local areas. The websites are developed and run by mums at home.

Netmums aim to provide support for anyone caring for children - mums, dads, mums-to be, childminders, grandmothers and grandfathers, nannies, teachers, health visitors - and all those who work with the mums of young children. Exchanging experiences is just as important as providing information, and content suited to their own geographic areas is written by mums for mums and other carers in an easily understood format.

Meeting needs of local carers is key and notice boards provide meaningful information suited to local needs and contexts. In addition to information and content provision, consultation about important issues can be organised between local authorities, community groups, private sector providers and carers to test out plans and better target local services.

Some local initiatives attempt to target deprivation and they also attempt to further the aims of e-democracy. For example, one site, Netmums Hillingdon, became the "voice on

the web" for the Government's "Surestart" programme in Townfield. The supermarket chain Tesco offered support towards the cost of development of further sites. From four sites in its infancy, the initiative has expanded to cover over 40 new sites, all run by volunteers.

England: Residents Online, London & Quadrant Housing Trust

Operating as a UK Online Centre in the South of England, London & Quadrant Housing Association, a registered Social Landlord, operates a residents online website. Content includes an up-to-date news and homelife section and a bulletin board which may be used to post messages and invite replies.

It is also possible to send messages to housing officers. There is a section for silver surfers to motivate and promote their involvement, and an e-learning section containing information about training courses. An online video accessible from the site provides residents with an online learning course. It is possible to register complaints and also to pay rent and other bills online 24 hours a day, using a special safe and secure website run by the Post Office.

Residents may also request repairs using the "report-a-repair" section of the website to log the repair. A jobs section provides information about jobs available with London & Quadrant. On the "Residents Involved" section, residents may join discussion groups, find a specific forum, link up with other resident associations and read about tenant participation. Information on moving house is provided. Computers are offered at a discounted rate, and there is provision of PCs to groups and an in-house Internet cafe.

Scotland: NGfL Scotland Communities Channel

This project provides online advice, support and content for community and voluntary sector organisations working to bridge the digital divide in local communities. It aims to provide learning support to all those promoting the use of information and communications technology (ICT) in the community.

Working in partnership with the Digital Inclusion Champions team and others, content of the Communities Channel is designed to serve community development practitioners throughout Scotland. The NGfL Scotland Communities Strategy document outlines its vision as to ensure "every member of all communities has the access, capability and motivation to exploit the information and learning environment facilitated by the National Grid for Learning."

A series of guides are available online to provide information and advice on a variety of topics, related websites, organisations and products. A toolkit is available to provide help with practical issues surrounding the use of ICT in a project. The case studies section of the communities channel website provides information about existing projects in

Scotland and internationally, also offering insight into partnerships, funding sources, lessons learned, and useful contact details.

Benefits of these international projects

Benefits of the Netmums project include:

- Supports development of content created by volunteers, e.g. late adopter groups of women and others involved in home duties and caring for young children
- Supports social inclusion, raises community spirit, reduces isolation, and improves quality of life
- Provides a forum for shared experience rather than a bland directory of information; empowers mothers and other carers through ability to form local virtual communities and through provision of access to information about their local community and about the services available to them
- Encourages individuals to work for good of community by providing online information on volunteering
- Based on content devised by users themselves, the project is relevant, sustainable, and self-sustaining

Benefits of England's resident's online project include:

- Content is mediated to introduce a range of socially inclusive ways to encourage accessibility and usability, deliver speedy interactive services, and take language and user friendly ICT training to late adopters who have not previously used new technology and the Internet
- Supports use by provision of PCs and access to the Internet
- Residents learn how to use ICT and the Internet in their own space and at their own pace
- Transforms the way housing services operate, introducing new types of interactive communication between members and other housing associations
- Promotes e-democracy consultation procedures

Benefits of the NGfL Scotland Communities Channel include:

- Content helps modernise and transform local grassroots agencies that deliver learning
- Content educates community and voluntary organisations about e-inclusion
- Content follows usability and accessibility guidelines
- Content helps to develop civic participation and e-democracy processes at local level
- Relevance of content is assured by close collaboration with partner groups operating in the community and voluntary sectors
- Content is supportive of grassroots organisations seeking advice and funding for ICT training and development
- The channel, along with the training programme, assists practitioners in seeing the benefits of ICT in the context of their existing work

RECOMMENDATIONS

The Internet can provide access to diverse social, cultural, civic and commercial information. The demand is increasing for relevant, local information. Recommendations focus on developing a strategic approach, building capacity to develop quality content, and encouraging a joined up, sustainable approach to local and community publishing.

6.1: Support CDBs to develop capacity in eInclusion and content for late adopter groups

Support CDBs to develop a strategy for eInclusion and community publishing, including online community content for late adopter groups. The Social Inclusion Coordination (SIM) group should draw up an ICT plan with each CDB for their county/city to address eInclusion. Plans need to be developed in partnership with the community and voluntary sector fora, other community groups, partnerships, leader groups and community enterprise boards. All the groups on the local SIM groups need to also buy into it, ie health boards, agencies and social partners. Seed funding needs to be provided for these plans.

6.2: Prioritise community partnerships for eInclusion for IS funding

The Information Society Fund should prioritise projects that focus on community partnership initiatives for eInclusion and knowledge exchange - i.e. partnerships between community organisations, CDBs, Government departments or social partners. National voluntary organisations may not find it easy to find government partners and partnerships may need to be facilitated. Criteria for funding should include the incorporation of best practice guidelines and eInclusion evaluation.

6.3: Develop guidelines for local and community content

Develop a strategy document with guidelines for publishing local and community content for local authorities and community organisations. The strategy should also advise on developing co-ordinated approaches to community publishing, and ensuring usability, accessibility and sustainability.

6.4: Explore new business models

A strong business model must underpin the development of community/county web portals. New ways of doing this need to be explored, such as linkages with the IT sector and the Chambers of Commerce to share map-related data. The development of community web portals that provide comprehensive local information for citizens should be driven by strong local partnerships.

Providing online Government services and information for the target groups

Chapter 1 discussed why citizens from all demographic groups should have the opportunity to use the Internet to engage with Government services and participate in democratic processes.

The most recent Information Society Commission report noted an EU benchmarking survey that found the use of online Government services in Ireland was among the lowest of the Member States.

Survey data show that although most late adopters are not interested in accessing Government services on the Internet, 40 percent are. Chart 7 illustrates the large number of late adopters in Ireland interested in accessing Government services through the Internet. Interestingly, the number wanting to gain access to Government information and services on the Internet is higher than the number who say they are interested in accessing the Internet.

This suggests that if Government information and services on the Internet were designed and delivered with the late adopter groups in mind, they could stimulate Internet use by late adopter groups.

Chart 7: Late adopters interested in Government services

Target group	Late adopters interested in accessing Government information and services through the Internet	Estimated total number of late adopters
Short-term target groups:		
Women with home duties (housewives)		
Retired people		
Tradesmen/skilled workers		
Workers in agriculture, forestry and fishing		
Unemployed people	390,000	990,000
Medium-term target groups:		
Workers in other occupational categories		
Students	290,000	710,000
Estimated total number	680,000	1,700,000

Source: Independent analysis of MRBI data (2002) and CSO (2002) figures.

The question asked if accessing any of the following Government services through the Internet

would be of interest: applying for/renewing a passport; applying for/renewing a drivers licence; checking social welfare entitlements, checking income tax entitlements, paying car tax.

Stakeholders' priorities for moving forward

Consult users about their information and service needs

- Government websites should address user needs. Government departments need to investigate ways to make services more relevant and easier to use. This can only happen when users are consulted about their needs and effort is made to meet real needs in the online (and offline) delivery of services.
- Procurers, information providers, politicians and civil servants should be made aware of the Government information and service needs of late adopters, including people with disabilities, special needs and literacy problems.

Raise awareness of e-inclusion in the public sector and government

- Inclusive information society development is often seen as a guaranteed outcome of information society initiatives, particularly e-government. This is a false premise. As a priority, inclusive information society development needs visible leadership, commitment and understanding within government and the public sector.
- Public sector management and staff need to understand information society and social inclusion concepts. Awareness programmes can provide opportunities to develop internal processes to integrate inclusive information society policy with practice.
- Intergovernmental committees need to develop mechanisms to involve staff from each department in strategies and actions aimed at integrating service delivery, with the citizen as the main focus. This process should contribute to the development of knowledge networks and the sharing of best practice.

Transform the processes for delivering government services

- Developing online services requires a transformation in government processes to ensure that value is added through the use of technology, rather than merely automating existing services. Efforts should be made to localise and individualise nationally deployed web services to tie in with local service delivery.
- Individual and citizens' information needs should be central to the provision of all online government services. As these needs change, online solutions need to be sufficiently flexible and integrated to match those changing needs.

- Serious consideration should be given to accelerating the development of essential electronic services, to catalyse real change in the processing of information and method of service delivery - e.g. the development of a national health ID card could be integrated with details for health services outside Ireland.

Engage citizens in the vision for e-government

- Citizens need to have a clear idea how their personal information and online communication with government are considered and processed. Government departments need to be willing and able to support transparency and ensure data integrity and protection.
- The benefits to citizens in transacting online should be apparent, e.g. shorter waiting lists for hospital appointments, driving tests. Incentives should be actively promoted.
- Using ICT to improve the relationship and communication between citizens and government requires major commitment and needs to be endorsed at the highest political level.
- The democratic potential of e-government should not be overlooked. The challenge of using ICT to improve democratic processes and encourage citizens to participate in decision-making needs to be articulated and addressed.
- Promoting e-government as a method of social inclusion is only credible if supported by a range of capacity building resources and supports.

Develop standardised, user-friendly interfaces

- Quality assurance and compliance with usability and accessibility guidelines needs to be prioritised by government departments. NDA and WAI guidelines should be implemented and compliance symbols displayed on government websites.
- Standardised interfaces for government websites should be developed. Currently huge disparity exists in design, functionality, navigation and usability. Government websites should serve as exemplars in best practice.
- The 'public face' of online government services needs to be instantly recognisable and 'branded' to attract users and encourage frequent visits and transactions with government websites.

Provide mediated access and information services suited to target groups

- The trend towards the development of one-stop-shops for government information is welcomed and offers the opportunity to explore and document late adopter groups' needs for information and services.

- The Citizens Information Centres (CIC) are considered to be a model of good practice in mediating government information. Mobile CICs should be considered for all remote areas, utilising the online CIC database, as well as demonstrating online government services.
- Increasingly, CICs and community and voluntary organisations will become intermediaries in online service delivery, mediating government information for their members and clients. They need to be funded and supported in this role.

Irish projects

The study identified four Irish projects aimed at providing online Government services and information to citizens, including late adopter groups. Efforts need to ensure that these initiatives engage with the priorities identified in the stakeholder consultations:

- Consulting users about their information and service needs
- Raising awareness of e-inclusion in the public sector and government
- Transforming the processes for delivering government services
- Engaging citizens in the vision for e-government
- Developing standardised, user-friendly interfaces
- Providing mediated access and information services suited to target groups

OASIS www.oasis.gov.ie

Online Access to Services, Information and Support (OASIS) is a frontline source of information on public services. Information is provided on "life events" - i.e. birth, education, employment, housing, illness, retirement, death. The site complies with the WAI (accessibility) guidelines.

REACH www.reach.ie

Reach has been developing the public service broker - which will improve the delivery of public services because it will put the customer (citizen) at the centre. Considerable effort has gone into building the technical architecture for the inter-agency interface. Originally REACH was going to encompass all public services and information but now OASIS and BASIS are strong brands. REACH will interface with them, at least in the short term. The long term aim is for all public services and information to be accessed through REACH's interface.

COMHAIRLE www.comhairle.ie

Comhairle is the national support agency responsible for the provision of information, advice and advocacy to members of the public on social services. Comhairle promotes and supports the development of Citizens Information Centres (CICs) around the country. Comhairle has a comprehensive national database, the Citizens Information Database

(CID) on social services and entitlements, which is currently being integrated with the OASIS database. The Comhairle website also provides a resource database for voluntary and community sectors. Included in this are good practice guides for setting up and running an information service and managing volunteers, as well as information on funding.

Fishingnet

The Department of Communications, the Marine and Natural Resources has developed a portal website for the commercial fishing industry - Fishingnet - an online "one-stop-shop." The aim is to make it easier for seafaring people to gain access to vital information and documents. Material available on the site includes business advice, health and safety advice and weather reports.

International projects

The websites of many governments have been developed with users' needs in mind. Three relevant to the Irish context are described below. For contact details and more information, see Appendix 2.

Canada: "Government of Canada On-Line"

A 2002 survey of 23 countries by Accenture judged Canada - with 58 per cent Internet penetration - to be the world's leading e-government. The Canadian government focus is on providing online access to fully integrated customer focused services.

User research and consultation with citizens and business have taken account of their needs and priorities in the development of multi-level citizen-focused e-services and access to all federal programmes. More than 50 focus groups fed information into the redesign in 2001 of Canada's single point of entry e-government website (www.canada.gc.ca).

The government gained insight into people's expectations from e-government services via an online citizen's panel. In addition, a Youth cluster provides information on youth-related programmes and services, and the Aboriginal Canada portal has been designed with input from Aboriginal organisations to ensure services available to this group are relevant.

All government websites are to conform to a common look and feel for navigation and use, and take account of international accessibility and privacy and official languages requirements. Consumer needs are served on Canada's Consumer Information Gateway which brings together Federal Government departments and agencies and provincial and territorial partners. Selected non-government organisations are also joining this initiative.

Singapore: E-Government

Ranking a close second to Canada in Accenture's evaluation of developments in e-government throughout the world, Singapore - with 47 per cent Internet penetration - is supported by three areas of government: government and citizens; government and business; and government and employees. Just under 100 per cent of services that could be delivered online are available electronically.

The focus is on developing services centred on user needs supported by a "sense and respond" approach to enterprise development and experimentation. The eCitizen service (www.ecitizen.gov.sg) is a single window to public services organised wholly around citizen intentions. Significantly, services are organised around what citizens intend to do rather than by government department or agency.

An interactive volunteer referral service supports those keen to volunteer, either as an individual, a family, a student or as part of a corporation. Information is provided on the variety of different ways to become a volunteer and also on finding the right volunteer opportunity. In addition, there is a bulletin board, information about volunteer orientation sessions held monthly, and a directory of volunteer hosting organisations.

It is also possible to register online as a volunteer with the Singapore Prison Service, providing services to inmates such as befriending, counselling, tutoring, supervising homework, teaching (academic), helping with vocational training, recreational training, indoor activities, providing general help or support for handicrafts and IT use.

Australia: Queensland Government online

Comprehensive market research has been conducted for the Queensland Government's online service delivery initiative into how Queenslanders would prefer to gain access to information and services. Processes associated with e-democracy underpin several initiatives that are now well underway as part of the Government's broader community engagement agenda.

An e-democracy policy framework guides initiatives. Citizens are also engaged in policy decisions towards developing Queensland as a Smart State. Live broadcasts of Parliamentary proceedings are starting in 2003 through the Internet, to improve public access to and understanding of the workings of Parliament. The Internet broadcast of Parliament service will feature live audio of Parliamentary sittings, with text captioning to identify speakers and the stage of proceedings, where possible.

An online petitioning system, launched in August 2002, provides a mechanism for the electronic lodgement of petitions. Community consultations are conducted online and a community consultation website is being developed for government to engage with the community on selected issues and policy matters. A model for the online Community Consultation Trial is being tested as part of the Smart State: Smart Stories

project, launched in mid-November 2002. The remaining phase of the trial is expected to be launched in early 2003.

Benefits of these international projects

The benefits of these three international projects include a strong focus on user needs.

Benefits of the Government of Canada online project include:

- User needs are central to the organisation of different gateways
- Integrated approach ensures relevance to diverse groups and works to secure inclusion of late adopters
- Wide variety of different users consulted about their needs, thus relevance of online service provision is assured
- Establishing "one-stop shop services" ensures services can be reached via one competent authority
- Web accessibility and privacy guidelines followed
- Digital signature authentication is central and is being tested

Benefits of the Singapore eGovernment project include:

- User needs supported by a "sense and respond" approach
- Long term plans around what citizens intend to do facilitates on-going development of relevant user focused e-services
- Volunteer involvement supports e-inclusion
- E-government programmes positioned among wider digital strategies
- Focus on demand side raises awareness among citizens

Benefits of the Queensland Government online project include:

- Input by citizens of Queensland helps to ensure services are relevant
- Observing developments internationally provided more scope to implement best practice e-democracy services also being developed elsewhere
- Access and content targets all citizens including those living in remote, deprived or otherwise disadvantaged areas
- "One stop shop" developments support delivery of online services and relevant information
- Skills development supported by Government programme and financial assistance

RECOMMENDATIONS

E-government services are central to information society development and can act as a key stimulus to engage the public. An EU benchmarking survey found that use of online Government services in Ireland is among the lowest of the Member States. Recommendations focus on establishing user needs and developing best practice to ensure effective delivery of government services.

7.1: Conduct a needs analysis

Conduct an analysis of the needs for Government services and information of the five target groups. National voluntary organisations working with these groups should be funded to give feedback on the research methodology and the draft research report. The analysis should focus on how using the Internet can meet these needs and be beneficial to the target groups. The knowledge gained from this project should be used to improve delivery of online Government services and information and also to develop key messages for awareness and motivation activities.

7.2: Ensure compliance with IT Accessibility Guidelines

The Information Society Commission recommended in its latest report that the NDA should establish a monitoring process to determine levels of compliance with the IT Accessibility Guidelines and whether further actions may be needed to promote their adoption. This study endorses this recommendation and proposes that the monitoring process incorporate a review of accessibility action plans and procurement practice in public funded bodies. This is in line with recommendations from *Equal Citizens*, the Disability Legislation Consultation Group (2003) proposal on core elements for disability legislation.

7.3: Develop a quality assurance symbol

Quality standards and guidelines for usability of public websites need to be established and a quality seal/ symbol developed to highlight compliant sites. REACH, the public service broker needs to be supported to be an exemplar, and flagship projects for citizens and integrated services pilots should aim for compliance.

7.4: Encourage achievement of NDA Accessibility Award

The NDA is developing an accessibility award to promote and acknowledge the accessible public services in public funded bodies. This award will incorporate all aspects of accessibility including the built environment, customer service and information and communication technologies. Achieving this award is integral to the delivery of a quality customer service, as outlined in the Department of the Taoiseach's *Sustaining Progress* (2003) report. Public bodies should be encouraged to achieve this award.

Ensuring ICT access, infrastructure and broadband

Affordable Internet access is another big challenge for an inclusive information society. The government Action Plan New Connections commits the government to securing the widespread availability of open access, affordable, always-on broadband infrastructure for businesses and citizens throughout the state within three years.

For most late adopters, Internet access refers initially to free, public Internet access points, because most believe the Internet is not relevant enough to pay for. A late adopter who begins to use the Internet through a broadband connection in a public place may go on to acquire an Internet connection at home. At that point, the deficiencies of the broadband infrastructure in Ireland become obvious to the new home user.

Public libraries are the main public access points for the Internet, and their Internet programme has been a success. A large number of late adopters are library users and could be motivated to gain access to and use the Internet in libraries. However most late adopters never visit a library and other kinds of public access are needed for them. Chart 8 indicates the estimated number of late adopters who are library users.

Chart 8: Late adopters who are library users

Target group	Late adopters who are library users	Estimated total number of late adopters
Short-term target groups:		
Women with home duties (housewives)		
Retired people		
Tradesmen/skilled workers		
Workers in agriculture, forestry and fishing		
Unemployed people	290,000	990,000
Medium-term target groups:		
Workers in other occupational categories		
Students	280,000	710,000
Estimated total number	570,000	1,700,000

Source: Independent analysis of MRBI data (2002) and CSO (2002) figures.

Stakeholders' priorities for moving forward

Ensure affordable, flat rate home Internet access

- Home Internet access is seen as the ideal and long-term objective of an inclusive information society. For domestic users and citizens, there is a serious lack of choice and affordability.

- The cost of domestic and community Internet access remains prohibitive to many late adopters. With digital or satellite television, fixed tariffs and price comparisons are possible and alternatives are available. Internet connectivity, and particularly broadband, have not yet reached an affordable price level. For people in low income brackets little benefit or advantage is apparent.
- Flat rate Internet access allows unlimited access to the Internet. Charges are not metered but are based on a flat rate. Flat rate Internet access is supposed to be available in Ireland in July 2003 and the cost is expected to decrease as demand increases.

Make public Internet access more widely available to late adopters

- Audits should be conducted of public Internet provisions and ICT resources at local or county level. Targets should be set to ensure public Internet access within each parish or a certain geographical radius.
- A range of public Internet access provisions should be ensured. Accessible, affordable, local public Internet access should be increased in the short-term. Accessible, user-friendly Internet access points and centres should be made attractive and highly visible.
- There is no need to create new purpose-built centres for public Internet access. Existing community-based buildings and centres should be the locations of any new public Internet access points, provided they are physically accessible buildings. Safe, comfortable spaces for access need to be provided, where people meet socially, with informal networks for encouragement.
- Free public Internet access needs to be available in all low income communities. A condition of funding a public Internet access point or centre should be having people and tutors available to demonstrate, help and mediate information. Where access is free, a recognisable brand or logo should be developed to encourage people to use the facility.
- Internet kiosks should be avoided in general, except in public buildings where the interface is tailored to provide specific information - e.g. FÁS centres, social welfare offices, CICs, sports clubs.
- Public Internet access should be linked with training opportunities and informal learning opportunities. Public Internet access should be in a relaxed environment where late adopters can engage with computers and the Internet at their own pace.

Consider schools as centres for community access and learning

- Schools should be encouraged to consider their potential role as centres for community learning and Internet access. They could have a strong influence in fostering a life-long learning culture in communities.
- Schools that provide public Internet access should have guaranteed broadband connections. Stakeholders noted the unclear position of schools as public Internet access providers and considered that schools might be more appropriate as training centres, rather than Internet access points.

Strengthen the Internet access capacity of libraries

- Libraries have a key role in providing public Internet access. They could be given funds to do outreach to attract new users among the target groups. They could also work with local community centres and community organisations to develop stronger links with late adopter groups.
- Many libraries are not accessible to people with physical mobility problems, and this needs to be addressed. Many libraries also do not have the capacity to provide assistive technologies to allow people with different kinds of disabilities to gain access to the Internet and many library websites do not comply with usability and accessibility guidelines. To be an exemplar in public Internet access, these issues must be given immediate attention.

Ensure broadband connections for late adopters

- Many stakeholders are not in favour of the broadband "push" and believe it caters only for industry's needs. Cheaper, more accessible solutions could be prioritised and developed. However, where pilots are developed, evaluations need to focus on social inclusion mechanisms and outcomes.
- Broadband networks are a support for regional economic, educational and social development. They are not a panacea for regional growth and there is concern that local authorities will invest too much time, energy and money in developing the infrastructure, rather than developing the services, or building the capacity of communities, schools and businesses to exploit broadband's potential.
- Equitable provision of broadband should be ensured to promote regional and national competitiveness and ensure broadband provision for late adopters in rural areas. There is real concern that rural areas will lose out in the provision of broadband services because of the limited market capacity. Development of regional broadband infrastructure is uneven.
- Sponsorship from industry should not be confused with funding. Public resources and subsidies must intervene where the market cannot commit to provision of

broadband. Schools and non-profit organisations who need broadband should be subsidised.

- Many different models of broadband are being developed, involving local and regional authorities and public and private partnerships. Public ownership and provision of broadband requires huge funding commitments from the regions, national budgets and European R & D budgets. To secure a return on investment a critical mass of users needs to be established, who will use the Internet regularly.

Articulate the needs of users to service developers

- The development of a telecommunications infrastructure and the development of services is significantly demand-driven. Much needs to be done at local level to articulate the needs of domestic users, non-profit organisations and late adopter groups.
- Local communities, local authorities, social partners, and development partnerships could form an effective, collective lobby to demand services from the providers and seek interventions and subsidies from the state.

Irish projects

The study identified nine Irish projects aimed at ensuring ICT access, infrastructure and broadband for late adopter groups. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Ensuring affordable, flat rate home Internet access
- Making public Internet access more widely available to late adopters
- Strengthening the Internet access capacity of libraries
- Considering schools as centres for community access and learning
- Ensuring broadband connections for late adopters
- Articulating the needs of users to service developers

National: Public library Internet access

More than 1,400 PCs with Internet access have been made available to the public in more than 300 public libraries around the country. Some libraries have outreach and ICT training programmes for late adopter groups, notably seniors.

Shannon: Auditing ICT Resources

Funded through LEADER Plus, Rural Resource Development in Shannon commissioned an audit of school and community ICT for County Clare. The audit identified Internet facilities in parishes, villages and towns in the county. The

baseline study is being used to plan and develop ICT projects throughout the county, utilising existing resources and building capacity in communities who currently have few facilities.

The Digital Hub, stimulating demand for broadband

The Digital Hub, in Dublin's Liberties, has ambitious aims, broadly based around aggregating demand for broadband services. These include: creating a state-of-the-art infrastructure to cluster leading-edge Irish and international digital media companies in a core development located in Thomas Street; to facilitate new connections between the creative, technological, research and development, educational and community sectors for collaboration and value added outputs; to design and deliver a sustainable, vibrant and inclusive living and working environment to benefit the local and enterprise communities in the core development; and to deliver the project through public sector investment, public private partnership developments, and community participation.

Dublin: Digital Community Project

Residents of nine Dublin City Council flat complexes will be given access to computers and high-speed Internet. Training courses are also being developed for disadvantaged youth, youth clubs, women's groups and those involved in drug rehabilitation. Each "digital centre" is equipped by industry partners Hewlett Packard and located in a Dublin City Council building. The Digital Hub will supply technical support and educational software. Eircom will provide high-speed Internet access and the National Centre for Technology in Education will train the project coordinators.

CorkWAN, building community-based wireless networks

CorkWAN is a not-for-profit organisation developing and building a community-based wireless network around Cork City and County, using unlicensed spectrum.

Ennis Information Age Town, supporting public access to broadband

To cater for late adopters and people without home Internet access, Ennis Information Age Town provided free broadband Internet access (ADSL) in centres used by the public. As well as supporting Ennis library's Internet access programme, community network centres were established in the Citizens Information Centre, an ADM development company, a community centre in a local authority estate and Clare Youth Information Centre. These centres also provided training in Internet use and have trained trainers to help people mediate online information. Ennis West Partners, the ADM company, is targeting late adopter groups through its CAIT project.

Western Development Commission, Update on telecommunications in the West

The Western Development Commission has published a comprehensive report on the status of the region's telecommunications infrastructure. The report also outlines the

issues that should be addressed to ensure equitable provision of narrowband and broadband in remote and rural areas.

SERPANT, South East Regional Public Access Network of Telecommunications

The South-East Regional Authority, in association with its six constituent local authorities, prepared and submitted a successful bid for the roll-out of broadband in the cities and towns of Waterford, Kilkenny, Carlow, Clonmel, Wexford and Dungarvan. The move towards public ownership and provision of broadband telecommunications infrastructure is a new departure for regional and local authorities in Ireland and it represents a strategy to fill the gap in service provision that the private sector has hitherto failed to achieve. The 'SERPANT' Project will build on the achievements of the 'SEISS' (South-East Information Society Strategy) published in 2001 and will further the objective of positioning the South-East as Ireland's leading ICT region.

Southwest Broadband, developing wireless broadband pilots www.swra.ie/broadband

The Southwest Broadband project is an EU-funded project, partnering with the National Space Agency and European regions. The aim is to demonstrate, learn and further develop the understanding, awareness and use of satellite-based technology in rural and remote communities as a tool for balanced spatial development. The SWB Programme has been divided up into four sectoral areas for purposes of demonstration and piloting activities. The four areas involve dedicated project partners, technical support and expertise, all using satellite technology but with different applications, uses and users on the ground.

International projects

A number of projects outside of Ireland are in development to encourage affordable broadband access. Many involve innovative ways to bring broadband to rural and remote areas. Four projects interesting in the Irish context are described below. More details and contact information are in Appendix 2.

Canada: Broadband Community Centre

The Broadband Community Centre in Canada has assessed community preparedness for broadband Internet, producing a variety of cases from needs analyses. They recognise that one size does not fit all and work to ensure that broadband is organised to suit diverse local needs in different communities.

Their strategy is based on a vision to ensure broadband networks reach all communities. Large communities are encouraged to support smaller ones and help facilitate access. The focus is on how a community organises itself to facilitate broadband access and use in all areas, assuring real outcomes for local people who would otherwise be excluded.

The focus moves beyond simply extending access to broadband and recognises importance of application to socio-economic need and existing lifestyles. For example the needs analysis of the town of Burns Lake in British Columbia shows the prevailing economy of communities in the area are based on forestry, tourism and mixed farming. There is no high-speed Internet access available but there is full coverage in the commercial centre and each outlying community through one or more dial-up service providers.

While the local government sector in Burns Lake has a good website, there is very low use of high-speed Internet connections by institutions, business and residents. In addition, there is very limited use of dial-up connections for business to business or business to consumer online transactions. Community resources to support broadband connectivity initiatives include local champions, the municipal government and economic development agencies.

UK: BBCi Project Hull - Broadband Television

BBCi Hull is the UK's most advanced television trial and makes use of Hull's Kingston Communication's interactive cutting edge broadband television technology. The BBC uses the platform to deliver a unique combination of traditional broadcast television, video on demand, local and national information services and next generation enhanced programming.

True video on demand, fast forward, rewind and slow motion television at the touch of a button - to provide the BBC's most advanced interactive trial service yet. BBCi Hull has built an infrastructure around open standards - using HTML and Javascript which would allow the rapid deployment of the service around the United Kingdom.

UK: ADSL Exchange Activate - Community Broadband Concept

The Community Broadband Concept has been devised by British Telecom to test delivery of ADSL to low demand areas not normally considered commercially viable for upgrade to ADSL. Trials to use broadband exchange equipment are geared towards as few as 16 users per exchange with only one available ISP.

Highlands and Islands Enterprise, Gwynedd County Council, Denbighshire County Council, IT consultants The ITC (UK) Ltd, the East of England Development Agency, the new Forrest Business Partnership, and Omagh District Council are taking part, with each producing 10,200 euro towards the cost of the trial.

BT has provided 1.46 million euro to support the trial and new smaller scale equipment has been donated by Alcatel, ECI Telecom and Fujitsu. Pricing is key. If the price is set at 80,000 euro (ex VAT) per exchange this would allow 30 people in isolated regions to get ADSL for three years. The wholesale cost then would be approximately 73 euro (ex VAT) per user over a three-year term contract.

Taking cost of ISP into consideration, this produces a retail price of about 95 euro per user. If this figure is off-set by a "sponsor"- such as a development agency or a local authority - then the retail price could come down to 45 euro a month, in line with mainstream broadband prices.

Benefits perceived include: the partnership between public and private sectors that supports development of comprehensive broadband infrastructure; new methods are explored that could mean very small communities are not excluded from broadband coverage in the long-term.

England: Broadband in Rural Areas

Partnerships have been set up to introduce broadband to rural areas in England that if left to market resources alone would have to do without fast connection to the Internet. Funded by The Department for Education and Skills (DfES), "Suffolk Online Internet Access via Air" (SOLITAIR) is a development of Suffolk ACRE's SuffolkOnline.net project to distribute high speed Internet access to a rural community over the airwaves (see www.suffolkonline.net).

The parish of Badingham has been selected as one of the first "wireless Internet" villages in the UK to trial high speed Internet access using standard WiFi (802.11b) wireless equipment. The scheme will cover most of the population of Badingham and is being designed and planned in conjunction with the Badingham User Group to make sure the system suits village needs.

The service will give speeds up to 20 times as fast as normal telephone based Internet services and connection will be "always on" because it does not use the telephone line. The first houses were fitted with antennas and computer cards to contact the system in February 2003 and fitting is due to be finalised in April 2003. Installation is free and may require a small aerial mounted on the roof of a property. Participants will be charged around 30 euro per month for unlimited access- comparing well to the typical charge of 36 euro for ADSL.

Benefits of these international projects

The benefits of these four international broadband projects have been wide-ranging. The benefits of England's Broadband in Rural Areas project include:

- Supports affordable and accessible home and public access
- Stimulates public and private sector demand
- Explores provision of universal access

RECOMMENDATIONS

ICT and broadband are enabling tools and infrastructures for accessing, developing, using and sharing information and knowledge. Recommendations focus on developing coherent and inclusive strategies to ensure involvement of community interests in infrastructure development and consultation on user needs.

8.1: Audit current public Internet and broadband access, provision and support

Conduct an audit of current public Internet and broadband access, provision and support to determine national capacity to provide Internet and broadband access to late adopters. This audit should inform and help to develop the eInclusion Action Plan. The audit should examine if the ICT support structure for this provision is keeping pace with ICT developments. A roadmap for future provision should include short-term and long-term targets for home access, work access and public or community access (libraries, schools, community centres and commercial options). Disadvantaged communities, such as the RAPID and CLAR areas should be targeted for community access. Public Internet points should be seen as an interim objective, with long-term objectives focused on home access. The audit could also assess the scope for an ICT bank (using a foodbank model) to distribute surplus PCs to those in need.

8.2: Expand the capacity of libraries for outreach to late adopters

Conduct an audit of the current and future capacity of the public library system to provide broadband Internet access to late adopters. This audit should determine the potential for expansion of the current public Internet provision in libraries. Specifically, assess the ability of the public library system to provide broadband access to the huge number of late adopters without Internet access - both library users and those who never visit libraries. This analysis should include surveys of non-library users in the target groups to determine why they do not visit libraries. The outreach capacity of public libraries to these target groups should be explored and funded.

8.3: Assess the status of schools' engagement with community ICT

Determine the potential of schools as broadband and Internet access points for their local communities and assess value for investment of broadband in schools. Working with the Department of Education, conduct a study to examine how schools - both primary and secondary - could be supported to develop visions of themselves as centres for community learning, community Internet access, and community ICT learning and training, and to provide value for investment in broadband capacity in schools. Possibilities to be explored include: supervised open Internet access for the local community after school hours, and access for community-based ICT learning and training programmes.

8.4: Develop digital maps of each county

In its most recent report, the Information Society Commission recommended that Government should put in place appropriate arrangements to ensure that good quality independent information on telecommunications infrastructure is available, including quality mapping to support ongoing planning and policy development. This study endorses this and recommends that digital profiles of each county and region should be developed that map current telecommunications and broadband infrastructure, Wireless Local Area Networks and ICT pilots. These should be used to benchmark and monitor broadband infrastructure and services and be updated regularly to keep the public informed of progress.

8.5: Conduct a public consultation on broadband for community ICT

To help establish and stimulate demand for broadband services, a public consultation should be conducted to raise awareness of national and regional plans for broadband and to investigate how communities' needs could be addressed by service providers and content producers.

Ensuring ICT learning and skills for the target groups

Chapter 1 discussed the importance of giving all demographic groups the opportunity to contribute to a knowledge-based economy and society. Numerous reports have stressed the need to increase ICT training and learning opportunities for a broad section of the Irish population.

The White Paper on Adult Education (2000) identified that: "There are compelling reasons for integrating ICT into education and training systems. Firstly there are vocational and economic reasons for promoting the use of ICT in education. Second there are pedagogic reasons..and thirdly there are social reasons. It is clearly important that all people, regardless of social or economic background should have equal access to new technologies."

Providing adequate ICT learning and ICT skills training opportunities and supports for late adopters is a considerable challenge for inclusive information society development. Large numbers of late adopters are interested in ICT skills training, indicated in Chart 9.

Chart 9: Late adopters interested in ICT skills training

Target group	Late adopters interested in ICT skills training	Estimated total number of late adopters
Short-term target groups:		
Women with home duties (housewives)		
Retired people		
Tradesmen/skilled workers		
Workers in agriculture, forestry and fishing		
Unemployed people	280,000	990,000
Medium-term target groups:		
Workers in other occupational categories		
Students	250,000	710,000
Estimated total number	530,000	1,700,000

Source: Independent analysis of MRBI data (2002) and CSO (2002) figures.

No data are available on the levels of literacy of the target groups. However about 25 percent of Irish adults have literacy difficulties and it is safe to assume that many of them are late adopters. The data show that 29 percent of all late adopters have a primary school education with no qualifications, and 47 percent are age 50-plus.

Stakeholders' priorities for moving forward

Prioritise ICT learning capacity over ICT skills acquisition

- The ability to use ICT effectively builds on traditional learning competencies and extends beyond traditional literacy and numeracy skills. Digital literacy involves the ability to filter information, communicate effectively and build our knowledge base.
- Most stakeholders consider that the focus should move from "skills" to "learning" for most of the late adopter groups - not the abstract concept of "lifelong learning" but the provision of personalised learning opportunities and paths and the stimulation of a learning culture.
- A flexible, learner-centred approach is necessary to engage people in a learning process. User-needs analyses can help to develop appropriate learning paths for late adopters, linking ICT training with other learning needs.

Recognise community education's important role in informal ICT learning

- Many late adopter groups have a fear and distrust of formal education institutions and avoid formal education settings. Community education offers a more holistic approach to ICT training, encouraging the development of lifelong learning skills, allowing people to develop at their own pace, in a more informal setting.
- People without home Internet access need local access and training venues close to where they live, without having to travel great distances. Learning and training opportunities should be linked with broadband Internet access points and informal learning opportunities, where late adopters can engage with computers and the Internet in a relaxed environment.
- The importance of informal learning environments was highlighted in encouraging disadvantaged groups to engage with learning and in providing the essential social supports to facilitate access and boost learners' comfort and confidence.

Support formal education settings in delivering ICT training

- Technical support in adult education centres and in non-traditional learning sites is inadequate or non-existent and ICT capacity will need to be increased in these centres.
- ICT training for adult trainers involved in other aspects of adult learning (literacy, guidance, language support, family learning) can be difficult to find time for. Professionals and volunteers are under pressure to upskill all the time and ICT can be seen as an extra chore, so more effort needs to be made to integrate training, make learning materials and shared

resources available online, and make the option of ICT training attractive to staff and volunteers, possibly by providing incentives or discounts on ICT equipment.

- Some stakeholders believe that in many areas schools may be the only centres with Internet access and training facilities. Many schools are supportive in this area, and in many parishes, schools willingly provide facilities for many community activities and see ICT provision as an extension of that community service.

Focus on the workplace and apprenticeship programmes for ICT learning

- Ireland has a poor record of employer investment in worker training programmes. Although grants and supports are available for companies, most employers neither avail of these nor prioritise employee training.
- Employer programmes aimed at upskilling employees, particularly workers in the 50-plus age category are necessary. Many of this age group have highly-skilled and responsible jobs, but with few future career options unless they embrace ICT training.
- A major review of the apprenticeship system in Ireland is underway and due for publication later this year. Links could be established between apprenticeship programmes and e-inclusion by ensuring that ICT is included in apprenticeship training. There is a need for progression routes from traditional apprenticeships and trades into higher-level skills and third level which has implications for ICT skills and knowledge.

Consider certification and accreditation

- The goal of acquiring a recognised ICT skills certification can be a positive incentive for a late adopter to take a training course. Accredited ICT training can encourage late adopters to pursue progressive training routes. A progression path for late adopters should include increasing skills to use the Internet for a range of practical purposes.
- However certification is not always necessary for participants on learning programmes. The National Qualifications Authority has completed a draft national framework of qualifications and there is confidence in this agency in achieving its goals.

Irish projects

The study identified 14 Irish projects aimed at increasing ICT learning and skills in late adopter groups. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Prioritising ICT learning capacity over ICT skills acquisition
- Recognising community education's important role in informal ICT learning
- Supporting formal education settings in delivering ICT training
- Focusing on workplace and apprenticeship programmes for ICT learning
- Considering certification and accreditation

Equalskills

The Equalskills pilot in the Southwest and Shannon e-region was positively evaluated (Warren, 2002). ICS Skills (formerly ECDL Ireland) has developed Equalskills into a new format for international certification. The Equalskills programme is aimed at late adopters who are not comfortable with computers. Equalskills has been integrated into the ECDL family of certifications and is being offered by training providers in Ireland and internationally.

CAIT

Many of the CAIT projects delivered ICT skills training to their late adopter target groups. For example, Telework Ireland carried out a feasibility study with a carers association in Mourne and Newry to establish career development opportunities for carers working from home. Following the feasibility study, a telework training project was funded through CAIT.

National: Community education provision

Adult and community education centres, funded by the Department of Education and Science and operated through VECs have developed vocational programmes for unemployed adults (e.g. VTOS), with a range of supports on site - childcare, literacy, guidance, etc. These centres provide well-established pathways to further education and employment, as well as accredited ICT courses - FETAC and ECDL.

Co. Clare: Caring for Carers

Caring for Carers in Clare are running a pilot, funded by Mid-Western Health Board, providing ICT training for carers and linking homes and daycare centres by Webcam.

Drogheda: Telework Training

Drogheda Partnership has recently established a Tele-Training company, a FÁS sponsored social economy programme which offers accredited ECDL (European Computer Driving Licence), CLAIT (Computer Literacy and Information Technology) and Teleservices training to the community and employers.

CIOC (Congress, information and opportunity centre)

This group in Ennis, Co. Clare has a good coordinated approach to providing ICT training to unemployed people, low income and those on the Community Employment programme.

Co. Clare: Open Learning Centre

Clare Adult and Community Education Centre has several ICT training suites, which have been upgraded over the past five years. ICT training is incorporated into all VTOS training and many participants have progressed to become ICT tutors. To reduce technical support costs, staff have been trained in technical trouble-shooting to help them recognise common technical problems they can solve themselves. The centre also hosts an Open Learning Centre which provides free ICT training to adults - unemployed or in employment. The centre is currently piloting a community e-learning project, which combines online training resources developed in-house, e-learning links for adult learners, Learndirect (UK) resources, FásNet training material and personal tutor support. <http://adultelearn.ennis.ie>

Ennis: Community Training Centres

Under its Community ICT Programme, the Ennis Information Age Town project supported and provided funds for Community Training Centres and Community Network Centres to enable them to provide ICT training to many late adopter groups - unemployed, travellers, people with disabilities, early school leavers and adults with special learning needs. As well as providing grants towards ICT equipment, Ennis Information Age Town also provided technical support and advice on ICT planning, project management and integration.

Carlow: Rural ICT training

Carlow County council has a network of ICT access and training centres (CRISP - Carlow Rural Information Services Project). It promotes training and other initiatives through the use of local media. Carlow CDB (County Development Board) also has a specific action in its CDB strategy to increase the number of older people participating in community ICT training using outreach ICT programmes. The Carlow Equality for Women project has already trained a group of older women in ICT.

Summerhill: Assistive technologies

Summerhill Active Retirement organisation is involved in several ICT projects. They provide computer training classes with subject matter of interest to the target group, using adapted equipment to address mobility and accessibility barriers for older people with visual impairments, hearing impairments, mobility or posture problems, grip problems, poor mouse control and co-ordination. They use "paint" programmes to improve mouse control, use non technical terms to explain things (less computer jargon) and group individuals in similar groups for training, e.g. older people with older people and lone parents with other lone parents.

Scariff: Needs-based training

A Scariff based organisation, E-training International, tailors its training courses to local needs. In an effort to facilitate and make training services available to late adopters in this rural area, close links have been made with the Local Employment Service and

East Clare Community Co-op. The training needs of the clients of both of these organisations are assessed and suitable training programmes are designed and delivered to groups and individuals. Links have also been established with the Department of Social Welfare which has resulted in their clients having access to full funding for training designed and delivered at the training centre.

Teagasc: Client group training

Teagasc provides training interventions at different levels and peer training to its membership around the country. The organisation has developed a client website for its 36,000 members. As well as information and interactive services for farmers, the site has published training materials and resources, including an online skills test and evaluation exercise.

Schools: Sponsorship for a dedicated IT centre

When the former sponsor of the Clare hurling team lost the sponsorship contract to eircell, he turned his energy and generosity to his Alma Mater, St. Flannan's College in Ennis, Co. Clare and helped to fund the development of the schools' ICT facility. The Pat O'Donnell IT Centre is a dedicated ICT building with training suites and video conferencing facilities for use by students, parent and the public. The centre finances its activities by providing a range of certified training courses to members of the public.

Westmeath Co. Council: Promoting ICT skills in the workplace

Westmeath county council provides return to learning programmes, including literacy and ICT training to their outdoor staff. Mobile ICT applications have also been developed which engage outdoor staff in ICT use, recording time sheets, and material and machinery data at source.

International projects

Innovative ICT learning and skills training programmes have been developed in a number of countries. Three programmes relevant to the Irish context are described below. For contact details and more information, see Appendix 2.

Australia: Community Information Technology Project

The Community Information technology Project (Com-IT) is a computer recycling and gifting project donating recycled computers to disadvantaged communities. The project blends work experience for unemployed people with provision of free computers for non-profit organisations and responsible disposal of redundant equipment.

Over 300 unemployed jobseekers have modified over 1000 computers and recycled around 120 tonnes of previously harmful IT scrap. Adult community education

programmes provide opportunities for life-long learning based on accessible and flexible approaches that also strengthen communication networks.

Literacy programmes - funded by the Department of Education, Science and Training - not only help people gain basic literacy skills they also provide training in how to use computers. The ComIt project is blended into a united approach organised by RecruitNet Career Skills, an organisation running since 1984, to provide support and training to help people gain and retain employment.

England: SkillsMobile

The Loughborough College "SkillsMobile" is a purpose-built mobile classroom supported by state-of the art computers. Training is delivered to complete beginners in their own communities rather than at the town centre college campus. Many of those involved have completed primary education but have no qualifications.

Each learner works at their own pace so that people who would otherwise not engage with ICT in a formal learning situation are given opportunity to learn new ICT skills. A choice of two courses are offered: Computers for the Terrified (CFTT) and Computer Literacy & Information Technology (CLAIT).

Courses lasting around 45 minutes are conducted three times a day over two week days, and the schedule varies according to need. Interviews with users have indicated that many of those who have completed informal training courses would not have done so if the SkillsMobile had not come to their area.

Most of those who completed the CFTT course in the SkillsMobile went on to take other level courses in ICT, and many others have become more confident and have indicated willingness to complete more formal ICT courses. Loughborough College has also launched "Mobile 2," a trimmed down version of the SkillsMobile, which travels to sites within a 25-mile radius of the College to deliver laptops and a computer tutor to individual sites in the community.

Benefits of these international projects

The benefits of Australia's Community Information Technology Project include:

- Cross-cutting, cohesive, united approach using established collaborations to recruit late adopter unemployed groups and blend new kinds of ICT training into non-institutional environments that supplement services already being provided
- Provision of tailored assistance to meet needs of jobseekers who want to enter the information technology industry
- Assistance in bridging the digital divide by providing access to computer technology to those without the means of accessing it themselves

- Developing transitions to employment for unemployed late adopter groups
- Minimising the amount of harmful electronic scrap entering the waste system

The benefits of England's SkillsMobile include:

- Recruiting late adopters into mainstream ICT training and transforming mainstream ICT training to meet the informal needs of late adopter groups
- Provision of non-institutional environments for engaging with ICT; learning in unthreatening familiar environments is beneficial
- Partnership with young farmers (in the case of AgriNet), flexibility of trainers and individual one-to-one training helps increase confidence in ability to learn
- Training tailored to specific needs - particularly useful in addressing rural needs of farming communities
- Convenience of local visits, and loan of equipment considered beneficial
- Easy to understand training and follow-up literature to read after training workshop is helpful

RECOMMENDATIONS

Lifelong learning has become a key public policy focus, with the need for ICT literacy widely recognised. For late adopters there are many challenges to gaining competency in ICT. Recommendations focus on developing a coherent and strategic approach to ICT skills and learning.

All these recommendations endorse and strengthen previous recommendations that have not yet been implemented by Government. The most recent Information Society Commission report (ISC, 2002) highlighted that a significant structural shift is needed in the education and training sector to support a culture of lifelong learning. The current study underlined that without a commitment to making this structural shift, inclusive information society development cannot be realised.

9.1: Prioritise late adopters for ICT literacy programmes

The Information Society Commission recommended in its latest report that the Government must give high priority to the establishment of a national ICT literacy programme. This study endorses this and recommends that late adopters should be prioritised in this programme. Working with national literacy and community-based training bodies, a five-year strategy for increasing ICT learning and skills in the five target groups should be developed. The document should include: outreach and motivation strategy; development of ICT skills and core skills; social and cultural supports; guidance and mentoring and literacy supports. Targets should be set for the next five years.

9.2: Develop a strategy for increasing ICT skills by late adopters in the workforce

Develop a more strategic approach to increasing ICT skills in the workplace by late adopters. In its latest report, the Information Society Commission endorsed the recommendations of the Taskforce on Lifelong Learning in relation to workplace learning. This study also endorses these and recommends that working with social partners, industrial development agencies and national training organisations, a five-year strategy should be developed for increasing ICT skills in late adopters in the labour force. The strategy should in particular focus on older workers who could increase their level of Internet skills which would be useful to them in new careers or retirement.

9.3: Support employers to develop ICT training plans

The Information Society Commission recommended in its latest report that where it is appropriate in the workplace, support and assistance should be provided through the National Training Fund for the development of an ICT training plan to include basic computer skills and for the encouragement of companies to undertake training by alternate means such as online and distance learning. This study endorses this and recommends that training should be aimed at increasing skills to use the Internet for a range of practical purposes.

9.4: Integrate ICT into mainstream and informal education

The Information Society Commission recommended in its latest report that basic ICT skills training for adults should be established as a key component of the Back to Education Initiative and should also, as far as possible, be integrated as a core component of mainstream education and training. This study endorses this and recommends that training should be aimed at increasing skills to use the Internet for a range of practical purposes.

Developing ICT capacity in community and voluntary organisations

The role of the voluntary sector in fostering inclusive information society development was highlighted in Chapter 1. The European Commission has called the voluntary sector "an essential stakeholder for eInclusion."

The European Commission's eInclusion strategy states that voluntary organisations "serve as a valuable partner for public action due to their knowledge of and access to late adopter groups. Many of the targeted ICT awareness and training initiatives build on their potential to communicate new technologies in an acquainted environment. They are also particularly useful in pooling public information on their websites, customising it to the specific needs of their clients, and providing, thus, multiplier effects" (European Commission, 2001). The Information Society Commission has also recognised the vital role of the community and voluntary sector in eInclusion in a number of reports.

A considerable challenge facing inclusive information society development in this context is the poor ICT capacity within the community and voluntary sector. The most comprehensive study in Ireland on this topic was completed in 1998 and found that most organisations had faced considerable barriers to integrating ICT within their operations (O'Donnell, Trench and Ennals, 1998).

More recently, a roundtable on community and voluntary organisations and the Internet held in Dublin highlighted the urgent need for building ICT capacity within the sector (The Wheel, 2002).

Stakeholders' priorities for moving forward

Developing capacity in the community and voluntary sector is seen as key to enabling inclusive information society development. Consultations focused on two distinct elements:

- (i) Putting in place a co-ordinated system of supports for the community and voluntary sector to develop organisational capacity and ICT knowledge.
- (ii) Leveraging the community and voluntary sector's knowledge of its members, clients and end users to develop and deliver targeted programmes for late adopters that complement existing activities and programmes.

Community ICT has developed on an ad hoc basis in Ireland, resulting in a knowledge deficit, missed opportunities for leveraging resources and partnerships and streamlining ICT initiatives with social inclusion measures. Maximising value from investment is paramount and because community ICT is at an embryonic stage in Ireland, the opportunity exists to develop capacity in this sector strategically, to link seamlessly with other information society strands and projects.

The opportunity exists to develop a co-ordinated system of supports for community and voluntary sector to develop organisational capacity and ICT knowledge. These supports could also be made available to all non-profit organisations, local authorities and social partners who are supporting inclusive information society development and encouraging ICT use among their constituents.

Provide ICT advice and supports

- The need for technical support for the community and voluntary sector has been highlighted in previous ISC reports, and this was endorsed in the consultations for this study.
- Resourcing a national technical support service with freephone telephone support, and subsidised call-out and maintenance service is seen as a priority. Technical knowledge is limited in many organisations.
- A national ICT advisory centre with county-based support networks could serve many functions and enable cost savings by helping organisations articulate their technology requirements and plan their ICT infrastructure based on their information needs.
- Community and voluntary organisations need unbiased and vendor neutral advice on the purchase of hardware, software and peripherals and help in developing specifications to meet their network and cabling requirements, to enable them to make judicious purchases.
- Organisations providing access and services for people with disabilities and elderly people would benefit from a central agency offering advice, developing technical specifications and installing assistive and adaptive technologies tailored to individuals' specific needs.
- Community and voluntary organisations need assistance with implementing usability and accessibility guidelines and incorporating universal design principles into their ICT plans. An ICT support service could advise in these areas, monitor implementation and award 'compliance' symbols for best practice awards in accessibility.

Develop ICT training programmes for staff and volunteers

- A range of ICT training provision needs to be developed for management, staff and volunteers of community and voluntary organisations. A national training programme for this sector should be considered and a mechanism (online and offline) for sharing material and resources should be developed.
- The ICT training capacity of community and voluntary organisations needs to be developed and enhanced. A 'train the trainers' programme can be cost effective and be tailored to suit both the organisations' and their clients' needs.
- ICT training for staff and volunteers should be broad; catering for individual skills and organisational capacity building. Consideration should be given to incorporating basic technical troubleshooting, web usability and accessibility guidelines, technical writing skills and action research skills, to increase the ICT knowledge base.
- Training resources should be developed to help organisations to assess their users' ICT needs, develop specific ICT training tailored to the needs of late adopter groups, develop ICT use to further social inclusion goals and processes and use ICT for advocacy and lobbying.

Raise the public profile of community ICT

- Public debate could be encouraged to raise public awareness of the benefits of the information society and investment and engagement in ICT. Information on community ICT initiatives and outcomes could be published in popular media.
- Regular fora and conferences should be organised, with published proceedings, to establish mechanisms for recognising best practice and effective use of ICT, particularly the Internet. The emphasis needs to be on the social applications of technology, not on the technology.
- Many community and voluntary organisations using ICT effectively have poor public relations capacity and resources. ICT can facilitate improved communication, publicity and dissemination of information. Efforts should be made to develop the public relations capacity of umbrella and networking organisations, to help highlight ICT successes and issues that should be addressed.

Develop funding mechanisms that community and voluntary organisations can access directly

- There was consensus that funding for community and voluntary organisations should not be competitive. A short-term demand for funding is for development grants to allow organisations research their ICT needs, develop an ICT plan and realistic timeframe for implementation and consider the most cost-effective solutions.

- It is important though that clear goals are set for funded projects, clear guidelines are given to projects applying for funding and transparent evaluation criteria are given for project approval.
- ICT projects which complement social inclusion objectives and measures should be prioritised for funding in national initiatives. Funding for small scale, innovative pilot projects targeting late adopters who experience multiple disadvantage and who have special needs should be supported.
- In general, there is support for larger scale projects, driven by the community sector, but supported by partners in industry, education, public sector or research institutions, to facilitate greater transfer of knowledge and further information society and knowledge economy goals.

Encourage and broker partnerships for large-scale projects

- Partnering with community and voluntary organisation presents opportunities for industry and research agencies to develop ICT projects which address real user need. Partnerships among organisations with different values, goals and organisational processes allows a transfer of knowledge and development of organisational capacity.
- The best approach is to encourage partnership with the community and voluntary sector from planning to evaluation stage, supporting them in achieving their aims and sharing the learning.
- Few opportunities currently exist for the community and voluntary sector to participate in EU research projects and it is felt that this not only discriminates against this sector, but inhibits information society development in Europe.

Irish projects

The study identified nine Irish projects aimed at developing ICT capacity in the community and voluntary sector. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Providing ICT advice and supports
- Developing ICT training programmes for staff and volunteers
- Raising the public profile of community ICT
- Developing funding mechanisms that community and voluntary organisations can access directly
- Encouraging and brokering partnerships for large-scale projects

CAIT: Networking for knowledge

Although not a specific objective of CAIT, one of the outcomes of CAIT was the development of ICT capacity in community and voluntary organisations. Organisations participating in CAIT also benefited from networking with similar type organisations at CAIT conferences

Muintir na Tire: Promoting partnership and knowledge transfer

The Department of Community, Family and Social Affairs and the University of Maynooth worked with Muintir na Tire to help develop web templates for rural community councils. The project was funded through the Information Society Fund. A report on the project is available at www.muintir.ie/ict/ict.html

The Wheel

The Wheel supports networks of information officers and community fora and facilitates regular round table discussions and workshops to develop strategic plans and actions around specific topics of interest. The Wheel facilitated a round table discussion on the Internet in 2002 in Dublin (The Wheel, 2002).

NDA: Accessibility guidelines and needs assessment

The NDA have developed accessibility guidelines for websites and have been involved in consultation - with senior citizens organisations and other groups as well as Government and social partner stakeholders - concerning the assistive technology needs and barriers that older people face when using technology.

CRISP: Working with community forum

Carlow County council through CRISP (Carlow Rural Information Society Project) works with the Community Fora (170 community and voluntary groups) to develop ICT skills among its members and develop websites for member groups.

Hyperlink: Providing online resources for the community and voluntary sector

Hyperlink provides discounted ICT services to charities and community and voluntary organisations. The company also maintains www.activelink.ie as an online resource for the non-profit sector.

Teagasc: Sharing training resources

Teagasc works with community groups in the delivery of ICT training. All Teagasc ICT training support materials are available free to community and voluntary groups.

Telework Ireland: Mentoring

Telework Ireland provides a nation-wide mentoring service to community groups who are interested in developing IT facilities, training and telework-based businesses. Mentors are trained, experienced teleworkers. Details of the mentor project are available on their website www.telework.ie Telework Ireland was also responsible for

developing an eWork code of practice, and with the Newry and Mourne Carers Association, developed a successful application for CAIT funding, aimed at facilitating telework opportunities for carers.

Ennis Information Age Town Community programme

After consultations with community, voluntary and sporting organisations, Ennis Information Age Town project developed an ICT programme, specifically designed to build ICT capacity in the community and voluntary sector. A range of supports was developed - grant aid, technical support, ICT training, web development, hosting, promotions, advice on project planning and the opportunity to develop a community ICT 'champion'. The community programme was facilitated by a dedicated community ICT coordinator. Case studies on some of the community projects are published at www.eiat.ie

International projects

Support systems for community and voluntary organisations have been developed in the UK and some other countries. Four programmes relevant to the Irish context are described below. For contact details and more information, see Appendix 2.

England: "Direct Support"

Funded by the Department for Education and Skills (DfES) until 2003 and managed by Ruralnet UK, "DirectSupport" is a free advice and mentoring service for community and voluntary sector UK online centres in England. The initiative comprises a consortium of agencies with long-term expertise in community development and ICT.

Designed to support the concept of social inclusion, the main aim is to ensure that all communities - including smaller and more isolated areas - acquire enough support and help to run sustainable local ICT centres. Ensuring adequate access to ICT and the Internet and appropriate learning to support community and voluntary sector use is central.

A freephone helpline offers immediate guidance to on-line centres and the voluntary sector in England. Access is provided to policy and other documents and a variety of learning resources. On joining, email addresses are provided and private extranet areas may be set up to allow centres to work together privately.

Mentoring and workshops are available and expert facilitators and presenters provide additional advice and support. A range of support material have been developed for staff and volunteers and to support funding activities.

Scotland: "Connecting Communities" Training Programme

This project targets community and voluntary sectors supporting late adopters. With funding from the Scottish Executive, support from Learning and Teaching Scotland, and under the umbrella of the National Grid for Learning in Scotland, the "Connecting Communities Programme" is a free-to-end-user programme designed specifically to increase the use of technology in the community sector.

Community "tutors" from a wide range of backgrounds within the field of community education are identified initially by community strategy lead officers to receive three days of training. Learning is focused on basic ICT skills, civic and e-democracy literacy issues, and a range of related topics that are part of a comprehensive "Connecting Communities" training pack.

Each tutor is given a training allowance of 150 euro, a laptop computer, and data projector to help them cascade training further. Within six weeks of completing the course, each tutor, supported by Learning and Teaching Scotland, and using a hard copy set of "Connecting Communities" training booklets, tutor notes, Power Point presentations and online materials in combination with the laptop and other equipment provided, cascade training on to 10 community professionals working in her or his partnership area. Training Units are also available online and may be downloaded.

England: 3tc Merseyside Third Sector Technology Centre

Partnerships between private, public and voluntary sector organisations have ensured ICT and the skills to use them are being made available to individuals, groups and community and voluntary sectors across Merseyside. From small beginnings, 3tc now has funding support of 20.7 million euro to coordinate action.

The project has already created over 50 jobs, runs a UK online centre with free access and training facilities, and supplies around 200 computers a month to the voluntary sector. ICT services and training are central in the attempt to create a socially inclusive bridge over the digital divide. Many members of the local community including married couples, lone parents, retired teachers, doctors, unemployed and local business people have all earned ICT qualifications from training courses.

A one stop shop for ICT and communication needs delivers services and helps develop an ICT literate culture by supporting skilling and use of ICT for groups and individuals tackling social exclusion. With support from the Northwest Development Agency, the project has developed a range of IT services.

An ICT community champions course is available free to those from third sector organisations who already have basic ICT skills. Participants obtain a formal qualification and are subsequently able to use new abilities to implement an ICT strategy for their own local organisation. The Waste Electrical and Electronic Equipment

Directive (WEEE) supported by MEPs in Strasbourg requires producers to fund collection and recycling of electrical equipment.

In a new scheme, used PCs that would otherwise be discarded are being refurbished and supplied to community and voluntary organisations across Merseyside. Large socially responsible firms in the private sector who are also aware of need to protect the environment pass on their unwanted PCs to 3tc for refurbishment and recycling. Those who benefit include charities, community groups and volunteers and recycled PCs are accompanied by technical support and an Internet package.

England: Manchester Women's Electronic Village Hall (WEVH)

The WEVH is an ICT training and resource centre run by women for women. All training courses are tailored to women's needs and are organised to suit school hours and holidays. Maintaining small groups helps to build self-confidence. The WEVH also supports women moving into entrepreneurship. In addition the WEVH supports women's community and voluntary groups and women in community and voluntary groups using ICT, through Lottery Funding.

The "Women's EVH WICOP (Women's Information and Community Outreach Project)" supports women in community and voluntary groups to make better use of IT. By providing technical support, advice and information, and resources to women, the project supports the development of networking between organisations and improves services offered by these organisations.

The initiative provides a drop-in or workshop facility for women who come to the WEVH to find out more about the potential of ICT for their organisation. Online resources and information about using and managing IT of most interest and importance to women in the voluntary sector, including events and training are also offered.

The Resources pages provide a focus point for networking for women in voluntary groups. Possibilities are also offered to join a number of mailing lists, access websites and read paper based material. As a result, women are able to network as well as find valuable information about common problems and issues for the voluntary sector, in both ICT and non-ICT related areas.

Benefits of these international projects

The benefits of England's Direct Support project include:

- ICT and knowledge capacity is increased in community and voluntary sectors
- Training is provided for staff and volunteers
- Support is provided for community and voluntary sectors to use ICT in practices designed to increase social inclusion
- ICT initiatives may become more sustainable as a result of early support

The benefits of Scotland's Connecting Communities training programme include:

- Community tutors and community professionals gain significant skills that may enhance practice in the community sector
- Good practice examples may also support other staff and volunteers working in the community sector
- Increasing skills as well as knowledge about the potential of ICT in communities builds capacity to develop more meaningful use of the technology to the benefit of each community
- Greater capacity to understand problem areas helps in pre-empting and dealing with risk and previously unforeseen side effects

The benefits of the Manchester Women's Electronic Village Hall include:

A volunteer workforce, trained in ICT and in working with voluntary groups can work directly with organisations to help them develop their ICT use and ICT strategies, for example:

- Undertaking IT and Information Audits
- Developing publicity & supporting better communication, internally and externally
- Training
- Developing information resources such as databases or websites
- Providing advice on buying computer equipment or getting onto the Internet
- Provision of e-mail, phone, fax advice lines for ICT support

RECOMMENDATIONS

The community and voluntary sector is widely recognised as an essential stakeholder and catalyst for inclusive information society development. Poor ICT capacity in the sector poses a serious challenge in this context. Recommendations focus on resourcing and supporting the community and voluntary sector and encouraging and recognising leadership.

The first recommendation, for a technical support system for the sector, has been made in previous information society reports but has not yet been implemented by Government. This study highlighted that the lack of technical support in the sector and the lack of movement by Government in this area is a considerable barrier to inclusive information society development.

10.1: Develop a technical support system and service for the community and voluntary sector

Conduct a feasibility study for the development of an ICT advice and technical support service for the community and voluntary sector. This should explore both a telephone-based support structure and face-to-face supports. Based on the study results, the technical support system should be put in place as rapidly as possible.

10.2: Support wider community development objectives with ICT

The Information Society Commission recommended in its latest report that the Minister for Community, Rural and Gaeltacht Affairs should bring forward early proposals in relation to the role of ICT in supporting wider community development objectives, building on the evaluation of the CAIT initiative. This study endorses this and recommends that a technical support system for the community and voluntary sector (recommendation 10.1) should be developed as a way of ensuring that ICT can support wider community development objectives.

10.3: Provide a fund to encourage leadership and innovation

ICT Champions who have the commitment, dedication and ideas need to be supported. An ICT Champion fund should be established to support mentors and champions working with community and voluntary organisations. Priority should be given to projects building capacity in community publishing, encouraging collaboration with the private sector and encouraging secondment of personnel from ICT industry and research institutes.

Consolidating knowledge about an inclusive information society

Knowledge and understanding about the needs of late adopters and their engagement with ICT was highlighted by the study as a major priority for inclusive information society development. The importance of research to Ireland's economy and competitiveness has been highlighted successfully in the recent past.

Although a number of research projects are currently underway on social inclusion in the information society, overall the research efforts have been minimal due to the lack of funding for such projects in Ireland. Consequently, knowledge about inclusive information society development and late adopters in Ireland is very underdeveloped.

A huge disparity exists between funding for science and technology research and funding for social research on technology. The separate research councils for technology research and social research make little effort to synergise research or encourage collaboration between them and there are no mechanisms for researchers on eInclusion topics to formally exchange knowledge. This situation has led to a need for research efforts to be strengthened and consolidated.

Stakeholders' priorities for moving forward

Design cost-effective and useful solutions by understanding user needs

- The biggest barrier to developing programmes for late adopters is the lack of knowledge about why people are not engaging with ICT and what their needs are.
- Assessing the needs of the target groups should be the first step in developing any ICT programme or project. A primary way to motivate late adopters is to learn how ICT can benefit them and then ensure that training programmes are relevant, interesting and useful.
- Qualitative studies of late adopters' information and communication needs and current patterns of ICT usage are needed to ensure that effective programmes are developed. If ICT projects are not rooted in people's everyday lives and are not designed and implemented with late adopters, they may never be used.

Raise the profile of research activities and strengthen research co-ordination

- Research collaboration needs to be strengthened, especially with Northern Ireland, which is implementing its information society strategy in a different way but experiencing similar social inclusion challenges. Many cross-border projects

and partnerships have been developed and the opportunity exists to strengthen these through joint research initiatives.

- Considerable expertise exists in different aspects of information society development, but knowledge of e-inclusion is scarce and thinly spread around the country. It is important to consolidate the knowledge base, collate best practice and develop a central, accessible source of information.
- Current academic research on information society, ICT and social inclusion, ICT and education and community ICT is disjointed and is spread across many academic disciplines and institutions. There is little multidisciplinary research in this area and to date academic research has had little impact on information society policy or practice.

Disseminate and promote research

- Stakeholders expressed a need for a regular forum for discussion, debate and public consultation on the challenges of developing an inclusive information society. Few opportunities for involvement currently exist for people who could contribute, particularly people actively involved in ICT projects and social inclusion initiatives.
- Participants in the CAIT Initiative benefited from the networking conferences organised by CAIT and would like the opportunity to show case their projects, learn from other practitioners and participants and explore options and opportunities to make their projects sustainable. They also felt that it was important to have a public forum to discuss the key learning from the CAIT evaluation.
- It is six years since Ireland hosted a conference on the information society. During that time, Ireland's progress in information society has been mediocre. There is considerable interest in exploring how other countries have succeeded in expanding their information societies to all.

Ensure standardisation of indicators and audits

- Currently, information society surveys and EU benchmarking exercises use different indicators and statistics on ICT use vary considerably. Efforts should be made to streamline data collection.
- Future information society surveys need to incorporate new inclusive information society indicators which will establish robust benchmarks and allow progress on social inclusion and usage of ICT by late adopter groups to be monitored on a regular basis.

- ICT audits at county level should be standardised. Currently, local authorities are involved in ICT skills audits, resource audits and audits of training provision. To allow equitable ICT provision throughout the country, guidelines for conducting and co-ordinating county-based ICT audits should be developed for county development boards.

Research the capacity and needs of the community and voluntary sector

- Research needs to be conducted with community and voluntary organisations to establish their ICT needs as organisations. Areas that should be assessed are how ICT might improve operational efficiency, reduce costs and improve communication and networking opportunities.
- An essential element is to investigate how ICT might enable each organisation to achieve its goals, be more effective and improve the information and services provided to members, clients and users.
- Audits of existing ICT facilities, resources and skills will help in developing an ICT plan for each organisation. These audits should be linked with ICT audits at county and sectoral level of ICT facilities, ICT initiatives, training capacity, skills and knowledge, to give a clear indication of resources accessible to late adopter groups and the public.

Leverage the community and voluntary sector's knowledge

- The community and voluntary sector has a wealth of knowledge about late adopters. Research supports could be developed to help organisations assess their members and clients' needs and support the development of outreach and training programmes targeted at late adopter interests.
- Ways of integrating ICT into existing programmes and supports, particularly learning and training programmes could be examined. The key successes and learning from CAIT and international ICT projects, aimed at engaging late adopters could be shared among projects and researchers in Ireland, the EU and wider internationally.
- Community and voluntary groups should be supported in their efforts to promote initiatives and attract participants. A rigorous user needs analysis should make it easier to identify people and develop targeted supports which will encourage participation in ICT projects.

Evaluate ICT pilots and projects

- There have been many community ICT projects funded through diverse sources over the past five years in Ireland. It is important to analyse, consolidate and disseminate the key learning from these projects before developing new initiatives.

- The term 'Best Practice' is used glibly, and many projects that claim to be models of best practice have been reviewed, rather than formally evaluated, often because no clear indicators or comparable measures exist. Development of best practice guidelines for evaluators of ICT projects, incorporating indicators for social inclusion, would allow progress to be monitored more closely.
- Technology pilots and trials, particularly, need sound evaluations to ensure that immature technologies and products do not get to market. Technology developers should be encouraged to test their products, applications and services with real users, particularly with late adopters in real life environments, rather than labs.

Irish projects

The study identified 13 Irish projects aimed at researching inclusive information society development. These projects each have some elements of the priorities identified in the stakeholder consultations:

- Designing cost-effective and useful solutions by understanding user needs
- Raising the profile of research activities and strengthening research co-ordination
- Disseminating and promoting research
- Ensuring standardisation of indicators and audits
- Researching the capacity and needs of the community and voluntary sector
- Leveraging the community and voluntary sector's knowledge
- Evaluating ICT pilots and projects

Encouraging digital inclusion in Dublin

The Dublin Employment Pact, in partnership with the four Dublin local authorities and the Dublin Regional Authority have recently commissioned a study of digital inclusion in Dublin, including ways that late adopters can be encouraged to increase their engagement with ICT.

The Digital Divide in Schools

A research project at NUI Maynooth is studying patterns of equipment, access and use of ICT in Irish schools. A report from this project will be published shortly (Mulkeen, forthcoming) and the research team is currently reviewing the latest survey data from the NCTE (National Centre for Technology in Education).

The Digital Divide in Ireland and the EU

A doctoral research project at NUI Maynooth is examining access to ICT and social exclusion in Ireland. The research includes a review of the available evidence of ICT access in Ireland, relating this to the broader trends in social and spatial inequality. The research previously explored national policies and access to ICT in EU Member States (McCaffrey, 2003).

Rural development in the information society

An ongoing research project at NUI Galway is studying the information society and rural development in Ireland and the EU. A number of papers and reports have been published, including Grimes (2000).

SIGIS: Strategies of Inclusion: Gender and the Information Society

The SIGIS project at the DCU School of Communications is examining various inclusion strategies, including public and commercial initiatives seeking to include women in ICT, and their effectiveness in different contexts. This multi-country project involves research centres from five different countries: the UK, Norway, Italy, Ireland and the Netherlands. DCU's contribution is addressing the patterns and forms of women's inclusion/exclusion in the areas of new ICT and the information society.

Understanding the knowledge society

The TCD School of Systems and Data Studies is currently working on research to understand the information society. One focus of the research is looking at those in society who are not computer literate or do not have access to ICT.

Digital Democracy in Ireland - a comparative analysis

This project is an analysis of how different actors in the Irish political system (elected representatives, public servants, citizens, NGOs) are utilising ICT and a comparison with ICT utilisation by similar actors in other OECD countries. A central issue is the manner in which "ordinary citizens" are becoming more or less included in the democratic process as a result of technological change. This research will be published as a Blue Paper by the Policy Institute at Trinity College Dublin.

KISEIS: Interventions for sustainable employment for disadvantaged groups in the information society

This EU research project coordinated by Itech Research is exploring ways that projects in five EU countries are assisting people from disadvantaged groups to acquire skills and sustainable employment in the information society.

MUTEIS: Macro-economic and Urban Trends in Europe's Information Society

This EU research project is coordinated in the Netherlands, with Nexus Research as the Irish partner. In Ireland, MUTEIS is conducting case study research into cooperative partnership models for innovative urban eInclusion projects in Dublin and Cork.

SEISS e-work conference

SEISS (The South East Information Society Strategy) hosted a conference on ICT and e-work at work in Ireland: Using information and communication technologies to accelerate Regional and National Development, in November 2002 with Teletwork Ireland and the Irish Internet Association. Case studies on broadband partnerships and regional ICT initiatives were presented. <http://conference.teletwork.ie>

British-Irish Council Digital Inclusion Researcher's Network

A network of researchers engaged in digital inclusion research has been formed. The network is coordinated by Jersey, which has the remit in the British-Irish Council for the knowledge economy.

Information Age Towns

Four Irish towns benefited from considerable investment in local ICT projects. Two of these towns, Killarney and Ennis have published research on some of their projects. Both towns commissioned research on the impact of the schools ICT projects on teaching and learning and Ennis has also published a 'connected community' report, a residents survey, examining ICT use, a review of e-business champions, a review of CAIT projects in Ennis and case studies of community ICT projects.

eIreland Initiative

This grouping of industry and academic organisations is developing plans to research and find solutions for social challenges in the Irish information society.

International projects

Many research projects internationally have explored the engagement with ICT by marginalised groups. Four projects relevant to the Irish context are described below. For contact details and more information, see Appendix 2.

England: Citizens Online - Everybody Online

This project evaluation is currently in progress to: conduct local audits; outline local action plans; meet aims and deliver outcomes; and, importantly, to monitor and evaluate progress in each location. The focus of the research is the whole community, with particular emphasis on individuals and groups who are most daunted by new ICT.

Using postcode information supplied by major Internet Service Providers, Citizens Online has mapped Internet connection in small areas. Each postcode is matched to 12 standard household types to produce a map charting Internet connection by locality while also cross-referencing with other socio-economic indicators.

Perhaps not unexpectedly, findings have shown that wealthier groups adopt information technology three times faster than poorer groups. By evaluating mapping data, the project is able to identify reasons for unexpectedly high or low levels of connectivity within a locality. These may include the presence or absence of schools, public libraries, post offices or telephone exchanges, etc.

Assessment of data will help projects increase access to IT and the Internet in those communities showing low income and low adoption rates. Local champions are working

with local community and voluntary groups, reviewing existing IT and Internet resources and barriers to gaining access. Champions are also conducting original research where necessary and collaborating with local groups to enhance provision.

Champions also provide information, education, publicity and promotional advice to enhance knowledge of ICT and the Internet, and advice and information to groups and individuals about their rights and responsibilities and any standards operating. The objective is to design a toolkit/framework/template that could be adopted by any community in the future.

Finland: Locality in the Global Net

The focus of the study was to explore social meanings of ICT networks - the Internet in particular - with the focus on local and grassroots development and everyday practices. Qualitative research, carried out by the University of Tampere Journalism Research and Development Centre in Finland between 1998-2000, was based on the concept of participatory action research. As such, the study was able to intervene openly in local community developments.

The study was split into three projects. Two centred on the development of local citizen communication and the other focused on local journalism development using new ICT. The aim of the two communities projects, Manse Communities and Raksila, was to work with local residents to produce their own online publications covering content such as writing news items, publishing stories, introducing the local area, running online discussions or compiling local information.

The civic debate forum (Manse forum) examined the extent to which an Internet forum could be used as a civic debate platform promoting public debate. Objectives were to test different types of citizen communication and examine web mediated civic public-ness.

Local residents who were involved felt the project had "helped to develop their neighbourhood, increased interaction, improved access to information and offered new publishing avenues." However, a primary recommendation from the study was that the technology needed to be much more accessible to members of the local community who wanted to use them.

United States: Website on women in the Information Age

A Harvard University professor is conducting research to explore a range of ways in which women can help shape and construct the Information Age as well as benefit from its use. The Women in the Information Age (WITIA) Project is a website developed at Harvard University's John F. Kennedy School of Government drawing together resources from private individuals, academia and industry; and, as a result, producing a representative collection of constructive sites debating issues around women and technology.

Each resource section contains links and a wealth of information relating to women and girls' involvement and experiences in the world of information technology. Project areas cover issues surrounding education, business, technology, international issues, race and poverty, law and government, cyberspace, gender and equity, and conferences, and also offers a bibliography of work in the area.

Each of these web pages brings together in-depth information from the different sectors and agencies involved. The long term intention is to actively create a shared set of resources and a collaborative community of researchers, managers and policy-makers at all levels with an interest in women and technology issues.

New media technologies in Bristol's communities: An evaluation of the "Connections" project pilot phase" (1999)

The focus of the study was to investigate new media use in Bristol's communities and help voluntary and community organisations in Bristol make more effective use of ICT. The late adopter groups were individuals, groups and communities who might benefit from community and voluntary organisations and their use of ICT.

The Connections project was set up and managed by the University of the West of England under Round 1 of the Single Regeneration Budget, to investigate, promote and support the use of ICT in the voluntary sector in Bristol. A report on a multi-stakeholder evaluation of the pilot phase of the project was conducted in 1999, paying attention to difficulties and challenges as well as successes.

The evaluation focused on project processes as well as outcomes. Work was conducted with a group of quilters who wanted to test the potential of the Internet to interact with other quilters elsewhere. In addition, guidance was given to a community arts group, a local community development action group, youth clubs, a family learning group, i.e. computer based learning for parents and children, and a single parent network.

Ongoing evaluation took account of needs, created a typology of projects, and noted the scale of the development, and the resources required to support progress. At the end of the pilot phase, the advisory group committed to an in-depth evaluation study. Arrangements were made by telephone to visit each mini-project sponsor to conduct semi-structured interviews lasting around one and a half hours. Areas explored included expectations at early stages, experiences while working on the project, achievements and outcomes, and thoughts on follow-up developments. The project officer was also interviewed to establish views on the strengths and weaknesses of the hardware and software products used.

Benefits of these international projects

The benefits of the UK Everybody Online project evaluation include:

- A toolkit/framework/template produced as a result of this project could be used by any community to adopt on-going evaluation of data in the future
- Monthly, quarterly, bi-annual and annual evaluation reports provide on-going information about key elements, focussing attention on key issues and noting barriers as well as successes
- Tracking and on-going evaluation ensures bad as well as good practices are identified, real issues analysed, and good practice shared
- Qualitative analysis builds understanding about impact of ICT engagement on real life experience
- Problems may be identified and steps taken to address difficulties and overcome barriers
- Relevant feedback will improve future policy and planning

The benefits of the Finnish Locality in the Global Net research included:

- Qualitative evaluation and participation in the study helps develop new understanding
- It is possible to intervene and guide development
- It is also possible to recommend further action

The benefits of the UK Connections project evaluation included:

- Community and voluntary sector organisations were able to learn how ICT could be used to support their work
- Best practice could be identified through the process of learning
- Understanding could be reached on how the technology could be used
- Tailored training could be delivered to help identify how ICT could be used by agencies to meet their objectives
- Appropriate promotion techniques could be developed to raise awareness
- Key information and advice could be identified and delivered electronically

RECOMMENDATIONS

New imperatives, challenges and opportunities for government and society shape the development of an inclusive information society. Recommendations focus on the consolidation of knowledge, the development of knowledge networks and co-ordination and dissemination of research on inclusive information society.

11.1: Support the development of centralised information on eInclusion research

An eInclusion Research Information Centre - virtual or physical - to share information on eInclusion research in Ireland, at EU-level and wider internationally should be developed and supported. This resource should be located in an academic research unit or department. The Centre should develop a website with links to eInclusion research and projects in Ireland. This repository could be developed into an information society research centre - which again could be physical or virtual - that could act as a central contact point and knowledge base, facilitating information society research and networks, linking policy, research and practice.

11.2: Fund research on ICT and social inclusion

Fund a national research project exploring the relationship between ICT and social inclusion in Ireland, with a particular focus on how the Internet can increase social inclusion by marginalised groups. Groups such as lone parents, people with disabilities, migrants and ethnic minorities, and people with literacy difficulties should be included. The research project should be managed by a public body with a social inclusion remit and research capacity, such as the Combat Poverty Agency.

11.3: Encourage qualitative research

We remain largely uninformed about actual experiences of change and the impact of having access or not to ICT and the Internet. Qualitative studies would help promote greater understanding of ICT and their real-life use. Comparative research is recommended to look critically at the consequences of access and non-access to ICT and the Internet, contrasting routine community and voluntary sector and resident experiences in opposite communities, i.e. communities with wide access and high use of ICT and the Internet and communities with little access and low use of ICT and the Internet. Such research should also highlight perceived problems resulting from use and non-use and identify barriers to digital inclusion in the two different sites.

11.4: Incorporate social inclusion into technology research

All publicly funded research with an ICT or information society dimension should be required to include social inclusion objectives and incorporate appropriate indicators into their evaluation processes. Research guidelines need to be developed to facilitate this.

11.5: Encourage research partnerships with the community and voluntary sector

A proportion of all public R&D funding should be ringfenced for eInclusion research. Priority should be given to action research projects that involve community and voluntary organisations and encourage capacity-building in ICT by the community and voluntary sector.

11.6: Develop guidelines for project evaluations

Guidelines for evaluating eInclusion projects should be developed. They should include common indicators for measuring engagement with ICT by specific target groups.

11.7: Hold an EU-level conference on eInclusion

Hold a high profile EU-level conference on eInclusion during Ireland's Presidency of the EU. A major international research conference, with emphasis on inclusive information society development could engage many stakeholders and citizens in the debate and process and provide an opportunity to showcase some of Ireland's successes and explore collaborative research and project opportunities.

Ways forward

Inclusive information society development is a dynamic and ongoing process, shaped by opportunities, challenges and responses. This report presents a framework for reviewing progress and developing coherent strategies to ensure that citizens' needs and involvement are prioritised and social, civic and economic benefits can be achieved.

Leveraging support

In moving forward and building on substantial progress, we need to reassess the goals, build capacity, consolidate our knowledge base and leverage the huge demand and support for making our society and economy inclusive and equitable. ICT can play a major role, but they are not a panacea - the technologies only play a supporting role.

Doing this study has been a challenging experience - highlighting the diverse needs, ideas and initiatives, and the enthusiasm and energy of everyone involved in information society development, particularly in the area of eInclusion. What is most apparent is the desire of people for more knowledge and direction and their eagerness to share what they have learned and continue to learn.

Leadership

The study raises many issues but the primary concern is that eInclusion is recognised as a political, economic and social priority. Vocal leadership, clear direction, coordinated strategies, targeted investment and streamlined activities are prerequisites.

There is confidence in the capacity of Government to maintain Ireland's position as an attractive proposition for national and international ICT investment and develop Ireland as a leader and model of excellence in eInclusion. Support, commitment and investment from all sectors are necessary to ensure this happens.

Government leadership in inclusive information society implementation impacts on other sectors, so the co-ordination and integration of eGovernment services is vital. Each government department should have an eInclusion strategy - with clear objectives and identifiable social and economic benefits - but should not develop these independently. There is concern that if clear intergovernmental responsibility and roadmaps are not established, progress will be slow and difficult to measure and information society development will be fragmented.

Cross-cutting themes

This study focuses on ten key areas, each discussed in a chapter. The main issues in each are highlighted but are not exhaustive, and recommendations are made in each chapter to address some of these issues. Many overlaps in challenges, inhibitors and opportunities exist. If ICT are enabling technologies, concerted effort needs to be made to make them more usable and useful. Consideration of users' needs and compliance with existing guidelines and standards are the first steps.

The biggest challenge is the coordination and synchronisation of eInclusion development, in communities, city/county areas, regionally and nationally. If clear strategies are not developed, responsibility is not assigned, resources and supports are not shared, ICT activities are not streamlined, active participation in information society will remain elitist, and value from investment will be minimised. Large gaps exist in infrastructure and knowledge among local and regional authorities. Coalitions need to be encouraged to build capacity and ensure even development.

The biggest barrier is the lack of opportunity for people with literacy difficulties to participate and contribute. Awareness of literacy problems has increased significantly in Ireland and major effort has been made to develop a range of supports and guidance for people with literacy difficulties. Ways need to be found to develop mutual literacy and digital literacy programmes, to prevent multiple disadvantages.

The biggest opportunity is to consolidate our diverse knowledge base, encourage research and knowledge networks and ensure that lessons learned are shared and incorporated into new programmes and projects. In doing this we must recognise and welcome cultural and linguistic diversity and aim to exploit creative as well as technical talents.

New models and risks

Innovation is one of the catch-phrases of the information society and knowledge economy. Evolving processes help to develop new models. For an inclusive information society, we must be open to developing new models of communication, new partnerships and collaborations, new business models and new learning processes, which place people's needs at the centre. This is not a short term goal, it must be ongoing.

Our ability to communicate and have a bit of craic is widely recognised. "Information society" tends to be narrowly communicated as a serious, economic and technical business, for young, highly skilled or expert people. The reality for people participating in community ICT initiatives is the opposite, where the

emphasis is often on practical activities and fun - enabling new modes of communication, creativity and social activity. Exploring ways of combining the two approaches presents interesting opportunity for innovation. Many international examples are given in this report.

The outcomes of information society projects are often unexpected. These can provide the greatest learning. Funding mechanisms should allow a certain element of risk and the exploration of innovative projects, particularly to encourage the participation of late adopters and high risk groups. We must, however, be open to sharing our "failures" as well as successes, to indicate our capacity to learn and build on real strengths. This allows us to become an inclusive information, learning and knowledge society.

Appendix 1: DEX scores

The data for these charts are based on the study's independent analysis of an MRBI survey commissioned by the Information Society Commission. The survey fieldwork was conducted from 17 September to 1 November 2002.

Late adopters and DEX scores are discussed in Chapter 3 of this report. The DEX (Digital Equality Index) is a new indicator developed for this study that measures inclusive information society development. The DEX is a way of identifying and ranking late adopters - demographic groups or geographic areas. The DEX assigns each group a number, called the DEX score. The higher the DEX score, the higher the risk of exclusion from the information society.

A DEX score is calculated as follows: (Percentage of late adopters for demographic group or area) minus (percentage of late adopters nationally) equals the DEX score. The percentage of late adopters nationally in 2002 was 55. Late adopters are: "adults without Internet access or using it less than once a month."

This appendix lists the DEX scores for all the demographic groups and geographical areas for which 2002 data are available. The sample size (n=x) is listed beside each demographic group.

Digital Equality Index (DEX) for employment and occupation

Demographic group	Percentage of late adopters in demographic group	DEX score
Part/full-time employment outside home (n=508)	43.1	-12
Self-employed outside home (n=70)	60.0	5
Part/full-time employment at home (n=51)	60.8	6
Self-employed at home (n=48)	62.5	7
Housewife working in home (n=269)	78.4	23
Student (n=204)	16.2	-39
Retired (n=163)	89.6	35
Unemployed (n=66)	72.7	18
<i>National average</i>	55.1	0
Managerial capacity (n=132)	22.0	-33
Supervisory capacity (n=71)	28.2	-27
Support capacity (n=58)	19.0	-36
Office employee (n=52)	26.9	-28
Non-office/non-manual (n=38)	60.5	5
Tradesmen/skilled worker (n=125)	68.0	13
Shop assistant, trade apprentice (n=49)	59.2	4
Agricultural, forestry, fishing (n=54)	85.2	30
Others (unknown) (n=86)	68.6	14

Digital Equality Index (DEX) for household income and class

Demographic group	Percentage of late adopters in demographic group	DEX score
Household income less than €10,000 (n=553)	53.2	-2
€10,001-€20,000 (n=514)	64.6	10
€20,001-€30,000 (n=101)	66.3	11
€30,001-€40,000 (n=80)	40.0	-15
€40,001-€50,000 (n=53)	34.0	-21
€50,000 plus (n=86)	20.0	-35
National average	55.1	0
<hr/>		
Class AB (upper/middle) (n=163)	21.5	-34
Class C1 (lower middle) (n=380)	41.1	-14
Class C2 (skilled workers) (n=366)	63.7	9
Class D (unskilled workers) (n=269)	69.9	15
Class E (lowest level of subsistence) (n=50)	70.0	15
Class F50+ (large farmers) (n=109)	64.2	9
Class F50 (small farmers) (n=55)	89.1	34
National average	55.1	0

Digital Equality Index (DEX) for location of residence

Geographical area	Percentage of late adopters in geographical area	DEX score
Urban (n=814)	48.8	-6
Rural (n=580)	64.0	9
<i>National average</i>	<i>55.1</i>	<i>0</i>
<hr/>		
Dublin (n=398)	47.7	-7
Rest of Leinster (n=359)	57.4	2
Munster (n=378)	57.7	3
Conn/Ulster (n=259)	59.5	4
<i>National average</i>	<i>55.1</i>	<i>0</i>

Digital Equality Index (DEX) for education

Demographic group	Percentage of late adopters in demographic group	DEX score
Primary school but no qualifications (n=255)	85.9	31
Group/Inter/Junior Certificate (n=326)	63.2	8
Leaving Certificate (n=433)	51.3	-4
3rd Level Certificate/Diploma (n=186)	35.5	-20
3rd Level Degree (n=130)	19.2	-36
Masters/PhD (n=19)	5.3	-50
Trade Apprenticeships (n=24)	70.8	16
<i>National average</i>	<i>55.1</i>	<i>0</i>

Digital Equality Index (DEX) for gender and age

Demographic group	Percentage of late adopters in demographic group	DEX score
Women (n=717)	57.5	2
Men (n=677)	52.6	-2
<i>National average</i>	<i>55.1</i>	<i>0</i>
Age 15 (n=55)	23.6	-31
16-17 (n=87)	29.9	-25
18 (n=36)	19.4	-36
19-24 (n=139)	36.7	-18
25-29 (n=119)	39.5	-16
30-34 (n=149)	43.0	-12
35-39 (n=126)	46.8	-8
40-44 (n=118)	49.2	-6
45-49 (n=132)	64.4	9
50-54 (n=102)	67.6	13
55+ (n=329)	87.3	32
<i>National average</i>	<i>55.1</i>	<i>0</i>

Appendix 2: International projects - contact details and further information

Chapter 5: Motivating the target groups

Germany: Senior Info-Mobil

Contacts:

Uschi Frenzel-Altman, empirica, tel. +49 228 98530 0

Email ursula.frenzel@empirica.com

Lutz Kubitschke, empirica, tel. +49 228 98530 0

Email lutz.kubitschke@empirica.com

Thomas Erkert, VsiW, tel. +49 (171) 4772272

Email. thomas.ecrkert@t-online.de

Web: www.sustainit.org/cases/full_cases.htm and www.seniorwatch.de/swa/cases/01.pdf

A range of other international projects have been devised to motivate senior citizens, e.g. "SeniorWeb" in the Netherlands www.seniorweb.nl

"Seniorennet" in Germany www.seniorennet.de

"SeniorNet" <http://www.seniornet.org> funded by the Markle Foundation in the USA.

The latter project in the USA launched a national public awareness campaign to help educate older adults and the general public about the benefits of computer training and the Internet for senior citizens. The organisation now has over 39,000 members, publishes a quarterly newsletter and a variety of instructional materials, and has over 220 learning centres throughout the USA.

The initiative offers discounts on computer-related and other products and services, holds regional conferences, and collaborates in research on older adults and technology. When trained, some SeniorNet members teach others to use computers and communications technologies to accomplish a variety of tasks. They learn to desktop publish, producing a range of outcomes, from a newsletter to an autobiography. Many also manage personal and financial records online, communicate with others across the country and the world, and generally find new ways to serve their communities.

In Scotland the "Cyber-grannies," a group of women senior citizens persuaded to participate when attending a local lunch club, have been motivated to increase confidence and skills using ICT and the Internet provided by the local Craigmillar Community Information Service (CCIS) community network www.ccis.org.uk. A range of new activities resulted, with one retired senior citizen developing a website for Wartime evacuees, successfully reuniting long-lost friends.

Scotland: Community Champions

Contact: Neil Paterson, Chief Digital Champion

Tel: 0141 228 2649, Mobile: 07775 755142

Email: neil.paterson@scotent.co.uk

Web:

www.ngflscotland.gov.uk/communities/digital_inclusion_initiative_background.asp

Digital champions are based in Local Enterprise Companies and work in partnership with others in their own SIP area to improve ICT provision and use of ICT. The Champions began by carrying out an audit of all public access to the Internet in their own SIP area, thus highlighting important problems to be addressed.

They found that in some areas there was a lack of public access points, and where these did exist they could be difficult to find, or people did not know about their existence. Some community and voluntary sector projects had problems funding ICT developments. Often, local people did not have the skills or confidence to start using computers and were sceptical about how they might be used in ways that were of interest. It became clear that staff in community and voluntary sectors were in need of training and support to use ICT in meaningful ways in their own work and were unable therefore to motivate others in the community. The audit indicated that greater co-ordination of digital inclusion efforts would help to prevent overlap.

Having identified key problems, the champions sought to collaborate with others to address the issues (see, for example, "Connecting Communities Training Programme" also described in this report). Designing ICT to effectively market existing local facilities ensures developments are relevant to each local context. Short taster and drop-in sessions in existing community facilities and learning centres are very effective in attracting excluded/late adopter groups. Peer training is encouraged and sessions are supported by a small team of local volunteers, co-ordinated by each area's local champion. Linking with schools to include school children in motivating their parents and other adults has also been effective.

When target groups are motivated initially to use ICT, attention is given to maintaining interest in the longer term through meaningful use and signposting to relevant local resources and opportunities also moving online. Importance is also being attached to making websites more accessible to disabled and visually impaired people and their carers. Emphasis is placed on two types of training, helping technical staff gain or advance their accessible web design skills, and providing information support to help managers and policy makers in developing web accessibility policies specifically geared to their organisation's needs.

For further information, contact Val Tonner, Training Manager, tel:0141 334 1650, e-mail: info@scotconnect.com web. <http://www.scotconnect.com/Training/index.php>

Good practice in supporting access to ICT for black and minority ethnic (BME) groups is also becoming central - see www.dfes.gov.uk/research/data/uploadfiles/RB388.pdf

Digital Champions work in partnership with the National Grid for Learning (NGfL) Scotland Communities Channel www.ngflscotland.gov.uk/communities and with the 'Connecting Communities' training programme www.ngflscotland.gov.uk/connecting-communities are organising a series of Digital Inclusion events to support practitioners throughout the year. The digital champions also provide advice, guidance and practical help to local community and voluntary organisations who want to fund new and innovative ICT initiatives in their community.

Chapter 6: Online community and local content

England, Scotland, and Wales: "Netmums"

Email. enquiries@netmums.com

Web: www.netmums.com

This project was the recipient of an eWellbeing Award for 'Most promising voluntary sector project.' Membership is free and immediate access is offered after completion of an online registration form. Information is secure and held within a private site. A web based template and detailed and personal support is provided for recruits as they research, launch and maintain their sites.

- Content under "membership" includes: What's on; Nearly new; Competitions; Special offers; Kids parties; Book corner; and Art box.
- Under "Education," content includes information about Pre-schools; Primary Schools; key Area 2; and HMI Reports.
- Under "Places to Go," content covers Parent and Toddlers; Restaurants; Cinema; Leisure centres; Theatres; Indoor Play; Outdoor Play; Clubs and Classes.
- "Tesco Baby and Toddler Club" heading covers issues to do with: Pre-conception; Pregnancy; Baby; and Toddler.
- The "community" heading includes issues such as Community groups; Jobs corner; Working mums; Childcare; Libraries; Places of Worship; Voluntary Work; Environment; Household help.
- The "Well-Being" heading provides content covering: Child health; Doctor's surgery; Coping; Competitions; Food and Nutrition; Enjoying Life; and Teeth.

Indications of new websites being developed can be found at

www.netmums.com/homepage%20with%20map/coming-soon.htm

England: Residents Online, London & Quadrant Housing Trust

Web: www.residentsonline.org.uk

Late adopter/ target group: Tenants of Housing Associations with low rates of Internet access and use

Award Becta/The Guardian UK Education Web Site Awards 2002

Web: www.becta.org.uk/websiteawards

There is also a useful facility to translate documents into other languages. The site is easy to navigate and use for first time Internet users. If new users are having difficulties, an online help site provides simple to follow advice and assistance.

Scotland: NGfL Scotland Communities Channel

Online advice, support and content for community and voluntary sector organisations working to bridge the digital divide in local communities.

The Communities Channel of the National Grid for Learning Scotland (NGfL) web service: www.ngflscotland.co.uk/communities

- The "technology guide" provides guidance, for example, in choosing hardware or software, getting online, planning a website for the first time, or looking for some general help and advice.
- The "community grids for learning guide" provides an up-to-date account of developments and helpful indicators for creating new community websites.
- The "e-learning guide" provides indication of the approaches and tools needed when creating or delivering online learning.
- Information in the "project development guide" provides insights into planning and funding a new project, and advice on monitoring and evaluation.
- The "civic participation guide" outlines the principles and current policy developments regarding e-democracy and e-citizenship.
- The training section provides information about the "Connecting Communities" Training programme, and also provides access to the materials used.
- The Resources section offers information on funding resources. It is also possible from here to download NGfL's UK Funding Guide.
- In addition, there is information about a range of opportunities, for example, possibilities offered by recycling PCs and information about volunteer schemes. It is possible to subscribe to the Digital Inclusion email bulletin lists which provide updates of progress on digital inclusion, information about online resources, and examples from a range of case studies.
- The project ideas section is designed to help integrate new approaches or entirely new and innovative ideas into existing project work. Useful contacts for support are also provided.
- An "about us" section provides details and information about the work of the "digital champions," and community developments supported by NGfL.

Chapter 7: Online Government information and services

Canada: "Government of Canada On-Line"

Providing citizens with one-stop access to multi-level government services

Award: Accenture. eGovernment Leadership-Realizing the Vision Survey Report (2002). www.accenture.com/xdoc/en/industries/government/eGov_April2002_3.pdf
Finalist in Stockholm Challenge (2002)

Digital signatures authentication is another project being tested and rolled out across a variety of government services. The integrated 'whole of government' approach to mature service delivery is supported by a Secure Channel designed by a consortium of private sector companies to deliver a common infrastructure for private, secure, and seamless transactions across government.

"Farm Security nets" is another example of Canada's integrated programme approach, designed to provide farmers with a single window to programme information, enabling them to file a single application once a year covering a number of different farm safety net programmes. The job-bank provides electronic listings of jobs opportunities and facilitates online applications.

Singapore: E-Government

http://www.accenture.com/xdoc/en/industries/government/eGov_April2002_3.pdf

Also available from the ecitizen website is a gateway to a variety of information about job vacancies www.employmenttown.gov.sg The intention is to enable employees and employers to make well-informed decisions on employment training and human resource practices to meet the changing needs of the workplace. For ease of access, the most popular eServices are highlighted in the e-citizen home page side-bar.

Bookmarks include a link to the Singapore e-government website, the Government directory, news announcement and the national IT literacy programme. Singapore emphasises uGovernment via multiple channels of delivery, i.e. wireless channels, WAP phone, PDA or other mobile device, and it is possible for citizens to view the time and date of trials via the Supreme Court of Singapore's SMS service.

Australia: Queensland Government online

Democratic participation in government and e-inclusion of all citizens in Queensland

Contact: Kathryn Anderson, Director, Policy Research, Policy Division, Queensland Government, Department of the Premier and Cabinet, 100 George Street, Brisbane, PO Box 185, Brisbane, Albert Street, Queensland 4002, Australia

Email. kathryn.anderson@premiers.qld.gov.au

www.premiers.qld.gov.au/about/community/pdf/edemocracy.pdf

www.parliament.qld.gov.au/petitions/EPetitions.htm

www.smartstate.qld.gov.au

Infrastructure funding for improved ICT in regional Queensland is largely provided through the Commonwealth Government's Networking the Nation program. Various programs ensure all Queenslanders are able to take full advantage of the opportunities offered by the information economy. For example, the Community Skills Development Program in ICT is designed to develop information and communication technology (ICT) skills in local communities with populations of less than 10,000.

Community groups and regional bodies can apply for funding for projects which provide "hands-on" training. Clear emphasis is placed on people in rural areas, people with a disability, and groups and individuals for whom English is not the first language. The i-STAR program provides financial assistance to industry, educational and training institutions, and local authorities, allowing them to undertake projects that develop ICT skills, especially in regional Queensland.

Chapter 8: Affordable broadband

Canada: Broadband Community Centre

Broadband Community Centre

456-435 Ellice Avenue, Winnipeg, Manitoba, Canada

Tel: 204.943.3386

Web. www.thebdc.ca

Also: Community Broadband Workforce www.broadbandworkforce.ca

In Burns Lake, skills resources include project management, networking hardware support, systems administration, application development, proposal writing, research, media relations, promotion, financial management/fundraising, and events co-ordination. There are sufficient IT trainers to accommodate demand and sufficient classroom space for teaching.

The initial aim is to tabulate demand from the community with the help of the community champion who could outline merits and economic advantages. The next aim is to form a community non-profit corporation and broker or partner with current high-speed user to develop a local high speed distribution business case. Additional aims are to use developing fixed wireless and local loop technology as a distribution medium and to form high-speed development alliances with local communities in the area.

On September 5, 2002, the Government of Canada launched a \$105-million Broadband Rural and Northern Development Pilot Program. The program is using a competitive process to support the deployment of innovative and sustainable broadband services to Canadian communities that currently have no high-speed Internet access, particularly unserved First Nation, northern, remote and rural communities such as those described above.

Candidates first submit proposals for funding to support the development of a business plan. Successful applicants will then be eligible to receive up to \$30,000 for their broadband development initiative. Additional funds are being made available on a competitive basis to eligible applicants to implement their business plans. The level of contribution will be subject to the quality of the submissions and the availability of funds. The Minister of Industry will make final selections based on recommendations by an arm's-length National Selection Committee.

BBCi Project Hull - Broadband Television

www.bbc.co.uk/humber/bbci_hull/index.shtml

These are some of the features:

- BBCi Hull has been nominated for an interactive entertainment BAFTA for technical innovation
- First use of ADSL broadband television by a major broadcaster
- 24/7 Local service
- Programme bookmarking
- On demand multi-stream application
- DVD style extras
- UK's first live interactive TV chat

BBCi Hull includes a dedicated local news team covering the issues that matter to local people and the community - from hard news to human-interest stories and the weather. The local aspects of BBCi Hull are complimented with a comprehensive and strong national package provided directly from BBC News, BBC Drama and Entertainment and BBC Learning. BBCi Hull also link to programmes with local interest - such as The Trench, which included cast members from Hull.

England: Broadband in Rural Areas

Web: www.acre.org.uk/Documents/Broadband%20articles.doc

- Another initiative is to bring the benefits of broadband in Cambridge into the Fens and the wider region www.camcnty.gov.uk/sub/resources/ccn/index.htm
- North Norfolk Broadband is another innovative campaign to bring Broadband to Sheringham, Cromer and Holt. This private sector project aims to provide affordable broadband services to homes and businesses http://www.northnorfolk.org/default_2333.asp.
- Taking a different approach, Cambridgeshire Community Network is a broadband computer network linking all aspects of public services - schools, libraries, council offices and local communities county-wide aiming to enable more effective, joined-up working between local councils, the health service and others.
- East of England NGfL Regional Broadband Consortium brings together representatives from Further and Higher Education, University for Industry, Education Action Zones and the Government are collaborating with the region's eleven Local Authorities (Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Luton, Milton Keynes, Norfolk, Peterborough, Southend, Suffolk, and Thurrock) to bring broadband to communities in the East of England (<http://www.eebroadband.net>).

- Remote Area BroadBand Inclusion Trial (RABBIT) is sponsored by UK Online for Business, East Midlands Development Agency, South East England Development Agency, Department of Enterprise Trade and Investment to promote the use of broadband Internet to small businesses in remote areas and to evaluate the effectiveness of the available solutions <http://www.rabbit-broadband.org.uk>
- The Herefordshire Partnership involves public, private and voluntary sector organisations working together to make the best use of the county's resources, to co-operate, share information and resources, and avoid duplication <http://www.herefordshirepartnership.com/broadband/index.html>
- Buckinghamshire Association of Local Councils (BALC) are campaigning for broadband access for remote villages. As a result DGA Business solutions is running a project using Wireless Broadband and BALC is involved in the rollout involving Parish Councils.
- Digital Dales Cumbria www.digitaldales.co.uk is a community wireless broadband project awarded 150,000 euro funding by the North West Development Agency, to bring broadband to the Dales local communities of 10,000 people, 500+ businesses and 10 schools during early 2003. The objective is to create local employment through the electronic network (see also <http://www.eden-faster.com>)

Chapter 9: Learning and skills

Australia: Community Information Technology Project

Box Hill (Head Office)

29 Ellingworth Parade Box Hill

Tel: +61 03 9899 2233

email: suecampbell@recruitnet.co.au

web: www.recruitnet.com.au

Stockholm Challenge Finalist , 2002 www.challenge.stockholm.se/finalists_index.html

Wherever possible PCs are repaired and optimised for re-use, or are modified to perform at a standard that is superior to older computers. Unemployed jobseekers learn to diagnose and repair computer faults, network the equipment, and install and set up software. Besides computer recycling, services include: traineeship training; disability employment services; language, literacy and numeracy training; community work programmes; industry training; community training; career centres and transition to consultancy.

Among the programmes devised is an initiative to help unemployed people who are disadvantaged educationally with no qualifications or are in the labour market. The

organisation provides a range of innovative programmes on behalf of government and operates from nine offices across Melbourne to ensure a broad geographical coverage. A Board of Directors and a Senior Management Team manage the organisation. RecruitNet Career Skills employs over 70 staff and a large number of sessional training staff.

England: SkillsMobile

Contact: Loughborough College, Radmoor Road, Loughborough, LE11 3BT

Coordinator: Mike Cooling, Tel 07770 646531

Email coolingm@loucoll.ac.uk

Web : www.loucoll.ac.uk/aboutus/skilmob.htm

Mobile 2

email contact: hazel@net-space.co.uk

Agrinet

See Warren, M. (2002). "Agrinet - taking technology to the countryside." Paper presented to 13th International Farm Management Congress, Wageningen

Web. www.ifma.nl/files/papersandposters/Word/Papers/Warren.doc

email: mwarren@plym.ac.uk

Circle Project

Email: pamela@lil.ac.uk

Target group:

Workers in rural areas and agriculture, who have primary education but little or no qualifications and have not participated previously in IT learning.

A previous initiative, the "AgriNet" project, ran from 1996 until 2000 and was funded with help from the European Social Fund Objective 5b and match funding from public-private partners to take minibuses equipped with PCs to farmyards, pubs, carparks and village halls using peer tutoring to draw newcomers to the Internet. The Federation of Young Farmers (FYF), and their parents, friends and neighbours were recruited as new Internet users, with YFCs nominating 2 or more members to act as trainers on the AgriNet buses. Farming OnLine (FOL) also became a partner in the project providing appropriate software suited to the farming community. Accredited certification was provided for course work.

By the end of 2000, 190 trainers (target had been 100) had trained over 2,500 certificated beneficiaries (target had been 1200) (Warren, 2002). With the end of European funding, the AgriNet project also came to an end. Warren (2002) conducted a telephone survey which suggested the project had been highly successful with 42% of users coming to the project via the FYF. This example illustrates the importance of ensuring sustainable project development beyond the end of funding. However, a new project has been devised and now builds on earlier work.

The "Circle Project: Link into Learning" now aims to provide computers, tutors and transport to introduce ICT in rural locations of Cornwall also visiting pubs, car parks, clubs and locations where people meet informally as well as the places people live. The aim is to target individuals who are disadvantaged by their rural location, or by disability, health problems, or socio-economic disadvantage.

Chapter 10: ICT capacity in community and voluntary organisations

England: "Direct Support"

Contact: Jane Berry/Richard Williams

Tel. 0800 026 0202

Web: www.ictcentre.org.uk/index.htm

Ruralnet UK <http://www.ruralnet.org.uk>

Within the project, CuriosIT is a set of informal learning activities designed to provoke and support curiosity about ICT in ways that are meaningful in people's routine daily lives. Drawing on the capital Modernisation Fund (CMF), an initiative termed "TargIT," provided grants of up to 30,000 euro to create and equip around 100 new UK online centres within existing community-based organisations in England. Exchange of information, sharing best practice, and development of innovative ideas is key to DirectSupport.

A network of networks, termed "Networks Online," brings together over 2,500 voluntary sector organisations over 25 different networks. English learning centres may join DirectSupport's virtual ICT centre to discuss ideas and share information with others. Plans are that the online centres will continue to receive help through 2003 from DirectSupport, and the "Virtual ICT centre" will also continue to evolve as a self-funding service beyond the funding period.

Scotland: "Connecting Communities" Training Programme

Contact: Susan Kozicki, Project Manager, Connecting Communities Team, Learning and Teaching Scotland, 74 Victoria Crescent Road, Glasgow G12 9JN

Tel: 0141 337 5119

Email: connectingcommunities@LTScotland.com

Web: www.ngflscotland.gov.uk/connectingcommunities

Participants / champions receive 150 euro as a training allowance. In addition, a once off allowance for connection helps to ensure Internet access for the duration of the programme. On completion of a suitable practical project involving community learning and ICT, the University of Dundee awards accreditation to participants. After training ends, Learning and Teaching Scotland continue to provide support for more specialised aspects of using ICT in community learning.

England: 3tc Merseyside Third Sector Technology Centre

Rob May

Email rmay@3tc.org.uk, Tel 0151 285 4025

<http://www.3tc4u.net>

www.3tc4u.net/corporate/sponsors.htm)

England: Manchester Women's Electronic Village Hall

Contact: Cath Dyson, 23 New Mount Street, Manchester, M4 4DE

Tel. (0044) 161 953 4049

web: <http://www.wevh.org.uk>

Winner of the BECTA ICT in Practice Award, 2002, the project has a dedicated website with the latest information at www.wevh.org.uk/wicop

Chapter 11: Consolidating knowledge about late adopters

UK: Citizens Online - Everybody Online

Contact: John Fisher, Chief Executive, Citizens Online, 1 Town Square, West Swindon Centre, Tewkesbury Way, Swindon SN5 7DL

Tel: 01793 88 28 00

email: Info@citizensonline.org.uk

Web: www.citizensonline.org.uk

The "Everybody Online" project is currently being piloted in 7 very different communities across the UK. www.citizensonline.co.uk/everybodyonline.shtml

The focus of the project evaluation is to gather all the relevant data, benchmark, and examine failure as well as celebrate success. Crucially, the project is setting indicators from the beginning to measure outcomes of the project. Regular telephone surveys in all the project areas will be conducted to track progress against key indicators. Progress will be assessed against indicators to assess what actions are needed to improve progress. Qualitative results will be noted in a series of mini-case studies designed to follow individuals through various different everybody online experiences, for example, inception, skills enhancement, and any change in lifestyle as a result.

United States: Women in the Information Age

Contact: Jane Fountain, Professor of Public Policy, School of Government, Harvard University, 79 John F Kennedy Street, MA USA 02138

Website: www.ksg.harvard.edu/witia/index.htm

Locality in the Global Net

Ari Heinonen, Makinen, M., Ridell, S., Martikainen, A., Halttu, M., and Sirkunnen, E. (2001). Journalism Research and Development Centre, University of Tampere.

Website: <http://mansetori.uta.fi/report/default.htm>

A number of lessons were learned. For example, online communication is a learning process and lively exchange does not develop simply as a result of placing the technology at the public's disposal. Beside access, it is necessary to ensure skills and sensitivity are learned in order to use ICT to good effect. The study found that new online genres can be learned, and the project managed to develop new models that could form the foundation for civic oriented online communication.

The study also found that new ICT do not themselves generate activity, and that existing technical solutions do not always meet the needs of local communities. One important suggestion is that hardware and software needs to be "developed from the vantage-point of the communications needs of local communities and local citizens and by working closely with civic groups.

Overall, the study found that the concept of local network publicness - developed by the creation of interactive, open and public spaces on the Internet - was able to open up new avenues for grassroots participation.

Connections project, Bristol

'New media technologies in Bristol's communities: An evaluation of the "Connections" project pilot phase' (1999)

Contact: Nick Plant, Director, Community Information Systems Centre, University of the West of England, Frenchay Campus, Coldharbour Lane, Bristol, BS16 1QY

Tel +44 (0)117 344 3170

E-mail: nick.plant@uwe.ac.uk

Web: <http://connections.uwe.ac.uk>

Report: <http://cisc.uwe.ac.uk/pub5.pdf>

Connections project Overview: <http://connections.uwe.ac.uk/about/index.htm>

Another part of the evaluation concentrated on the views held by the advisory group about mini-project findings; the mini-projects programme, the project as a whole, and the advisory group and its role. The advisory group were supplied information about mini-projects prior to interview. Conclusions drawn from the analysis of findings indicate opportunities for the community and voluntary sectors to use ICT. Emphasis was on the role of the organisation as a proactive producer of content rather than as a user of the Internet for email and information searching. Opportunities were related to awareness levels and to how ICT could be used and what they could help produce.

It was thought increased awareness could spark the germ of a new and innovative idea. However, several obstacles were also identified. Among these were lack of awareness, adversity to computers, and lack of access to ICT. Another problem was that lack of immediate outcomes could de-motivate users. Another was that a stable technology infrastructure needed to be put in place since failure of the technology could alienate organisations.

Yet another barrier was that changing technology and new software would draw attention towards technology problems rather than the work at hand. Need was highlighted to monitor allocation of staff resources and time given to different tasks, e.g. keeping sight of new technology development and operational use. The evaluation highlighted need to establish sources of support, information and training and to spread understanding of the potential of the technology. Need was suggested to allocate responsibility for managing each initiative from the start, and attention was drawn to the value of meaningful use within the context of each group's aims and objectives.

Appendix 3: References and reading list

> [Page numbers refer to this report]

An Chomhairle Leabharlanna (2003), "Update on public libraries and e-inclusion," January.

> [pages 37,65]

--- (2002), "Public Library User Survey - A Summary Report," November.

> [page 37]

--- (1999), *Joining Forces: Delivering Libraries and Information Services in the Information Age*. Dublin: An Chomhairle Leabharlanna.

> [page 37]

--- (1998), *Branching Out - A New Public Library Service*. Dublin: Department of the Environment and Local Government. www.environ.ie/pdf/report.pdf

> [page 37]

Bailey, Inez and Ursula Coleman (1999), *Access and Participation in Adult Literacy Schemes*. Dublin: National Adult Literacy Agency.

> [page 29]

Children's Partnership (2000), *Online Content for Low-Income and Underserved Americans: The Digital Divide's New Frontier*. Santa Monica, California: Children's Partnership.

> [page 70]

Clarke, Alan (2001), *First Steps: Initial Information and Communication Technology (ICT) Events*. Leicester: National Organisation for Adult Learning.

> [page 29]

--- (1998), *IT Awareness Raising for Adults*. Sheffield: Education and Training Technologies, Department for Education and Employment.

> [page 29]

Community Workers Co-Operative (2003) "Community Sector concerned about Community Development Board 'endorsing' plans," *News and Views* 8 (March), 1.

> [Page numbers refer to this report]

CSO (2002), *Quarterly National Household Survey: Third Quarter 2002*. Dublin: Central Statistics Office. www.cso.ie
> [pages 8, 31, 52, 53, 62, 80, 88, 98]

Department of Education and Science (2000), *Learning for Life: White Paper on Adult Education*. Dublin: Stationery Office.
> [pages 35, 98]

Department of Social and Family Affairs (2001), "White Paper on a Framework for Supporting Voluntary Activity and for Developing the Relationship between the State and the Community and Voluntary Sector."
> [page 35]

Department of the Environment and Local Government (2000), *A Shared Vision for County/City Development Boards: Guidelines on the CDB Strategies for Economic, Social and Cultural Development*. Dublin: Department of the Environment and Local Government.
> [pages 8, 13, 36, 41, 42]

Department of the Taoiseach (2003a), *New Connections: Progress Report 1 (February 2003)*. Dublin: Department of the Taoiseach. www.gov.ie/taoiseach
> [page 8]

--- (2003b), "Sustaining Progress - Draft Social Partnership Agreement 2003-2005," February. www.gov.ie/taoiseach
> [pages 8, 25, 35]

--- (2002), *New Connections: A strategy to realise the potential of the Information Society*. Dublin: Information Society Policy Unit, Department of the Taoiseach. Government Action Plan. March, 2002. www.gov.ie/taoiseach
> [pages 8, 35, 88]

--- (2000), *National Development Plan 2000-2006*. Dublin: Stationery Office. www.gov.ie/taoiseach

Department of Transport (2002), "Report of the Advisory Committee on Information and Communications Technology," March. www.irlgov.ie/tec/infocoms/index.html
> [page 36]

> [Page numbers refer to this report]

Disability Legislation Consultation Group (2003). *Equal Citizens*. Dublin: DLCC.
www.nda.ie

> [pages 19, 87]

Donegal County Council (2001), "Information Systems Strategic Plan 2001-2004,"
Strategic Plan for Information Systems Development in Donegal County Council
www.donegal.ie/dcc/it/sysplan.htm

> [page 37]

Dublin CDB (2002), *Dublin - A City of Possibilities*. Dublin: Dublin City Development
Board. Economic, Social and Cultural Strategy (2002-2012). www.dublin.ie

> [page 37]

Equality Authority (2001a), *An Equality Authority policy on the National Action Plan
for Social Inclusion*. Dublin: Equality Authority. www.equality.ie

> [page 36]

--- (2001b), *Implementing Equality for Older People*. Dublin: Equality Authority.
www.equality.ie

> [page 36]

European Commission (2002a), *eEurope 2005: An information society for all*.
Brussels: European Commission. COM(2002) 263 final. Brussels. Available from:
http://europa.eu.int/information_society/eeurope/actionplan/index.html

> [pages 8,15, 33, 38, 39, 40, 42]

--- (2002b), *eEurope 2005: Benchmarking Indicators*. Brussels: European
Commission. COM(2002) 655 final. November.

> [pages 43, 44, 45]

--- (2002c), *Flash Barometer 125: Internet and the Public at Large*. Brussels:
European Commission.

> [pages 43, 44]

--- (2001), *eInclusion: The Information Society's potential for social inclusion in
Europe*. Brussels: European Commission. Commission Staff Working Paper.
SEC(2001)1428.

http://europa.eu.int/comm/employment_social/knowledge_society/library_en.html

> [pages 11, 39, 107]

Foley, Paul, Ximena Alfonso, and Shazad Ghani (2002), *The digital divide in a world city: A literature review and recommendations for research and strategy development to address the digital divide in London*. London: Greater London Authority.

> [page 27]

de la Fuente, Angel and Antonio Ciccone (2002), *Human capital in a global and knowledge-based economy*. Brussels: European Commission. DG Employment and Social Affairs.

> [page 28]

Galway CDB (2002), *Galway County Strategy for Economic, Social and Cultural Development 2002-2012*. Galway: Galway County Council. www.galwaycoco.ie

> [page 37]

Government of Ireland (2002), "Ireland's Employment Action Plan," April.

http://europa.eu.int/comm/employment_social/employment_strategy/national_en.html

> [pages 8, 13, 34, 35, 41, 42]

--- (2001), "National Action Plan Against Poverty and Social Exclusion (NAPincl) 2001-2003."

http://europa.eu.int/comm/employment_social/news/2001/jun/napsincl2001_en.html

> [pages 8, 13, 14, 16, 33, 34, 35, 38, 41, 42, 50, 61]

Grimes, Seamus (2000) "Rural areas in the information society: diminishing distance or increasing learning capacity?," *Journal of Rural Studies* 16, 13-21.

> [pages 29, 121]

Hall Aiken (2002), *Evaluation of CMF-funded UK online centres: initial report*.

Norwich: Department for Education and Skills.

--- (2001), "E-enabling the Voluntary and Community Sectors," Hall Aiken, Ashbrook Research and Partnerships Online. November. Glasgow.

Harris, Kevin (2000), *"Everyone gets hooked": Exploring ICTs in Low-Income Neighbourhoods*. London: Community Development Foundation.

> [page 27]

> [Page numbers refer to this report]

Harris, Kevin and Martin P. Dudley (2000), *Many First Steps. Interim report to the DTI and DfEE Learning Centre Boards*. London: Community Development Foundation.

> [page 27]

ISC (2002), *Building the Knowledge Society: Report to Government, December 2002*. Dublin: Information Society Commission. www.isc.ie

> [pages 11, 14, 17, 18, 20, 21, 22, 35, 50, 69, 80, 87, 97, 105, 106, 107, 116]

--- (2002). *Building Trust through the Legal Framework*. Legal Affairs Group. December 2002. Dublin: Information Society Commission.

> [pages 17, 69]

--- (2000), *How the General Public is adapting to the Information Society in Ireland*. Dublin: Information Society Commission. www.isc.ie

> [page 44]

Kildare CDB (2001), *Kildare 2012 Strategy*. Naas: Kildare CDB.

<http://kildare.ie/kcdb/kildare-2012-strategy/transport.asp>

> [page 37]

Kilkenny CDB (2002), *Kilkenny 2002-2012. A Strategy for Economic, Social and Cultural Development*. Kilkenny: Kilkenny CDB. www.kilkennycdb.ie/strategy.asp

> [page 37]

Komito, Lee (1998) "The Net as a Foraging Society: Flexible Communities," *The Information Society* 14, 97-106.

Leslie Harris & Associates (2002), *Bringing a Nation Online: The Importance of Federal Leadership*. Washington: Digital Media Forum.

Local Government Computer Services Board (2000), "ICT Vision for Local Government," May. www.lgcsb.ie/html/about_vision.htm

> [page 36]

Longford CDB (2002), *Longford County Development Board Strategy 2002-2011*. Longford: Longford CDB. Available from:

<http://longfordcoco.ie/development/strategy.htm>

> [page 37]

> [Page numbers refer to this report]

Malina, Anna and Ann Macintosh (2003), "Bridging the Digital Divide - Development in Scotland," in *eTransformation in Governance: New Directions in Government and Politics*, A. Anttiroiko, M. Mälkiä, and R. Savolainen, eds. USA: Idea Group Publishing.
> [page 27]

McCaffrey, Conor (2003) *The Digital Divide in the EU: National Policies and Access to ICTs in the Member States*. Dublin: Oscail - National Distance Education Centre, Dublin City University.
> [page 120]

McQuillan, Helen (2001), "Ennis Information Age Town: Virtuality Rooted in Reality," *Digital Cities II: Computational and Sociological Approaches*. Second Kyoto Workshop on Digital Cities, Springer (Lecture Notes in Computer Science, 2362) Tanabe, van den Besselaar, Ishida (eds).
> [page 27]

McQuillan, Helen (2000), "Eircom Ennis Information Age Town: A Connected Community," Report for the Ennis Information Age Town. www.ennis.ie
> [page 27]

Meath County Council (2001), *Meath County Council Corporate Plan 2001-2005*. Navan: Meath County Council.
www.business.meath.ie/MeathCoCo/CorporatePlan/contents.htm
> [page 37]

Muintir na Tíre (2002), "The Muintir na Tíre Information and Communication Technology (ICT) Project Final Report," 31 October.
> [pages 74, 111]

Mulkeen, Aidan (forthcoming) "The Digital Divide in Schools: Should we be worried?," *Irish Educational Studies*.
> [pages 29,120]

National Disability Authority (2002), "Irish National Disability Authority IT Accessibility Guidelines." <http://accessit.nda.ie>.
> [pages 36, 74]

> [Page numbers refer to this report]

NESC (2003), *An Investment in Quality: Services, Inclusion and Enterprise*. Dublin: National Economic and Social Council.

> [page 28]

North Tipperary CDB (2002), *A Shared Vision for the Economic Social and Cultural Development of North Tipperary*. Nenagh: North Tipperary CDB.

www.tipperarynorth.ie/services/cdb/aims.htm

> [page 37]

O'Connor, Síle (2001), *Review of the Poverty Proofing Process*. Dublin: National Economic and Social Council.

O'Donnell, Susan (2001), *Towards an Inclusive Information Society in Europe: The Role of Voluntary Organisations*. Dublin: Models Research. IST Study Report.

www.itech-research.ie

> [page 30]

O'Donnell, Susan and Eilís Ní Leathlobhair (2002), *A Website for Newcomers to Ireland and Ethnic Minority Communities in Ireland: Feasibility Study Report*.

Dublin: Models Research. www.itech-research.ie

> [page 76]

O'Donnell, Susan, Brian Trench, and Kate Ennals (1998), *Weak Connections: Final report of the research project The Voluntary Sector in the Information Age*. Dublin: Dublin City University.

Dublin City University.

> [page 107]

OECD (2001a), *Citizens as Partners: Information, Consultation and Public Participation in Policy-Making*. Paris: OECD.

> [page 30]

--- (2001b), *The New Economy: Beyond the Hype*. The OECD Growth Project.

Paris: OECD.

> [page 28]

Offaly CDB (2002), *Offaly Community Development Board Strategy*. Tullamore: Offaly CDB. www.offaly.ie/council/countydevelopmentboard/cdbnews1.htm

> [page 37]

> [Page numbers refer to this report]

Offaly County Council (2002), *IS Strategic Plan*. Tullamore: Offaly County Council.
available on: www.offaly.ie/yourcouncil.

Rural Resource Development (2003), *Evaluation of IT Resources in County Clare*.
Shannon: Rural Resource Development.
> [page 91]

Russell, Helen et al. (2002), "*Getting out of the House*" *Women returning to employment, education and training*. Dublin: Economic and Social Research Council and The Liffey Press.
> [page 29]

SEISS (2001), *South-East Regional Information Society Strategy and Action Plan*.
Clonmel: South East Regional Authority. www.seiss.ie
> [pages 38, 93]

Selhofer, Hannes and Tobias Hüsing (2002), "The Digital Divide Index - A Measure of Social Inequalities in the Adoption of ICT," Paper presented at the European Commission's IST 2002 Conference, Copenhagen, 4-6 November. Empirica GmbH, Bonn, Germany.
> [page 47]

Shannon Development (2002), *e-region: Shannon Information Society Partnership Programme Action Phase Final Report*. June. Limerick: Shannon Development.
www.e-region.ie
> [page 38]

South Dublin CDB (2002), *South Dublin: A Place for People. An Integrated Strategy for the Economic, Social and Cultural Development of South Dublin County 2002-2012*. Dublin: South Dublin CDB. www.southdublin.ie
> [page 37]

STAND-RISI (1999), *Strategic Action Plan for the Development of the Information Society in the South West Region of Ireland*. South West Telematic Area Network Development Partnership.
www.swra.ie/swra/Reports/Actionplan.pdf.

> [Page numbers refer to this report]

Taskforce on Lifelong Learning (2002), *Report of the Taskforce on Lifelong Learning*.
Dublin: Government Publications, Stationery Office.

> [pages 21, 35, 106]

Warren, Pdraig (2002), "Final Report: Ex-Post Evaluation of the Equalskills Initiative," Report for the Information Society Policy Unit, Department of the Taoiseach. Chinook Consulting, Dundalk. November.

> [page 101]

The Wheel (2002), "Community and Voluntary Organisations and the Internet: Meeting Report," May.

www.wheel.ie

> [pages 107, 111]

WRC (2002), "Interim Evaluation of the CAIT Initiative," Report to the Department of Public Enterprise, March. Dublin: WRC Social and Economic Consultants.

--- (2000), *Achieving Equality in the Information Society*. Dublin: WRC Social and Economic Consultants.

--- (1998), *Getting Connected: Social Inclusion and the Information Society*. Dublin: WRC Social and Economic Consultants.

Appendix 4: Stakeholders consulted and acknowledgements

Information Society Commission

Combat Poverty Agency - Paidrag Carmody (eInclusion Group)
Department of Community, Rural and Gaeltacht Affairs - Úna Ní Fhearrcheallaigh (eInclusion Group)
Ennis Information Age Services - Michael Byrne (Learning Group)
Forum for People with Disabilities - Donal Toolan (eInclusion Group)
National Adult Literacy Agency (NALA) - Inez Bailey (eInclusion Group)
National Disability Authority - Brenda Delaney (eInclusion Group)
South Dublin County Council - Joe Horan (eInclusion Group) (also Philomena Poole, Lorna Maxwell and Teresa Walsh from SDCC)
Torque Management - Dee Cari (Legal Affairs Group)
Western Development Commission - Dr. Patricia O'Hara (Telecommunications Infrastructure Group)
The Wheel - Deirdre Garvey (eInclusion Group)

Government departments

Department of Education and Science - Patricia O'Connor and Frank Kelly
Department of Enterprise, Trade and Employment - Dave Barry, Michael English
Department of Environment and Local Government - Joe Allen
Department of Social and Family Affairs - Colm O'Neill
Department of An Taoiseach - Colm Butler, Máiread Mullaney, Carmel Madden

Government authorities and bodies

An Chomhairle Leabharlanna - Brendan Teeling
Comhairle - Tony McQuinn
The Digital Hub - Michael Hallissey
Equality Authority
FAS NetCollege - John McNamee
Forfás - Declan Hughes, Adrian Devitt
REACH - Victor Galvin
Teagasc - Tom Kelly
Údaras na Gaeltachta - Eamon Naughton

Local and regional authorities

Carlow County Council - Jarlath Judge
Donegal County Enterprise Board
Galway County Enterprise Board

Kildare County Council / Kildare Community Network - Ann Marie Conneally
Offaly County Council / County Development Board - Jack Keyes
Mayo County Council - John Magee
Midlands Regional Authority - James Stone
Mid West Regional Authority - Tom Kirby
South East Regional Authority/ SEISS - Frances Buggy
Westmeath County Council - Kevin Monaghan

Community fora

Clare Community Forum - Michael Nagle
Dungarven Community Forum - Gabriel Foley
Cork County Community Forum
Kerry County Community and Voluntary Forum

Social partners, development organisations, community and voluntary, and education and research

Activelink/Hyperlink - Giancarlo Ramaioli
Age Action - David Strattan
Community Workers Cooperative- Heike Vornhagen
Drogheda Partnership - Ina Mc.Crumlish, Mary Ann Mc.Glynn
ECDL/ ICS Skills/ EQUALSKILLS
e-Training International - Martina Minogue
Irish National Organisation of the Unemployed
Muintir na Tire
National Women's Council - Helen Farrell
St. Vincent de Paul Society - John M. McCafferty
Summerhill Active Retired Association - Allison Branigan
Telework Ireland - Nana Luke
Waterford Institute of Technology
Youthreach - Dermot Stokes

Acknowledgements

The authors would like to thank all the individuals and organisations who participated in the consultation process for this study - their names are listed above. Thanks also to organisations who expressed an interest in further consultation.

In addition, thanks are due to the following people who contributed information about the international projects or provided other useful information for the study:

Sabrina Allison, Hall Aiken, Scotland

Kathryn Anderson, Queensland Government, Australia

Ari-Veikko Anttiroiko, University of Tampere, Finland

Kees Brants, University of Amsterdam and University in Leiden, the Netherlands

John Fisher, Citizens On-Line, UK

Seamus Grimes, NUI Galway

Kevin Harris, Community Development Foundation, London

Thomas Hart, Bertelsmann Foundation, Germany

Leigh Keeble, University of Teeside, England

Lee Komito, UCD

Susan Kozicki, NGfL Scotland Communities Team, Scotland

Steven Latta, Scottish Enterprise (Glasgow), Scotland

Michelle Lornie, National Grid for learning, Scotland

Carol Mackeogh, DCU

Aiden Mulkeen, NUI Maynooth

Gerry O'Donnell, Statistics Canada, Ottawa

Neil Patterson, Digital Inclusion Team, Scottish Enterprise, Scotland

Sheizaf Rafaeli, University of Haifa, Mt. Carmel, Haifa, Israel

Seija Ridell, University of Turku, Finland

Esa Sirkunnen, University of Tampere, Finland

Barry Wellman, NetLab, University of Toronto, Canada

Heleen Weening, Delft University of Technology, The Netherlands



**Information
Society Commission**

**Information Society Commission
Department of the Taoiseach
Government Buildings
Upper Merrion Street
Dublin 2**

Tel: +353 1 619 4344

Fax: +353 1 619 4340

Email: info@isc.ie

www.isc.ie