

Irish Information Society Policy

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Résumé – *Le secteur de l'information est, depuis quelques années, un moteur du développement de l'Irlande. La priorité en matière de politique TIC a porté sur l'économie et l'éducation dans une perspective de plus grande compétitivité du pays à l'international. Tout ceci devait promouvoir une société basée sur la connaissance et miser sur l'inclusion numérique (eInclusion). Cet article retrace la politique nationale irlandaise en matière de société de l'information. Puis l'accent est porté sur les niveaux régionaux et locaux en insistant notamment sur les actions concrètes. Enfin, la façon dont la politique nationale et les appropriations territoriales de la problématique par les acteurs locaux/régionaux est envisagée, en portant la focale sur leur éventuelle efficacité. L'article évoque alors des pistes de réflexion pour améliorer l'impact de ces politiques sur la société irlandaise.*

Mots clés – *Irlande, TIC, Société de l'Information, Politique publique, Gouvernance, Développement*

Abstract – *The information sector has been a key contributor to the development of Ireland in the relatively recent past. The primary focus of Irish ICT related policy was on economic and educational aspects in order to maximise the country's competitiveness within the global market. In more recent years the government has made a concerted effort to build upon this foundation, specifically to promote a knowledge-based society and address issues relating to digital inclusion (eInclusion). This paper, presenting key documents, traces the evolution of Irish information-society policy since it first emerged. Then the current policy framework at national, regional and local levels is outlined before implementation actions are traced. Also brought into consideration is the interaction between central governance and the key regional, county and community actors. Ireland's performance as a European information society is benchmarked through a number of indicators in order to investigate how effective the policies have been. The paper closes with thoughts as to why Ireland is not performing as well as it could and how this might be addressed.*

Keywords – *Ireland, ICT, Information Society, Policy, Governance, Digital Inclusion, Development*

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Details on the progression and implementation of Irish information society policy have been quite fragmented to date. The majority of key documents relating to policy that have been produced over the years are available but there is a shortage of papers or reports that document the overall progression and comment upon it. It is therefore worth drawing it into a coherent piece for the benefit particularly of scholars doing comparative work. However, of equal or perhaps more importance is the realisation that maybe Ireland isn't doing as well as it might and this lack of performance will also be touched upon below.

The Republic of Ireland, covering a land area of 68,895 square kilometres with a population of 4.2 million in 2006, has a relatively centralised administration. It has been noted by analysts prior to EU expansion that the Irish system of governance is one of the more centralised of any European country. However, this might be questioned if the relative size of the country is considered.

1. THE IRISH REGIONS

Before investigating the history of Irish information society policy, an understanding of county and regional government or management is necessary. The Republic of Ireland is divided into twenty-six counties. These are subdivisions of the ancient provinces of Ireland. The counties developed under the Christian dioceses and also the Norman and British administrations.

Given the centralised administration, the local and regional levels nevertheless have key responsibilities in a number of significant areas. Clear constitutional status was given to local government in 1999 following an amendment to the constitution.

Local government services at a county and city level are provided by local authorities. These authorities are multi-purpose bodies that have responsibility for an extensive range of services. There are thirty-four primary local authorities. This is made up of twenty-nine county councils and five city councils. There are a further eighty town authorities with a representational role at the sub-county level. Members are elected for a period of five years according to a system of proportional representation. The services for which local authorities are responsible are divided into eight categories: housing; planning; roads; water supply and sewerage; development incentives and controls; environmental protection; recreational facilities and amenities; and agriculture, education, health and welfare. (Irish Regions Office, 2006) Further to these functions, a primary remit of local government is to represent local communities. There is no specific remit for these authorities in relation to ICTs.

Eight regional authorities came into existence in 1994 under the 1991 Local Government act. Their function is to monitor the use of EU structural funds and coordinate specific activities of the local authorities. They have specific responsibility for: reviewing the various development plans of local authorities in both their region and in adjoining regions; compiling regional planning guidelines and regional social and economic strategies; and promoting arrangements, consultation, joint actions and cooperation among local authorities and the various public bodies. Members are nominated by the local authorities in the region. The final regional divisions were established in July 1999 when the country was designated as two regions for EU structural funds purposes. The Southern and Eastern (S&E) region had a "phasing out" regime for objective one until the end of 2005 while the Border, Midland and Western (BMW) region had objective one status until 2006. Following this designation, two regional assemblies came into effect in July 1999 with the following tasks: to manage the regional operation programmes under the national development plan; to monitor the general impact of all the EU programmes under the national development plan/community support framework; and to promote coordination in the provision of public services in the assembly

areas. (Irish Regions Office, 2006) Further, these assemblies were the INTERREG IIIB contact points for Ireland.

2. INFORMATION SOCIETY POLICY HISTORY / BACKGROUND

The Irish Government has placed considerable emphasis on the promotion and propagation of an information economy and subsequently information society. As was the case with most states in the early to mid '90s, there was awareness that the trends in information technology will have a profound effect on practically all aspects of life. The primary – and arguably most successful – focus of government policy was on economic and educational aspects in order to maximise the country's competitiveness within the global market. In more recent years the government has made a concerted effort to build upon this foundation specifically to promote a knowledge-based society and address concerns relating to digital inclusion (eInclusion). However, the initial focus was limited to mentioning the imbalanced diffusion of the information society and the potential problems without formulating any definite policies to address them.

In 1996 the government industrial policy agency (Forfás), began to refer to societal issues in relation to economic development. The importance of the information society and equal participation for citizens is mentioned. (Forfás, 1996) However, while the requirement of policy implementation had been identified, it was not developed any further. The main focus for the use of advanced telecommunications was on business applications. Changes in education and the development of telecommunications infrastructure to facilitate competition were suggested without any further consideration for any societal aspects or for the citizen in particular.

The Department of Enterprise and Employment (1996) developed this further within a white paper containing rhetoric increasingly being used at the time within the EU. Referring to the presence of information haves and have-nots, it acknowledged that the economic developments which were largely based on informational activity could result in the further compounding of social cleavages resulting in a two-tier information society. It also presents the inherent dangers of allowing this new age to be driven and shaped by market forces alone. The report was lacking any concrete proposals on how to combat or reverse any of these issues.

Perhaps the most comprehensive report at the time, which – unlike the others – contained more proactive suggestions and solutions, was released by Forbairt (1996) entitled 'Ireland, the Digital Age and the Internet'. This document assessed the possible impact that the digital age could have on Ireland. It was a decent appraisal of the changes that will occur. It is the most constructive report released in 1996 in that it suggests possible responses for the state in the face of this challenge. It stated that the government had become keenly aware of the need to implement the necessary structures for an information economy and political system. This reflects the primary focus at the time on economic activity while showing that there was an awareness of the potential these technologies had for improving governance. However, it also makes suggestions on how best to approach the issue of addressing the shortcomings of Ireland in terms of promoting an information society.

The following key documents, illustrating developments in Irish Information Society policy up to the current policy document, are presented in chronological order.

2.1. Information Society Steering Committee

The reports outlined above brought the presence, importance and dangers of the information society into the political limelight. This, combined with the attention being paid to it by other states, resulted in an Information Society Steering Committee being established by the Minister for Employment and Enterprise in March of 1996. The role of this committee was to advise the government on its information society policy. The committee recognised the importance that “Ireland responds with urgency to the challenges that lie ahead” as it acknowledged “the speed and scale of the revolution under way”. The committee was comprised of twenty members. The corporate sector and the government had the majority of representatives (eleven and six members respectively). The remaining positions were comprised of two academics and one trade union representative. There were no representatives from the community or voluntary sector. This can be viewed as a major flaw in the representative structure of the committee.

2.2. Information Society Ireland: Strategy for Action

The main product of the committee was a report entitled ‘Information Society Ireland: Strategy for Action’ (ISSC, 1996), which was published in December 1996. It examined the potential of ICTs for transforming the economy and society of Ireland in the future. It set out the vision for Ireland in the future as an economy that is committed to “securing the full benefits of the information society for its people and enterprises”, that a social partnership is vital, and that the state’s actions should be quick and decisive. The main body of the report identified barriers and presented a series of objectives and strategies to overcome them. A series of actions are suggested for implementation in order to achieve this. A key central suggestions of the report was: the foundation of an Information Society Commission to monitor progress and advise the government; the creation of a public interdepartmental implementation group on information society; and the formation of a development team in charge of preparing a ‘framework for action’ followed by an action plan. This group of seventeen members, which was chaired by the Taoiseach (i.e. Prime Minister), included members from the Central Statistics Office and all ministries.

2.3. First Information Society Commission Report

The Information Society Commission (ISC) was established in May 1997 for an initial three-year period. The Commission was an advisory body whose main function was to monitor and advise on the development of the Information Society in Ireland. It was to advise the government, conduct research and benchmarking, and promote general awareness and understanding of ICTs among the general population and businesses. Another of its most important tasks was to raise awareness among the general public and industry of the opportunities and benefits offered by the Information Society.

The ‘First report of Ireland’s Information Society Commission’ was released in December 1997. (ISC, 1997) It outlined the main developments within Irish society and initiative implementation since the ISSC ‘Strategy for Action’ publication in March. Further to this, it set out goals for the short-term while areas where more urgent action was required were highlighted. A summary of the key developments were outlined under the headings awareness, infrastructure, education, enterprise, government legal issues, and government services and social inclusion.

With regard to awareness, the publication of the 'Strategy for Action' report is considered an important development creating a focus on the information society for national debate. There had been an increase in the media coverage of information society related issues. The number of related conferences and events also increased. The Information Age Town competition was won by Ennis, Co. Clare, and the national broadcaster (RTE) launched a magazine programme to raise awareness of technology in education issues, entitled LearnNet. Recommendations for action included two suggestions. Firstly, the national broadcaster (RTE) should cater for the growing interest in the information society. Secondly, companies who stand to gain most from informational activities should sponsor awareness raising activities.

There were numerous developments in relation to *infrastructure*. A director of telecommunications regulation was appointed. The liberalisation of the telecommunications market had begun and was predicted to be complete by January 2000. This was to include the provision of advanced telecommunications and services beyond voice telephony by forty service providers already active in the market. A fibre optic network for every major city and town was among the investment activity. ISDN was available nationwide and the national telecommunications companies broadband backbone exceeded the 30,000 fibre kilometres. Cable networks were developing internet cable access. NTL Telecom began construction of a £30m (€39m) undersea digital synchronous hierarchy (UDH) fibre optic ring linking Ireland with the network within the UK. The Electricity Supply Board (ESB) and British Telecom began a joint venture of £130m (€165m) over ten years to enter the Irish telecommunications market. They were to utilise the ESB's digital microwave network and electricity cables and ducts. Finally, ten MECU of EU structural funds were relocated to fund a new measure for broadband telecommunications. A number of recommendations for action are outlined. These include: The use of existing cable and telecommunications networks for the large-scale deployment of cable modems and xDSL technologies should have clear timescale targets and further investment – beyond the 10 MECU redirection outlined above – would be required for sufficient infrastructural development.

Investments in *education* were numerous. An Education Technology investment fund was launched in November '97. This investment of a quarter of a billion pounds over a three-year period was the largest commitment to education and training ever undertaken by the state. The money was to be used to modernise third level institutions, promote innovation, and develop new areas of activity for emerging skills needs. The Schools IT 2000 programme was set up with the key objective of bringing "about a national partnership involving schools, parents, local communities, third level colleges, together with public and private sector organisations to meet the project's ambitious aims" (ISC, 1997, 11). A National Centre for Technology in Education was set up to manage the project while working with a national network of Education Centres supplying regional-level support to schools. The Government's investment was £40m (€51m) with a further contribution by Telecom Eireann of £10m (€13m). Three key initiatives within the Schools IT 2000 project were launched. The first initiative, entitled the 'Technology Integration initiative' aimed to provide schools with 60,000 multimedia computers by the year end 2001. The second, called the Teaching Skills Initiative, aimed to provide ICT skills to 20,000 teachers nationally and a minimum of one teacher per school. The final initiative within this programme was the schools' support initiative. This aimed to enhance ICT use in the classroom and create a support structure via a schools network, 'Scoilnet', and a School Integration project.

Forfás launched a three year campaign aimed at encouraging young people and school leavers to take up jobs in the software, tele-services and electronics sectors. To complement this, 3,000 new places across all third level and training institutions were made available in 1997. Research in the Institutes of Technology doubled between 1996 and 1998

(Forfás, 1998); Reacting to a shortage of people with technical skills within the technology sector, a 'Task Force on the Supply of Technicians' received investment of £5m. It was hoped that this would initiate an industry / college initiative to recruit and train technicians. 'Libraries-on-Line', was a partnership between public libraries and Microsoft which provided internet access, business and educational software. The European Computer Drivers Licence (ECDL) Ireland Ltd was set up with the goal of establishing computer-use standards for educational institutions, enterprises and the general public. In realising the full potential of investment in educational institutions and including marginalised groups in internet activity / learning programmes, recommendations for the future were outlined. Every library in the country should have an ISDN connection, while all citizens should have access to email within the libraries by 2000.

Under the *enterprise* heading, there was a significant rise in the amount of inward investment by high-tech industries. This further compounded the points made in earlier reports outlining the importance of increasing the skills base and high-quality, low-cost broadband availability. A new business, education and training partnership was announced in 1997. The partnership aimed to develop high-level national strategies, to address the issues of skills needs, manpower forecasting and education for industry and business. Within this there was to be an Expert Group on Future Skills and a Business / Education Partnership forum. Recognising the challenges ahead for industries, Forfás began a feasibility study on the creation of Digital Park in Ireland. The National Competitiveness Council was established in 1997. It reports to the Taoiseach on key competitiveness issues for the Irish economy together with recommendations on policy actions required to enhance Ireland's competitive position. The council was to liaise regularly with the ISC on issues concerning both, future skills and infrastructure. In 1998, Enterprise Ireland directly assisted over 1,300 indigenous enterprises through its R&D and technical consultancy. This helped increase their technical competence and link them to major European technology developments via EU initiatives. (Enterprise Ireland, 1998) Recommendations for the future include a final overview of all of the requirements for the digital park to be finalised, a more integrated approach to training to ensure the presence of a workforce for information intensive industries, and the National Labour Force Data should include new forms of work such as teleworking and numerous forms of contract work.

There were two main developments in relation to *government legal issues*. One was the formation of a Working Group on the Illegal and Harmful use of the Internet by the Department of Justice, Equality and Law Reform. Recommendations for this section included legislation enabling eCommunications, messages and records to be admissible in civil proceedings. The other was the compiling of a Fraud Offences Bill for offence in relation to the dishonest use of a computer.

Under *government services and social exclusion*, the freedom of information act was passed to come into effect in April 1998. This act, through the use of ICTs, will oblige public organisations to publish their internal guidelines and rules. The provision of public services in an interactive way was another initiative within this section. The ISC recommend that all future government and related publications should be made available electronically. Internet services should be made available to all government departments. Interactivity and service delivery of government websites should be increased. Finally, Irish developers and those involved in government projects particularly, should adopt EU suggestions on the application of ICTs for the elderly and disabled.

2.4. Implementing the Information Society: A Framework for Action

The Inter-departmental Implementation Group on the Information Society (IIGIS) published 'Implementing the Information Society: A Framework for Action' in December 1998. (Dept of the Taoiseach, 1998) It followed the recommendations from the Information Society Steering Committee report but also followed the suggestions from a number of other reports released in 1998. These included; the Report of the Advisory Committee on Telecommunications (ACT, 1998); The National Competitiveness Councils 'Annual Competitiveness Report '98 (NCC, 1998a) and 'Statement on Telecommunications: a key factor in Electronic Commerce and Competitiveness' (NCC, 1998b); and reports from the Irish Business and Employers Confederation concerning telecommunications and governmental policies (www.ibec.ie).

The report took on, and developed further, the suggestions from the Steering Committee's report. It contained two parts. The first part presented a comprehensive strategic plan, with precise tasks within specific timeframes, which outlined the resources that would be required while allocating responsibility. It proposed a plan of action under the headings: telecommunications infrastructure; development of eCommerce and business opportunities; enabling measures; legislative measures; ICTs and the delivery of public services; support areas where action is needed; and taking the work forward. The second part was a commentary on the proposed action plan.

2.5. Implementing the Information Society in Ireland: An Action Plan

The Government responded to the above reports, and built upon the 'A Framework for Action' report by publishing their plan of action for the future entitled 'Implementing the Information Society in Ireland: An Action Plan'. (Department of the Taoiseach, 1999) It outlined the importance of a coordinated and comprehensive approach. Findings within this were in line with sentiments from a number of reports from advisory bodies (NCC, 1998b / IBEC, 1998a / IBEC, 1998b). In order to present a comprehensive strategic plan the report covers a number of broad areas which they believed embraced all of the tasks requiring attention. These broad areas followed the same structure as the 'Framework for Action' report and the majority of measures to be implemented by the government developed suggestions from that earlier report.

2.6. The ISC second report

This report was released in April 1999. This report followed the same structure as the first. It reviewed developments since the 1997 report and identified new key policy areas where action was necessary. According to the report, many of the essential elements of the information society strategy had been established but it questioned the pace of these developments. Three dominant areas already identified were highlighted in this light namely low-cost broadband provision, intellectual property rights and the emerging skills shortage. However, some new areas requiring specific attention were identified. These were the promotion of access to ICTs for the general public and the development of Irish ebusiness opportunities. According to the report, awareness of new technologies among the general public and businesses had reached an acceptably high level. Thus the Irish information society was to move onto a new phase by utilising this awareness to facilitate ecommerce activity and the widespread adoption of ICTs.

2.7. Second report of the IIGIS Progress report of the implementation plan

This progress report traces developments since the Action Plan was published. It states that the Action Plan was received well and that it had become a credible blueprint for the job of implementing the information society in Ireland. The primary focus of the IIGIS in the months leading up to the report was to measure the resources required to execute the plan. They came up with numerous findings. They state that staff and funding resources have to be increased and assured. A major problem identified was that target dates were not being met due to a lack of the required resources. The developments in the areas identified within the Action Plan are outlined. Under the 'New initiatives and Action Points' heading at the end of the report, some suggestions on how local government can apply new technologies to the delivery of their services are made by the Department of the Environment and Local Government. Areas identified include the development of a sectoral intranet which will facilitate a local government website offering a range of services electronically, the development of an internet-based procurement system, and two research and development projects. The first of these projects would be concerned with public participation in the planning process and eDemocracy. The second would focus on a localised framework for the delivery of broadband (using the sewer network for fibre optics is suggested). A third progress report was released in April 2000 following the same format.

2.8. IT Access for All

This report, published in March 2000, was the first publication to focus on social inclusion in the information age and the digital divide specifically. Its focus on the digital divide raised many issues regarding socio-economic standing and the connection this has to rates of adoption of technologies. It raised the question of whether existing social inequalities will be perpetuated, even exacerbated, by new technologies and that disadvantaged communities face additional obstacles to adoption. A key finding was that whether one is equipped to engage in the information society is predominantly determined by both one's access to and ability to use information technology. This report, with the suggestions being adopted by the government, had the potential to address many shortcomings in Irish IS policy. It presented various factors responsible for inhibiting ICT uptake namely: awareness; physical accessibility; usability and user friendliness; ability to use new ICTs; and the availability of the required support framework.

All of the above reports were vital in the history of building an information society policy approach for Ireland. There have been subsequent reports but the foundation for the first strategic approach document published by the government rests on the seminal reports above. It was the framework for all initiatives / developments to follow. Subsequent reports all built upon and developed these reports further.

3. POLICY FRAMEWORK

At this point an outline of the current policy framework at national and regional levels is necessary. This will include both policy areas specifically dealing with inclusion in the information society and those with relevant elements within them. Following this, an overview of the actions undertaken will be presented.

3.1. National level strategies / policies directly concerning the information society

3.1.1. Government Policy

The Information Society Policy Unit (ISPU) is a unit within the Department of the Taoiseach (Prime Minister). It has the general responsibility for developing, co-ordinating and driving implementation of the information society agenda. It aims “to ensure that Ireland develops as a fully participative, competitive, knowledge-based information Society, with all the benefits that entails” (Taoiseach.gov.ie). There are seven key areas with which this policy unit is concerned with. These are outlined in the Governments action plan entitled ‘New Connections’ (Taoiseach, 2002):

- Delivery of a robust telecommunications infrastructure;
- Promoting universal engagement and participation, in particular through eInclusion initiatives;
- Further developing the potential of eGovernment
- Furthering Irish competitiveness through the development of enhanced eBusiness capacity;
- Promoting and facilitating lifelong learning in the knowledge economy
- Stimulating research and development
- Promoting a supportive legal and regulatory environment

In addition to this role of policy coordination, development and coordination, the unit has specific functional responsibility for: developing the potential of eGovernment; the eCabinet initiative; monitoring and reporting on the implementation of eEurope in Ireland; evaluation of submissions to the Information Society Fund.

The ISPU also acts as the secretariat for a number of structures assisting the minister of State with responsibility for coordinating the information society agenda across all government departments. These structures include firstly, the Cabinet Committee on the information society. This committee drives the implementation of the information society agenda. The committee is chaired by the Taoiseach and convened by a Minister of State. It includes the Ministers for Finance; Enterprise, Trade and Employment; Communications, Marine and Natural Resources; Education and Science; Community, Rural and Gaeltacht Affairs; Social and Family Affairs; Environment and Local Government; Health and Children; Justice, Equality and Law Reform. The second structure is the eStrategy Group of Secretaries General which complements the above group in addressing national eStrategy issues. The third structure is the Assistant Secretaries eGovernment Implementation Group. Its remit is to ensure the coordinated implementation of information society policy across all government agencies and departments. The Information Society Commission was one of the structures within this grouping assisting the minister for state. Policy relating to the telecommunications sector is a remit of The Department of Communication, Marine and Natural Resources (DCMNR). Comreg is the communications regulator.

3.1.2. Social Partnership Agreements

At a national level, policies relating to the information society and social partnership agreements share some common goals. The National Economic and Social Council (NESCC) Strategy Report, An Investment in Quality: Services, Inclusion and Enterprise acted as a background for discussion. The parties involved in social partnership discussions included the

Government, employers, trade unions, farming bodies and the community and voluntary sector. The negotiations have resulted in a series of reports entitled *Sustaining Progress* which is the sixth in a series of Agreements between Government and the social partners dating back to 1987. They have covered a wide range of issues considered fundamental to making the economy globally competitive, environmentally sustainable, efficient and socially acceptable. The aim of these reports is to provide a coherent and focused strategy for managing the interconnected elements of the economy and the behaviour of economic and social policies.

Social partnership agreements prior to 2003 had not given any significant focused attention to information society considerations beyond a number of objectives which touched upon the area. Within *'Sustaining Progress: Social Partnership Agreement 2003-2005'* (Government of Ireland, 2003), however, there is a specific goal relating to it entitled *'Including everyone in the Information Society'*. Its objective is to *'create meaningful and useful content to enable everyone to exploit technology to the highest advantage and to provide the levers for change and advancement that can help people to overcome barriers of personal and economic circumstances'*. The social partnership agreement identifies the need to facilitate access and actively promote low-income and late adopter engagement, while facilitating measures designed to support an inclusive information society. The Government action plan, *New Connections*, provided direction for the implementation of this Initiative. The most recent partnership agreement *'Towards 2016: Ten-Year Framework Social Partnership Agreement 2006-2016'* (Government of Ireland, 2006b), while having a section entitled *'Knowledge Society'*, does not go into any great detail on the subject. In fact there is considerably less than its predecessor. It merely states that it will follow the government's new knowledge society action plan. This is due to be produced in December 2006. It is to be in line with the EU i2010 initiative *'A European Information Society for Growth and Employment'*. The report states that the continued exploitation of ICTs by all sectors will be supported. Following on with its view to stimulate further and encourage increased engagement with and participation in the knowledge society, it is to include specific actions on increasing awareness, use, access, application and exploitation of ICTs. An encouraging aspect of this publication is that it states that an *'eInclusion Stakeholders Group'* was formed in early 2006. The only public information available on the Stakeholders Group is within this report. Its role is to contribute to the development of the new government *'Action Plan on the Knowledge Society'*, due to be released in early 2007, which will primarily focus on eInclusion. Its priorities for action are in the areas of access and connectivity, skills, awareness and content. From this *"a national eInclusion strategy will be developed so that everyone has the opportunity, through encouragement, awareness, support, enablement and participation, to exploit ICTs to improve their quality of life, and the cohesiveness and well-being of their communities"* (Government of Ireland, 2006b, 58). The report states that the successful implementation of this Strategy in reaching the late adopters of technology relies on the part played by intermediaries, including community and voluntary organisations. According to a member of the ISPU, the group was formed earlier this year and comprises government officials, academics, representatives of the Social Partners, and eInclusion practitioners. It is to be in line with the European i2010 initiative entitled *'a European Information Society for growth and employment'* and the National Action Plan against poverty and social inclusion (NAPS/incl) programme.

3.1.3. The NAPS/incl

The NAPS/incl programme is a prime example of a policy mechanism currently in place within the state that has the potential to propagate an inclusive information society but had been falling short. This was recognised by the ISC in 2003 but, as they stated then: *'the*

information society elements within it were fragmented and not cohesive' (ISC, 2003, 33). They were referring to the 2001-2003 action plan. Ireland's plan was based on the revised National Anti-poverty Strategy entitled 'Building an Inclusive Society' (Feb 2002) and the social partnership agreement 'Sustaining Progress' (March 2003). It drew on consultation carried out by the Office for Social Inclusion (OSI) and the Combat Poverty Agency (CPA) through regional and national seminars. They also, following advertisements placed in the national media, received numerous submissions.

The 2003-2005 NAPS/incl plan (Europa, 2003) addressed the ISC criticisms. It refers to eInclusion and presents a policy task relating to it which covers excluded groups: women on home duties, retired people, tradesmen / skilled workers, workers in agriculture forestry or fishing, and the unemployed. It reports that funds were allocated to the information society fund initiatives such as: the Community Application of Information Technology Project, the development of National Disability Authority, IT Accessibility Guidelines, the Equalskills Project, and the Library Internet Access Initiative. Within the objective 2 section (to prevent the risks of social exclusion), under the heading 'E-Inclusion – exploiting the potential of the knowledge based society', it rearticulates the government's policy to raise the level of participation and access. It outlines the 'Including Everyone in the Information Society' special initiative involving the Government and Social Partners developing 'coherent strategies to promote participation in the Information Society' for late adopters and those on low income. It states that this will include a review of the national e-inclusion strategy with the following key outputs: "Review of the Implementation Strategy: Evaluation of initiatives at local, regional and national level to date, progress achieved, existing and potential gaps; Examination of the research findings on how the digital divide issue is being tackled nationally compared to other countries and the need for further policy initiatives; Identification of the key components of a revised implementation strategy, including funding, particularly focusing on those on low incomes and late adopters; Mainstreaming of information society issues into all relevant Government policies and decision-making" (Europa, 2003, 41).

The 2006-2008 report is due for release at time of writing. It covers many concerns relating to the struggle against poverty in Ireland, and is linked to the 200 Billion Euro National Development Plan for 2007-2013. The consultation report used to gather opinion and formulate the 2006-2008 publication (OSI, 2006) seems to give information society related policies and issues less attention than the previous report. While many eInclusion issues are related to general poverty, it seems that IS policy has slipped down the priorities again within the NAPS/incl proposals for Ireland. None of the submissions focused particularly on the information society. Within the progress-made chapter, there is a similar trend. Within the Strategic approach, objectives and targets section [Objective 2 (5.3.2) – Facilitating access to rights, resources, goods and services] there is a section entitled 'E-inclusion/Tackling the Digital Divide'. It sets the target to 'Increase the broadband penetration rate to the OECD average of 10% by 2007.' The chapter relating to policy measures says that enhanced funding to support the use of IT technologies in education and training programmes is required. The only mention of eInclusion is within section 6.3 Objective 3 – Preventing the risks of exclusion. "A small number of submissions (3) called for the continuation of measures such as eInclusion' to address gaps in computer literacy and enhanced access to IT training and computer access for vulnerable groups. A number of submissions (2) from local authorities called for the role of existing public services, in promoting e-inclusion, particularly libraries, to be recognised in NAP/inclusion and for the national rollout of the 'Making Access Happen' scheme".

3.2. Regional Level Strategies

As will be outlined in the 'Actions Taken' section to follow, there is much being done at the regional level in relation to information society policy. While these policies are greatly influenced and generally funded by EU level initiatives, the regional authorities do contribute to, shape and in some cases totally fund and operate projects. The majority of the information society projects and initiatives at this level receive funding from the government, the EU or both. Regional authorities also play a role in assisting the county councils and, in some cases, the voluntary sector and the community at local level. The importance of the community and voluntary sector in addressing social exclusion through utilising ICTs is being increasingly realised. The actions taken by them reflect this as can be seen within the relevant operational and development strategies.

3.3. National level strategies for local development

A number of national-level strategies have been developed to facilitate information society growth at the local level.

3.3.1. National / local Libraries

A set of strategies which originate at the national level but facilitate local level development is directly related to the national library service. An Chomhairle Leabharlanna (The Library Authority Council) is the advisory body on public libraries to national and local government in Ireland. The national library service is a key resource for all sections of society which is delivered at practically no cost to the user. The library council sees itself as over time increasingly becoming agents of social inclusion. Libraries were identified as one of the three key targets in a project to examine cultural inclusion by The National Economic and Social Forum (NESF) in February 2006. The Library Council sees libraries as a local and national space for all in both physical and virtual aspects. There has been a central focus of policy on libraries as a means to provide internet access to the public. With funding from the Information Society Fund, public libraries both facilitate access to online resources while digitising material from their own collections. There are now over 1,400 Internet access PCs available in almost 100% of public libraries. In 2004 a total of 1.6 million sessions of Internet access were provided throughout the country. (An Comhairle Leabharlanna, 2006, 17) Further, the libraries support adult, distance and lifelong learning.

3.3.2. LGCSB

Another national level strategy which directly affected local governance was the development of the Local Government Computer Services Board (LGCSB). Their aim is that 'through the quality, commitment and continuous development of their staff, the LGCSB will be the partner of choice for Local Government initiatives in the delivery of quality services through the optimum application of ICTs within the National Information Society framework' (LGCSB, 2003). Through providing ICT vision, advice, guidance and support, they strive to improve the roles, processes, systems and service delivery of Local Government. They identify common approaches and strategies for ICT in the delivery of Local Government business systems while acting as a strategic and operational resource. They also facilitate the role of local authorities, improve the service delivered to citizens and enhance local participation in the decision making process.

3.3.3. Local Governance

Traditionally, local agencies (LEADER, Area partnerships, Groups and County or City Enterprise Boards) while conducting positive work, had in many ways been working in parallel. This had the combined effect of reducing their effectiveness, which at times resulted in duplication and often overlap in aspects of their responsibilities. The Government established an Interdepartmental Task Force on the Integration of Local Government and Local Development Systems in June 1998. The intention of this action was to establish closer partnerships between local authorities and local development bodies both functioning at the local level. It also aimed to bring about an integrated approach to the delivery of both State and local development services at local level. It recommended the establishment of City/County Development Boards (CDBs) in each of the five major cities and in each of the twenty nine county councils. In 2000 the Department of the Environment and Local Government published guidelines to enable CDBs to deliver a horizontally integrated service across agencies and actors at a local level. To facilitate a more coherent method of planning and delivery of services at local level, each CDB is required to prepare and oversee the implementation of a ten year county/city Strategy for Economic, Social and Cultural Development. This provided the template guiding all public services and local development activities locally. A key guideline was that social inclusion was to be a major focus within the CDB strategy and that the boards were to follow key national public policies including information society and national anti-poverty strategies. In February 2003 the CDBs were formally recognised as the central bodies for formulating community and local development programmes. This shift in responsibility resulted in the CDBs having the potential to deliver and coordinate inclusive information society measures at the local level. "The county development boards generally, and the CDB strategies in particular, are a new approach to the challenging topic of providing more 'joined-up' government at local level in Ireland (CDB, 2003, 9). These boards have the potential to deliver an effective, and more locally based/orientated, approach to information society policies and initiatives. However, while some are doing this, many are not availing of this potential.

4. ACTIONS TAKEN

Following the overview of the policy framework, a look at particular actions being taken at national, regional and local levels will give a clearer perspective. For national level actions, a synopsis of the key developments within the government action plan from progress reports will be provided. For regional initiatives, as reviewing all regions would be beyond the scope of this paper, a number of regions will be covered acting as case studies. A similar approach will be taken for local level initiatives within the counties.

4.1. Government Strategy

As outlined above, the government's strategy and actions for the information society, are presented in their publication 'New Connections: A Strategy to realise the potential of the Information Society'. This was originally published in March 2002 and there have been three progress reports since. These reports are quite comprehensive, outlining overall actions and containing updates on the relevant developments. For the purpose of synopsisizing key policy areas and developments, a quite general account of actions taken within each section will be presented. There are three subsections within the 'key infrastructures' section and four within

the 'frameworks necessary to support and strengthen Information Society development' section.

4.1.1. Key Infrastructures Necessary for Progress as an Information Society

4.1.1.1. Telecommunications Infrastructure

An indicative €200 million from the 'e-commerce and telecommunications measures' within the National Development Plan (NDP) (2000-2006) had been put aside for broadband infrastructure projects. This was partly funded by the ERDF. The finances were used to identify gaps in infrastructure, maximise the utility of shared information, and drive demand for new services and activities. The measures were being taken to facilitate the even spread of the digital economy and to 'contribute to economic and social cohesion in the information society'.

The government launched the broadband action plan in 2003. It allocated €140 million of exchequer funding to be invested up to 2007. There are five key elements of the action plan:

- Connect more than 90 towns with populations exceeding 1,500 to broadband with Community Broadband Exchanges and strategic fibre;
- Through the Group Broadband Scheme, promote the rollout of broadband to communities where the market is not meeting demand. This scheme, with government financial support of up to 55%, facilitated these communities to pool broadband demands and obtain high-speed connectivity from service providers;
- Tougher fines for those infringing communications laws;
- New policy directions for the Communications Regulator which focus on facilitating the delivery of competitive broadband pricing;
- A website (www.broadband.gov.ie) which promotes broadband and its benefits, outlines where it is available and allows consumers to compare prices from different service providers.

The regional broadband programme aimed to supply smaller towns with broadband. Within this programme there have been two phases of Metropolitan Area Network (MAN) rollout. Both had €80 million set aside for them. The first phase set up networks in 27 towns, while the second is to supply MANs to 90 towns with populations in excess of 1,500 that had no existing DSL broadband. Connectivity framework deals with the backbone networks, carried out by the Department of Communications, Marine and Natural Resources (DCMNR), reduced the price of back-haul (connection of a local area network to the WWW via Dublin) to one eighth of what it had been prior to 2004. Co-investment with private sector partners to upgrade and expand the backbone infrastructure also took place within the NDP (00-06). Initiatives included the construction of a new national fibre backbone by ESB Telecom (the national Electricity Supply Board), the development of regional e-commerce centres, the extension of the EsatBT regional backbone network and the acceleration of its DSL locations. The national incumbent Eircom also received funding for its DSL programme. The 'Broadband for Schools' initiative was jointly funded by the Department of Education and Science, the DCMNR and the Telecommunications and Internet Federation. It had a fund of €18 million and initially aimed to have 4,100 primary and post-primary schools supplied with broadband connectivity by the start of the 2005 academic year. The latest progress report states that Public Private Partnerships (PPP) has resulted in Ireland being one of the cheapest locations worldwide for international leased lines. A €50 million project, also funded by the NDP 00-06, was allocated to experiment with using the ESBs network to deliver broadband.

4.1.1.2. Legal and Regulatory Environment

Numerous initiatives were implemented under this heading. Some of key initiatives will be outlined. A review of the code of practice and ethics concerning illegal and harmful use of the internet was undertaken. Legislative provisions enabling Ireland to ratify the Cybercrime Convention were included in the criminal justice bill. Work was undertaken by the Department of Enterprise, Trade and Employment to restructure, consolidate, simplify and modernise company law in Ireland. The Copyright and Related Rights Act 2000 was brought into line with EC copyright Directives. A national network security awareness campaign, with a dedicated website (www.netsecure.ie), was launched in July 2003. Further telecommunications regulation that includes the regulation of the .ie domain registry and the creation of indictable offences for breaches of enforcement measures imposed by the Commission for Communications Regulation.

4.1.1.3. e-Government

Initiatives within this section, which is by far the largest one, are grouped within nine subheadings. These are: Public Service Broker; Flagship Services to Citizens; Flagship Services to Businesses; GIS Strategy Prioritised Service; eHealth; eCabinet Project; ePayments Strategy; eLegislation; and Additional eGovernment Projects. The public service broker is a platform to 'support integrated access to all services of central and local government through a single point of contact and through multiple access channels. The portal website went live in 2004 (www.reachservices.ie). The website, www.basis.ie, provides business access to state information and services. Thirty two services are outlined under flagship services to citizens. These include: a site within which motor tax can be paid; the e-Plan facility within which planning applications can be monitored and processed; bringing national museums, libraries / library services, archives and art galleries online; a consumer protection and small claims portal; and eEnabling public services. Twenty two projects fall within the services to businesses section. These include a number of services being offered by the revenue commissioners such as online vehicle registration tax. Other services are: import/export licenses online; online tendering for public procurement; and online work permits. The eHealth initiative has online services such as appointments for hospital services, medical cost reimbursement, access to laboratory results and integrated health services. Online filing and payment of taxes is one of the twenty two projects outlined within the additional eGovernment projects section.

4.1.2. Frameworks Necessary to Support and Strengthen Information Society Development

4.1.2.1. eBusiness

A project to develop a new national eBusiness strategy was developed by the Department of Enterprise, Trade and Employment to promote non-ICT sector Small to Medium Enterprises (SMEs) and micro-enterprises to use ICTs to maximise their competitive advantage. An acceleration fund was established by Enterprise Ireland to fast-track projects of a significant scale designed to integrate ICTs into the business process. Building on this was an initiative supplying ebusiness and IT advice which aimed to have an effect on a larger number of companies. ITS 2007 is another Enterprise Ireland project designed to develop high value-added knowledge intensive industries and to assist them in achieving fast growth. A number of

eProcurement projects were also designed and implemented by the Chambers of Commerce and Enterprise Ireland. Campaigns were run dealing with and promoting e-work, e-work awareness and training.

The government's e-business development strategy focused on five target sectors: mobile commerce; e-marketplaces; netsourcing; voice technology and digital content development. Flagship digital content projects were established. The Digital Hub was established in Dublin as an International centre of excellence in digital content development. It has 28 firms working in collaboration with education & research institutions to develop digital content capabilities. Media Lab Europe, an offshoot of Media Lab at Massachusetts Institute of Technology (MIT) was set up for cutting edge IT research (development and application). Both aimed to promote research and development, help spin-off enterprises/commercial activity while also being used to showcase Irish expertise and, in turn, attract foreign e-business investment. This project has since experienced serious / terminal difficulties. (See Lillington, 2005)

4.1.2.2. Research & Development (R&D)

Enterprise Ireland has developed programmes which aim to: build the R&D capacity of firms to a continuous and significant level and to initiate significant R&D development; encourage and support high-risk, high-quality R&D projects; encourage company participation in collaborative R&D projects at both national and international levels and to develop their management ability to control the R&D process. €2.5 billion from the NDP 2000-06 was allocated to research, innovation and technical development. Numerous initiatives were developed to support the development of the pervasive technologies of ICT and biotechnology. Regional development strategies were also developed. Strategies to increase the quantity and quality of collaboration between third level institutions and companies were developed to establish a world class research environment in state agencies and higher education institutions.

Science Foundation Ireland was set up in 2003 to: embed existing firms within the economy and facilitate their re-positioning higher up the value chain; attract the R&D activities of foreign investment projects; foster the start-up of high potential technology firms. The Irish Research Council for Science, Engineering and Technology (IRCSET) was launched in 2002 to establish schemes of support for researchers within its relevant disciplines and to provide research funding. Numerous post-graduate and post-doctoral fellowship schemes were also set up. The Higher Education Authority, with the support of the Department of Science and Education, increased the capacity of its national backbone (HEAnet).

4.1.2.3. Lifelong Learning

As part of the Blueprint for the Future of ICT in Primary and Secondary Level Education initiative, almost €40 million was made available to schools between 1998 and 2004 in order to realise the government's vision of preparing all students for the information age. In 2003 the National Council for Curriculum and Assessment (NCCA) developed a plan to integrate ICTs into education at first and second level. Following negotiations between the DCMNR, the Department of Science and Education and the telecommunications industry, an €18million fund was established in 2003 to fund broadband services to schools over a three year period. Additional exchequer funding was added for the supply of equipment and services. An IT industry advisory group was established to formalise links between the IT industry and schools at national level in the implementation and development of innovative IT projects

which would, through the use of ICTs, also expand the boundaries of traditional education. A number of ICT training initiatives for adults were developed to provide both basic ICT training and part-time flexible options in further education. The National Adult Literacy Agency was given funding to develop a website (www.literacytools.ie) to develop distance learning ICT literacy programmes to be used in homes, workplaces, libraries and within training and education centres. In 2002 €12 million (plus a further €3 million in 2003 and 2004) was given to the Information Technology Skills Fund to ensure the supply of skilled graduates in emerging market needs areas. In 2002 a Taskforce on Lifelong Learning established a strategic framework for lifelong learning. (Government of Ireland, 2002)

4.1.2.4. eInclusion

Following the outcomes of many initiatives and policy implementation plus the suggestions made by reports on eInclusion, including the ISC (2003) report outlined above, the government's e-Inclusion implementation strategy was reviewed. Five areas of importance were outlined by the review committee: ICT Access, Learning and Skills; Building the ICT capacity of the community and Voluntary Sector; Measuring Inclusive Information Society Development; Awareness Raising, including Content Development and; Mainstreaming Information Society Issues. ICT literacy is being developed within the context of Lifelong Learning and within the government's commitment under the e-Europe 2005 action plan in order to produce a national lifelong learning strategy. The key goal is to incorporate ICT literacy within all education, training and 'second chance' programmes for disadvantaged groups. Three programmes were developed which target the community and voluntary sector. The first aims to provide structured support for building and enhancing the ICT capacity for the sector. The second is run by the LGCSB in coordination with the relevant government departments and agencies and funded by the information society fund, is the Mobhaile Community and Voluntary Services project (www.mobhaile.ie). Through the provision of an online presence, hosted intranets, secure emails and SMS gateways, the demands of the sector can be met through gaining the ability to communicate with members, other interested parties and individual citizens. This project also syndicated services and an online office within which the retrieval and storage of forms and documents in private areas for the members. The third programme was to research the ICT needs of the sector. This was undertaken by the Computer Science and Anthropology departments at the National University of Ireland in Maynooth (NUIM).

Another initiative, which was successful, was the Community Application of Information Technology (CAIT). Details of this are outlined within the community level actions section below. In the areas of research and measuring, the extent of the digital divide in Ireland was highlighted. The above mentioned ISC (2003) publication which was carried out by iTech Research, was used to measure imbalances and provide international comparisons. Further, the Central Statistics Office (CSO) have publicised and are to continue to publish, annual statistical reports detailing ICT use among businesses and households. To raise awareness and provide local content the LGCSB are using the Mobhaile project which will make local authority information easily accessible, relevant and useful. As was mentioned above, the 'Sustaining Progress' and NAPs/incl reports have included sections concerning e-inclusion in order to mainstream information society issues.

Two projects were launched, under the heading, accessibility. The first was the development of guidelines for electronically delivered services. This was launched by the National Disability Authority (NDA) in 2002 and the website (www.accessit.nda.ie) was subsequently used for a number of IT publications. The second project aimed to identify and

provide examples of methods or tools that could be followed in order to assist in determination of compliance with the accessibility guidelines. These projects more recently resulted in the production of a draft set of guidelines on accessibility in the physical environment, ICT and quality customer services for public service bodies.

4.2. Regional Authorities

Two regional authorities stand out as a result of their activities in relation to addressing issues concerning information society strategies and initiatives. Initiatives have been developed in line with EU regional development policy and are largely supported by EU funds. While some initiatives received funds from the Information Society Development Fund, they are considered to be fairly independent of both national and local authority strategies.

4.2.1. South East Regional authority

The South East region accounts for 13.5% of the country. It consists of five counties and has a population of 423,589. The economy has historically been primarily based upon agriculture, manufacturing, tourism, fishing and services. The South East Information Society Strategy (SEISS) was formally considered and adopted by the authority in September 2001. It was one of the first strategies of its kind. A key vision for the initiative was to address the relative disadvantage of the region in terms of technology availability and use. It also aimed to place the region in a strong position to develop an ICT sector. The goal of the programme was the “creation of a cohesive set of regional relationships for the delivery of ongoing practical ICT initiatives relevant to companies, communities and Local Authorities in each county in the region” (SEISS, 2004, 1). The SEISS programme was responsible for the attraction of over €19.2m of project funding to the South East region. A number of key projects were funded by SEISS.

CARP (Connection and Access for Rural People), funded by INTERREG IIIA, dealt with the provision of local community information content and broadband access for pilot communities in Ireland. A project entitled Connected Communities was a regional approach to the encouragement of local community content creation and internet usage. EPROC (INTERREG IIIB) was a project concerned with eProcurement and the effect it has on small to medium enterprises (SMEs). Also funded by the INTERREG IIIB Atlantic Programme, SENSITIC was a benchmarking project to which sought to gauge the impact of the Information Society in seven regions of Europe including South-East Ireland. SERPANT was a flagship project with a budget of €18 million which financed six municipal area broadband networks (MANs). The SERPANT project fell within the national county and group broadband scheme. The project was grant-aided at the rate of 90% by the Department of Communications, Marine & Natural Resources (DCMNR) with match funding of 10% provided by local authorities, was completed at a total cost of €18 million. Having brought broadband to key towns, the regional authority moved its focus to the provision of broadband to rural towns and communities (the government’s group broadband scheme).

The CAPTIE (Co-ordinated Advanced Teleworking Pilots in Europe) project was funded by INTERREG IIC. The South East Regional Authority was the lead partner and co-ordinator of it. The aim of the project was to promote teleworking and promote the associated benefits. The E-BYGOV project aimed to examine methods, utilising ICTs, to make government services more responsive, accessible to citizens and easier to use. It was partially funded by both the EC and INTERREG IIIB. The local authorities, assisted by the LGCSB, developed an eReciepts. Online payment services were developed in areas such as housing

rents and loans, water charges, traffic fines and fire charges. The SERB-II broadband project was run in coordination with the relevant county councils. It constructed nine further networks in addition to those mentioned above. This fell within the second phase of the Government's regional broadband programme. Similarly to the previous phase, five of the towns had MANs installed. However, the remaining four utilised wireless technology to deliver broadband connections.

4.2.2. Midwest Regional Authority

This region contains three counties, has a population of 339,591, and is 8,248.64 square kilometres in area. The principal economic activity is in agriculture, professional services and manufacturing. The Ennis Information Age Town Project was carried out within this region. (<http://www.eiat.ie/index.php>)

The Shannon Informational Society Regional Partnership Programme (ShIPP) provided a coherent approach for all agencies, companies, organisations and general users within the Shannon region, that they might be direct and guide the information society proactively. This was seen as a method to raise the quality of life and economic productivity of the region. The Shannon Regional Innovation Strategy (SRIS) ran parallel to the ShIPP project and was financed by the European Regional Development Fund (ERDF) but focussed solely on the development and promotion of innovation in the region. The Analysis of Spatial Planning and Emerging Communications Technologies (ASPECT) was a project investigating both the potential and actual impacts on spatial planning and development made by ICTs. The Tactical Integration of Telematics Applications Across Intelligent Networks (TITAN) aimed to provide personalised internet access to public services within the region. It was a project falling within the EU Integrated Applications Digital Sites (IADS) programme. The PRELUDE (Promoting European Regional and Local Sustainability in the Digital Economy) project was also carried out within the Midwest region. The RuralTech project, funded by INTERREG IIB Atlantic Area Programme, ran in the region until December 2005 and was concerned with promoting the information society in rural areas. Finally, the Citizen First project, also funded by INTERREG IIB, was headed by the Midwest Regional Authority as a lead partner and aimed to empower citizen interaction through the improvement of public service delivery.

4.3. County Level

In the publication entitled 'Review of County/City Development Board Strategies' (CDB, 2003) it is stated that ICTs are seen as one of the more significant opportunities for all of the counties/cities. This report also shows concern about the shortcomings generally in terms of the development of the telecommunications network. When mentioning the development of ICTs, reports from the CDBs are concerned primarily with broadband investment and development. There is very little being done in terms of the profiling of ICT development within the individual counties and cities. While social inclusion is identified as a priority within all of the CDB reports, very few look at it in terms of social exclusion from the information society or how ICTs can be used to address the problem generally. In a table outlining the number of actions targeted at social inclusion only one out of 1,225 focuses on telecommunications. (CBD, 2003, 49) This report includes information technology among the issues which the CBDs feel should be addressed at regional level.

While the majority of County councils and CDB strategies merely refer to ICTs as an infrastructural issue, some do address social information society issues such as inclusion. The Information Society Commission (ISC, 2003) presents a list of Counties that have produced

strategy documents which include social inclusion and ICT issues. These include South Dublin, Meath, Kilkenny, Offaly, Donegal, Longford, Galway, North Tipperary, Kildare and Dublin City. A number of these counties action plan sections dealing with ICTs will be presented at this point to illustrate the range and types of actions which appear in county development plans.

Within its infrastructure section of the CDB plan Longford identifies ICTs as a key issue. It states that they wish to ensure that appropriate structures are in place to encourage the expansion and development of the county. Two objectives to facilitate this are associated with information society development. The first, relating to infrastructure, is to have an affordable high-speed telecommunications infrastructure. The second is more concerned with inclusion as this objective is to provide access to ICTs to those most marginalised within the county.

Kildare County Council is an example of another county level development plan that addresses e-inclusion as well as ICTs as an infrastructure. In comparison to Longford, Kildare is an example of a county going into slightly more detail. As one of its goals it has stated that it wishes to establish Kildare as a leader in ICTs. There are two sides to this goal. The first is to develop the county as a high-tech location, while the second key development is to provide publicly accessible ICT. The action to be taken to achieve this goal is to develop and implement an ICT strategy to achieve the following: Firstly, to investigate the future potential of broadband infrastructure in the county; secondly, to resolve training and skills gaps; and, finally, to co-ordinate and streamline ICT initiatives in the county.

A shortcoming of both the Longford and Kildare CDB plans is that they fail to provide sufficient detail on the initiatives and how they will be implemented is left vague. A number of county strategy documents stand out as being good examples of all encompassing ICTs strategies in that they include infrastructural, economic and social concerns and detail how shortcomings in these areas are to be addressed. The Meath and Offaly strategies, while outlining the potential of ICTs, mentioned concerns and initiatives relating to the digital divide. They presented awareness campaigns with the goal of disseminating general public information and information relating to the importance, dangers and potential of ICTs and the promotion of lifelong learning. They also formulated and implemented initiatives to develop e-democracy and tackle social exclusion. Wexford county development board has developed an information society strategy following the establishment of an information society taskforce. It aimed to use existing structures to develop ICT training for marginalised groups. It has carried out appraisals of ICT training and facilities and formulated an approach as to how best to meet this objective.

One county strategy will be sufficient to illustrate a proactive county approach to information society development. This is the North Tipperary County Development Board strategy. (North Tipperary CDB, 2002). Within this plan, numerous strategies concerning the use of ICTs for economic development are presented with the aim of developing small to medium enterprises (SMEs) and making the county a suitable location for IT industries. An example of one action taken in this area is an objective which aims to provide services and technical supports to sustain and develop existing SMEs through examining methods of ICT capacity building and the development of a programme to implement these methods. Coinciding with these are initiatives aimed at rural development and the creation of sustainable rural communities that include ICT elements, such as reviewing I.T. and e-commerce training needs of farming families. On the cultural development side, they see ICTs as being an ideal means of promoting and marketing cultural events through the development of a county culture website with links to local media and relevant information sources. (<http://www.tipperarynorth.ie/services/arts.htm>)

In terms of the promotion and development of the information society in the county, the section entitled 'Information and Communication Technologies' is a prime example of a well informed and wide ranging approach to addressing issues relating to the information society. The section, following an overview of the positives associated with ICTs, presents a general account of the digital divide and why it is dangerous to society. This section presents six visions within which objectives are identified and actions outlined to achieve these.

The first vision is that all people in the county are aware of ICTs. Objectives within this state that everybody, despite their geographical location, age, and education will be aware of ICTs and existing ICT facilities. Actions to reach these objectives include financing research into which social groups require special attention, an audit of ICTs within the education system and available to the general public, and projects to develop the capacity of people to evaluate and understand the ICT supports which are available. Vision two aims to ensure that ICT training and advisory supports are available to all people in the county. Objectives within this include one which aims to ensure that each individual and organisation has a level of training appropriate to their needs. Numerous actions are outlined to achieve this such as identifying specific barriers to ICT use and addressing them. Many actions within this vision focus on evaluating and developing ICT training at different educational levels. Vision three, which also outlines numerous objectives and actions, aims to ensure that organisations, groups and individuals are aware of the financial supports available to them for ICT development. Vision six is perhaps the most detailed and ambitious of the six visions. It aims to ensure that the county will have a telecommunications infrastructure that provides equal access for all at an affordable cost. Objectives include: the provision of high-speed access to all individuals, businesses, public institutions; ensuring that provision for the installation of local digital exchange is made through the planning process in every community that has a library, school, post office or church; support for national initiatives such as PIAPS in libraries and the national LLU process and; ensuring that the required infrastructure is put in place for low density population rural areas. Numerous actions are suggested to reach these goals and timescales are outlined.

4.4. Community Level

Local authorities working within the counties have developed initiatives specifically aimed at addressing inclusion in the information society through the generation of relevant content. A number of these are also outlined within the eInclusion publication produced by the ISC. (ISC, 2003, ch6). These projects vary in terms of whether they are funded / approached at the national level, developed by county councils or individual local groups or authorities. An example of content generation from the top-down would be the Eircom funded Information Age town projects. Ennis, Kilkenny, Castlebar and Kilarney are among the towns included in this initiative. They received funding to develop community portals and promote the use of ICTs among businesses and the community. At a regional level, local content development is also being approached by the regional authorities. The SEISS project, mentioned above, contains an example of one of these initiatives. Clann Eire is a project aimed at developing a content management platform for communities within the South East region. It was funded by the EU and initially generated local content across five counties and subsequently set the foundation for potentially delivering e-government services at the local level. As outlined above, many county councils, through their websites, have been achieving local content delivery. In terms of locally based community promotion, one programme stands out as being a huge success. The Community Exchange Programme, which was established in 1999, provides a communication channel for individuals and groups with some involvement or

interest in community and voluntary work or organisations. It was the first online forum for the delivery and exchange of information and news relating to the Irish voluntary sector. It has developed from being a monthly email bulletin service to become an environment for anybody both to share information and actively to contribute to the websites content.

The CAIT initiative, while being funded by the government, is the best example of initiatives being developed to target local communities and groups at the local level. The introduction of the CAIT (Community Application of Information Technology) initiative in 2000 aimed to address the digital divide following suggestions made within the Information Society Commissions report entitled IT Access to All (ISC, 2000). Within this report were suggestions to promote social inclusion through actions taken by the community and voluntary sector organisations. It suggested that these organisations should be funded to facilitate their ability to reach three key objectives. These objectives were: to encourage late adopters to engage with information and communication technologies in a beneficial way; to empower communities to harness the benefits of the new technologies; to employ information and communications technologies to overcome particular socio-economic barriers which exist for some communities. In order to do this initial funding amounting to just over €5 million was allocated to 71 projects nationwide. These projects came into being in June 2001 and were initially to run until December 2002. There have been other phases since (Duggan et al, 2003, 5). An example of a successful initiative that took place which was shaped and organised by national, regional and community inputs is the group broadband scheme. The county and Group Broadband Scheme (CGBS) was co-funded by the e-commerce and communications measures of the Border, Midlands and Western (BMW) and Southern and Eastern (SE) Regional Operational Programmes of the National Development Plan 2000-2006. The regional coordinators acted in an advisory capacity for the communities and service providers, while matching suitable communities and providers to each other. These regional advisors also encouraged larger Group Broadband Schemes by promoting aggregated or combined projects that cover many communities within counties or across a region. The key objective of the programme was to promote the rollout of broadband access by establishing, through local/regional authority coordination and community driven initiatives, sustainable services in rural hinterlands, towns, villages and underserved areas. To be eligible for this scheme the community could not have more than 1,500 residents. It facilitated the community to deal with the telecommunications operator of their choice, or to draw up and implement their own broadband plan, in order to supply broadband to local businesses and residents. Over 125 projects were approved under the second phase of this initiative which ran until 28th April 2005. This scheme has since ended with no definite substitute put in place. (Kyle, 2007)

5. STATISTICAL INDICATORS

The ISC produced two key statistical reports in April 2003. (ISC, 2003b) One is a general public survey and the other a business survey. The Central Statistics Office (CSO) has produced numerous reports on information society statistics which are becoming both increasingly detailed and broad in scope. This reflects both the policy shift towards increasing the analysis of the information society and the more comprehensive understanding of the key concerns that has been built up over time. A quite detailed account of the Information Society and Telecommunications sector was released in January 2006 analysing 2005 figures (CSO, 2006a), while an update on the information society statistics for 2006 was released in November (CSO, 2006b) with a full report due in December. Another source of statistical

analysis, which builds upon ISC and CSO figures, is from the Economic and Social Research Institute (ESRI, 2004). These statistical reports inform a number of generalisations.

5.1. ICT Sector

The ICT sector accounted for 20% of the total turnover for Irish industries and services. There are 80,100 people in employment within the sector which accounts for 36% of the total value added in industry and services. Of these enterprises 10% are foreign owned which account for 56% of total employment and 85% of total turnover for the sector. The Irish ICT sector has one of the highest shares of business sector value added in the EU and OECD countries.

5.2. Use of ICTs by Enterprises

Figures for enterprises were taken for those with ten or more in employment. In 2006 97% of all Irish enterprises use computers, which is a similar figure to the previous two years. 94% of all enterprises are connected to the internet. The most common type of connection is broadband (61%), then ISDN (31%). 35% connect using a modem while 14% use wireless technology to connect. Sales, which significantly overshadow total purchases, using e-commerce accounted for just over one quarter of the total manufacturing revenue. In terms of ICT strategies, a mere 18% of enterprises have written one. Irish enterprises are far more likely to sell online in comparison to their EU counterparts. They are, however, less likely to have a broadband connection.

5.3. Use of ICTs by Households

Figures for 2006 show that 58.5% of Irish households (867,300) have a home computer. This is up from 54.9% in 2005 and 46.2% in 2004. In 2006 48.7% of all houses are connected to the internet. This is increasing slightly as the corresponding figures for 2005 were 45.1% while for 2004, they were 38.2%. The figures for houses with home computers that are connected to the internet are 83.3% in 2006, 82.1% in 2005 and 82.7% in 2004. Of people aged 16 – 74, it is estimated that 54% have used a computer at some time, while 44.5% have used the internet. The three highest responses, when asked why they don't have internet access at home were: the internet is not needed; the internet is not wanted due to content being harmful or not being useful; and a lack of skills. Cost of equipment and access also appear as reasons.

5.4. Broadband

Ireland has a noteworthy international capacity existing to support current and future enterprise activity, which is served by a variety of routes and carriers. International leased line costs are the lowest in the OECD. Strong competition and competitive prices are a result of high levels of diversity and capacity. National leased line costs place the country in third place within the EU behind Denmark and Luxembourg. There has been undoubted success in relation to the ICT sector and the use of broadband among enterprises. Much progress has been made concerning the rollout and promotion of ICTs and broadband as Ireland has experienced rapid DSL growth coinciding with a reduction in cost.

Thus, the policy implementation, projects and initiatives outlined above are undoubtedly having a positive effect. However, to reveal the extent of their effectiveness and

the rate of progress, Ireland's performance as an information society must be compared to other member states. The above results warrant a specific analysis of broadband rollout among households, as they represent a flaw in the relative performance of Ireland within the EU.

While Ireland is a leading EU country in terms of the ICT sector, various aspects of e-commerce and familiarity and use of some ICTs among the general public, the country as a whole performs very poorly when it comes to households connected to the internet and the rollout of broadband generally. The OECD (2006) placed Ireland in twenty-fourth place out of thirty in terms of broadband subscribers per 100 inhabitants in June 2006. As this is a worse position than the previous year, the country is falling further behind many OECD countries. Irish households are less likely to have internet access and are among the lowest users of broadband within the EU. 16% of Irish households with an internet connection in 2005 used broadband. A low figure when compared to the EU average of 48% for the same year. In addition to this, a regional disparity exists in that households within the Southern and Eastern region are more than twice as likely to have a broadband connection than those within the Boarder and Midlands region. It was reported by Comreg (2006a) that a large percentage (around 40%) of dial-up users failed to get broadband throughout all of the regions and that the gap between the rest of the country and Dublin, in terms of availability and use of broadband, is increasing. Thus the digital divide within Ireland is widening while Ireland's position within the European digital divide is worsening.

While numerous commentators and analysts might disagree, the following points are made in the most recent review of broadband demand produced by the Irish Government (DCMNR, 2006). Ireland has a relatively low number of broadband subscribers due to the full scale launch of broadband services taking place 18-24 months after other countries which resulted in a 'take-up lag time' of roughly two years. They attribute this take-up lag time to a number of factors. Competitively priced DSL was launched relatively late by the incumbent telecom operator. Due to financial difficulties, the cable TV networks didn't emerge as significant infrastructure-based competitors. It should be noted that cable TV, partly due to receiving British television, has a long history in Ireland which means that many systems are old and in need of expensive renewal. Moreover, the scope for additional investment required to launch broadband services was curtailed by the deterioration in share values of telecoms companies.

A key issue to consider is whether this relative disparity is being reduced or is getting worse. While there are many positive considerations, Ireland continues to compare poorly for overall broadband take-up and is in fact slipping further behind other member states. Further, many of the new member states are out performing Ireland now in this area. It has been stated that Ireland was in a better relative position ten years ago. Two key reasons for Ireland's slippage and poor relative performance in relation to overall broadband take-up are presented by Forfás (2004). Firstly, the lack of real growth in competing technologies, such as cable, which is strong in other countries is key. The second reason presented is the lack of competition and innovation within the DSL market.

6. CONSIDERATIONS IN CLOSING

The industrial development driven Information Society policy has been undoubtedly highly successful. Public policy focusing on general education and skills to raise the country's human capital could only be viewed as a success. The required infrastructure has been put in place in various locations and most cities to attract foreign investment. Coinciding with this are the efforts of the Industrial Development Agency (IDA) to promote and attract these companies. eCommerce and call centres are thriving as foreign firms are experiencing no

difficulty in accessing high quality telecommunications infrastructure. The key problem lies in the fact that at the local level provision and/or promotion of quality low cost services is flawed. A comprehensive discussion of the flaws and the criticisms they have attracted, would be beyond the scope of this paper. However, some key ones deserve mention. At the most basic level many key recommendations from the Information Society Commission and related reports were not put into action at all or were realised as being important years after their first presentation. A result of this was that many policy requirements or initiatives were either ignored completely or put in place far later than they should have been. The pace of developments was questioned at the time within publications and was not adequately addressed. The problem has been exacerbated over time.

The Government were very late in realising that simple provision of infrastructure would not suffice. While the infrastructure was becoming increasingly available, where it was available many were unaware of it. Examples of this can be seen in the Ennis information age town project (of which Eircom was given total control) and the use of ICTs in schools. The Information Age Town Projects are certainly worthwhile initiatives and produced results. In Ennis there were indeed many positive outcomes. However, despite the uniform availability of quality infrastructure and services, many people did not avail of the numerous initiatives / incentives. These people tended to be from socio-economic groupings which would exhibit slow take-up anyway. The initiatives for providing ICTs to schools in terms of hardware availability and, in most cases, high speed connections were a huge success. However, in terms of the full utilisation of these provisions, the approach was flawed. Many computers are not being used to the extent they should be. The curriculum and teacher training has not been adapted to suit. There seems to be a lack of detailed planning. Deficiencies in terms of coordination have been blamed. Examples given are that there was no single supplier and that technicians at any level were lacking.

The privatisation of the state operator (Eircom) could not be viewed as a success. Government policy has been criticised for being insufficiently critical of Eircom's market policies. Lack of competition continued for far too long. Following privatisation the company was broken up and sold off to US venture capitalists that had no interest in long-term investment decisions. (Kenna, 2003) The most profitable and useful assets were stripped and sold off. The Eircom network, which runs into almost all houses and businesses, was not opened up equally which resulted in 'bottlenecks in the market' (Smyth, 2005). Prior to the arrival of real competition Eircom was criticised for not moving beyond the more profitable dial up connections at a sufficient pace and local loop unbundling (LLU) was very slow. LLU has continued to be unsuccessful to date. (Comreg, 2006b) While the monopoly on service provision has been broken, Eircom have been heavily criticised for dragging their feet on last-mile availability. The communications regulator (Comreg), having being given increased powers, has addressed many of these criticisms and Eircom have improved significantly but the delay, it is argued, is a key factor in Ireland's relatively poor performance within the EU. There has been talk within the media of re-nationalising Eircom in order to force much needed investment. Regardless of what is done in relation to this problem, Comreg and the government need to adopt an increased sense of urgency in addressing Ireland's broadband shortcomings. This could perhaps be reached through an overhaul of telecommunications policy / regulation in place at present, which is unlikely.

Further, two significant changes to the government's approach are required. Firstly, there must be a coordinated follow through on policies and secondly the problems associated with the centralised nature of Ireland's governance must be addressed. An example of where coherence is required is in the area of education. The government needs both to pay more attention to the more recent ISC recommendations and to revisit the recommendations made

in the earlier publications. A problem with the centralised nature of the state is that there is a lack of communication between various agencies. A powerful agency should be established or a minister with increased influence is required both to develop a coordinated and effective policy and to get people / bodies to act on it. There is a lack of a central driving champion. The difficulty with Ireland's centralised structure is that the question of 'Who is responsible?' still remains. Too many state agencies are involved. There is a lack of coordination at a local level. Regional and local authorities need to be given more authority (over schools and their application of ICTs for example). If the present centralised control is a problem, the solution cannot be a central authority or champion. The problem is a paradox. Centralised control is spread across too many agencies. A central champion or czar could ensure local coordination and delegate effective authority to regional and local administration.

The administration of information society policy has to be driven from the top by an agency or minister with increased powers who can coordinate and boost the effectiveness of policies. The remit would also include getting other public bodies and organisations to act on policies and to maximise the returns for investments made whether this be from the EU or national funding. While, and through doing this, an increased level of communication from top-down, bottom-up and across all actors can be reached. With a powerful and well informed body in operation, policies that reflect the real needs of all sectors can be implemented and driven, while general communication of key issues and concerns will be increased. This change in the representation of concerns, focused through the formation of a central champion, would have the effect of making existing policy more effective and future policy more representative. Thus the shortcomings of Ireland's information society policy could be addressed resulting in a high relative performance across all of the indicators rather than just a number of them.

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