Ireland's Broadband Strategy

INTRODUCTION

Background

Ireland's economy has moved from one being based principally around the production and distribution of physical goods to one driven primarily by the production and application of knowledge. The Information Age has dawned. There is increasing recognition within the Government that information and knowledge have now become a core aspect of the socio-economic development of the country. The dramatic developments in the field of information and communication technologies (ICT's) are at the heart of this transition. What is evolving is a fundamental change in how business is conducted, and how services (including government, health and education services) can be provided. We are experiencing a transformation in our daily living and working conditions.

Almost five years ago, the Irish Government produced the first Government Action Plan on the Information Society. That Action Plan recognised the enormous significance of developments in ICT's and set out a clear policy goal of positioning Ireland as a world leader for e-business and knowledge-based economic activity. The Government believes that broadband connectivity forms a significant part of ICT development and is imperative to the maintenance of Ireland's international competitiveness. Accordingly a number of policy options and market interventions are currently under consideration in order to stimulate further development of the market and to drive the rollout of broadband infrastructure and services. There has already been significant investment in the rollout of broadband infrastructure and measures have been put in place in order to ensure greater competition, to reduce prices and to minimize the spatial digital divide.

The Government believes that the creation and nurturing of a knowledge-based society is essential to maintaining and enhancing Ireland's international competitiveness and will allow the country to build on the economic gains of recent years. A key factor contributing to the unprecedented economic growth in recent years has been the provision of competitive and high-quality infrastructure and services. Grasping the opportunities afforded by the Information Age is at the heart of Government policy, recognizing that readiness to adopt new technologies, an innovative capacity and first-class infrastructure and services are essential if we are to attract and retain inward investment, stimulate job creation and ensure a fully inclusive society.

Access to ICT is an essential enabler of economic growth and social inclusion. The rapid growth in Internet use means that higher bandwidth is becoming ever more crucial. Broadband high-speed always-on Internet connectivity represents the next phase in the

evolution of the Internet. Therefore, widespread availability of open-access, affordable, always-on broadband infrastructure and services for businesses and citizens by 2005 is a key policy priority for the Irish Government.

Its stated objective is to attain a position for Ireland in the top decile of OECD countries for broadband connectivity by 2005. All areas of the country will be provided with access to high-speed broadband; where necessary, the required infrastructure must be built. In order for Ireland to compete on an international stage in the Information age, this is an imperative. It is the policy of the Irish Government that Ireland is at the forefront of this new economy and that e-commerce becomes 'the norm' within the shortest possible time.

In the medium term, the Governments goal is that speeds of at least 5mb/s to the home and substantially higher speeds for business users will be the minimum broadband standard within ten years. The policy aim is for Ireland to be the first country in Europe to have these levels of broadband service widely available.

It is evident to the Irish Government that market failure to address regional broadband infrastructural and service deficits in a timely fashion, exist. The Government is unconvinced that there is sufficient dynamic or competitive pressure in the market to ensure that towns other than those already addressed through a combination of market-led and Government initiatives will be addressed in the near term. Those deficits are unlikely to be addressed by the market of its own accord in the short to medium term. As a result the Government has assumed a leading and prominent role in driving broadband delivery and has devised a programme of phased, targeted investment. In order to realize its objectives, the Government has put in place several programmes of initiatives to assist the private sector to address the existing gaps in communications infrastructure and services throughout Ireland, in both urban and rural areas. The rollout of access to broadband service and supply of the infrastructure needed to deliver it is a prime example of such recent Government intervention.

Current Estimated Usage

In December 2003, the total number of broadband subscribers (including DSL, cable modem and broadband FWA) was approximately 30,000. Following significant price reductions in recent months on DSL services and promotion of broadband by the main providers, numbers of new DSL subscribers are now increasing at estimated rate of 1,000 per month (see Map – Annex I)

The main broadband technologies deployed in Ireland are DSL, cable modem and broadband FWA. Satellite and WLAN technologies are also increasingly used. DSL alone accounted for about 80% of all users. As at 30th September 2003, approx 55% of all telephone lines in Ireland were connected to DSL-enabled exchanges, while the countrywide exchange-enabled programme of the main provider, eircom continues to be a priority for the company.

Strategy Approach and Aims

The Irish Government has approached the formulation of the broadband strategy by focusing on each potential area of influence regarding the deployment of broadband throughout the country. The Government regards **broadband infrastructure** as the single most important economic infrastructure to the future economic development of Ireland. To that end the Government has invested heavily in the rollout of broadband infrastructure in order to develop the capacity necessary for delivery of advanced telecommunications infrastructure. The **legal and regulatory environment** plays an important role in the progression of broadband diffusion throughout the country. The aim of the government is to ensure a secure and predictable legal framework for electronic transactions that provides the necessary confidence for citizens and business. It is the goal of the Government to assume a central leadership role in driving wider engagement with technologies through internal business process and service delivery through the medium of e-Government. The support of the competitiveness of business in meeting the challenges of the new competitive environment is an important concern for the Government. The promotion and development of a successful **e-Business** environment is a key success factor in the new economy. The Government considers knowledge to be a core factor in creating and sustaining a competitive economy. **Lifelong learning** ensures the availability of knowledge and skills and supporting new ways of learning. The Irish Government recognises the importance of **e-Inclusion**, that is, ensuring an inclusive information society that addresses disadvantage and exclusion.

1. BROADBAND INFRASTRUCTURE
DEVELOPING THE CAPACITY NECESSARY FOR DELIVERY OF ADVANCED BROADBAND SERVICES

1.1 Broadband Infrastructure & Services

The objectives for broadband infrastructure and services include:

❑ *Making open-access, affordable, always-on broadband infrastructure and services for businesses and citizens available throughout the State within three years*

❑ *Broadband speeds of 5mbit/s to the home and substantially higher for business users as the minimum standard in the medium term*

❑ *Putting infrastructures in place, with Exchequer assistance, to meet the three-year objective, capable of being upgraded to meet the <u>long-term objective</u>*

❑ *Target available funding at procuring open access, local access networks on a Public Private Partnership type basis*

In addition to the pathfinder projects detailed in the next section, the Department of Communications, Marine and Natural Resources (DCMNR) is co-funding 7 projects with telecommunications operators under the National Development Plan 2000 – 2006, involving the development of broadband infrastructure. These projects, due to be completed in 2003, will result in a new national fibre backbone, extensive rollout of Digital Subscriber Line DSL services and leased line services around the country.

1.1.1 Infrastructure Rollout Initiatives

Under the National Development Plan (NDP) 2000-2006, an indicative €200 million, part-funded by the ERDF, has been set aside for broadband infrastructure projects that will enable provision of world-class communications services.

The e-commerce and telecommunications measure of the NDP ensures that support from public funds is provided to overcome identified gaps in infrastructure, maximise the utility of shared information and drive demand for new services and activities in order to facilitate the benefits of the new digital economy being evenly spread across all regions of the country and to contribute to economic and social cohesion in the Information Society. Specific initiatives are targeted to curb a possible emergence of a digital or spatial divide.

1.1.2 Regional Broadband Programme

A key initiative under the e-commerce measure of the NDP is the Metropolitan Area network intervention announced in March 2002. This initiative involves the construction of high-speed fibre-optic rings linking the key business districts in 19 towns and cities across the country within a partnership with local and regional government organisations (see Map - Annex II). These Metropolitan Networks will provide high-speed broadband infrastructure to businesses, schools, hospitals and private consumers on an open-access basis. More than €64 million has been committed to the 1st phase of this programme for the period 2003-2004.

All network construction is now underway and are expected to be operational in mid-2004. When completed, a neutral Management Services Entity (MSE) that will provide open access to the networks, on a cost basis, to broadband service providers, will manage the networks. The MSE will manage, maintain and operate these networks on behalf of the State. The process of recruiting the MSE is well advanced and an announcement on appointment is imminent. These networks will facilitate and promote competition in the broadband market and stimulate private sector investment in the provision of broadband service.

1.1.3 The Broadband Action Plan

In December 2003, the Minister for Communications, Marine and Natural Resources announced a major new initiative to drive the broadband market in Ireland. €140 million of Exchequer funding will be invested between now and 2007 (€35 million per annum) providing high-speed, open access broadband infrastructure in all cities and towns in the State with a population greater than 1,500 (see Table – Annex III and IV).
The key elements of the Broadband Action Plan are:
- ❑ Connecting 88 towns of 1,500+ population to broadband with Community Broadband Exchanges and strategic fibre optic metropolitan area networks,
- ❑ A new Group Broadband Scheme to facilitate smaller communities to pool their broadband demands and secure high speed connectivity from a range of providers in the Irish market with grant support from the Government. The aim of the scheme is to promote the rollout of broadband access to communities where the market may not be currently meeting demand from potential users. In particular the scheme is designed to foster a unitary information society
- ❑ Tougher fines for those infringing communications laws
- ❑ New Policy Directions to the Communications Regulator (Comreg) focussing on delivering competitive broadband pricing

❑ A website where consumers demanding broadband can register and see competing prices from broadband providers

1.1.4 Connectivity Framework Deals

The Minister for Communications, Marine and Natural Resources recently announced new regional high-speed broadband connectivity framework deals on backbone networks. These deals will be a key driver of broadband outside Dublin. This move radically improves the economic case for providing broadband in the regions. Under the offerings, high-speed broadband packages, including 155Mbps (STM1), 34Mbps, 100Mbps Ethernet, (622 Mbps), STM4 will be available to towns on the ESB Telecoms fibre optic network.

In addition, 2.5Gbps wavelength products connecting Dublin to 26 regional towns will be made available on the EsatBT networks (see Map – Annex V)

The broadband products and pricing in the ESB Telecoms offering are as follows:

❑ 34 megabit products @€50,000 per annum
❑ Ethernet 100mbps @€50,000 per annum
❑ STM1 @€100,00 per annum and
❑ STM4 @€400,000 per annum

All pricing is point to point on ESB's extensive fibre wrap network. This new network consists of almost 1,300 kilometres of 48-fibre cable in a figure-of-eight loop around Ireland taking in all four provinces and most major towns and cities. The Government and the European Regional Development Fund supported ESBTelecoms construction of this network under the NDP 2000-2006.

The EsatBT offering involves an ultra high-speed product and leverages the investment made by the Government and EsatBT in its regional fibre network in recent years, including the significant investment made in the Western Digital Corridor. The pricing in the Esat BT offering is designed to encourage connectivity to groups of towns. On average the cost per wavelength per annum is in the region of €150,000 to €200,000.

Individual ISP's, telcos and consortia will be able to draw down capacity from these framework deals.

1.1.5 Backbone Infrastructure

Other initiatives under the NDP e-commerce measure include co-investment in backbone infrastructure in the regions in conjunction with private sector partners. These projects include the construction of new national fibre backbone by ESB Telecom, referred to earlier, by the national Electricity Supply Board, the development of regional e-commerce centers by Nevadatele, the extension by EsatBT of its regional backbone network and the acceleration of its rollout of DSL in 40 locations. Eircom, the incumbent operator, has also received co-investment from the Government in its DSL programme. Upwards of 900,000 telephone lines have already been DSL-enabled nationwide and the current aim is to have 1.4 million telephone lines DSL-enabled by March 2004. With the rollout of the Government's broadband programme over this year and next, investment will be 7,000% more than 1997.

1.1.6 Broadband Infrastructure for Education and R&D

The Next Generation Internet Programme seeks to place Ireland at the leading edge of international Internet activity by installing major upgrades to European and US connections, increasing the speed and capacity of Internet access for institutions. This will enable real-time collaboration with high-speed education and research networks and the development of new advanced IT applications based on Internet technology. Activities include digital libraries, virtual laboratories and telemedicine. The availability of advanced networking and complementary applications to the research and teaching programmes are seen as critical by all third-level institutions in Ireland. HEANet manages Ireland's national research network.

The network links and high-speed international circuits were launched, at HEAnet's first national networking conference at the Tipperary Institute in November 2001. This brought on-line connectivity to the pan-European Geant network in Europe through 155Mbps links to London and Frankfurt. While US links from HEAnet's CityWest node went live to the New York Internet Exchange. In late 2002 Heanet upgraded the capacity of the links connecting it to the Geant European research network.

Heanet's US and European links enable all the universities and institutes of technology and other Irish higher education and research organisations to connect to all the leading colleges and researchers in the US and some 3,500 institutions across Europe. In addition, in December 2001 a link was installed between Dublin and Belfast linking Northern Irish colleges and UK colleges on JANET to HEAnet organisations at very high bandwidth.

There has been a significant uptake by Irish researchers of HEAnet's new strategic links to the NGI in Europe, North America and elsewhere. Indeed many of these links have enabled the Irish research community to develop and expand their Ipv6 next version of the Internet protocol network, by connecting to other Ipv6 enabled networks around the world.

With support from the Higher Education Authority and the Department of Education and Science, HEAnet has upgraded the national backbone network during 2002. With resources made available by the HEA, an aggressive programme of client upgrades to the National Backbone Network was undertaken in 2002. Many large clients have double the connection bandwidths in the past year, while major upgrades of some of the smaller institutions is still under way.

The largest of these client upgrades took place in October 2002, when Trinity College Dublin upgraded its access circuit to the HEAnet network as a trial of a new Gigabit Ethernet link at 1000Mbps. This has been successfully tested and UCD have also upgraded its access circuit to the HEAnet backbone to 1 gigabite and this linkage is currently undergoing user testing. Other clients, including NUI Galway will follow in this regard.

1.1.7 International Connectivity

A public private partnership entered into in 1999 has greatly increased the levels of competitively priced international connectivity from Ireland to Europe, Asia and to the United States and has been a key factor in the attraction of foreign direct investment, particularly in the information and communications technology sector and consequently to the greater economy.

The Government negotiated a number of amendments to the original contract and the original capacity may now be packaged as short-term leases. 2.5 Gb wavelengths and IP products are now available. The reach of the network has been increased and connectivity to additional European, US and Asian cities is now available. In all, over 50 cities are now covered by this connectivity contract.

As a result, Ireland is now one of the cheapest locations worldwide for international leased lines. The original project was also designed to promote investment in strategic and research-related initiatives. To take one example, 7 STMs have subsequently been assigned therefore to the national education research network, HEAnet, for strategic and educational purposes, enabling the network to link with the UK and other national research networks.

The success of Ireland's international connectivity project is illustrated by the decision of many high profile international operators to locate in Ireland. The most recent evidence of this is the decision by Google the international search engine, to locate in Dublin. There is increasing evidence that Ireland is becoming a location of choice for data management, outsourcing and disaster recovery sites. This international investment is enabled by the availability of competitive, high-speed international quality bandwidth – i.e. broadband services and digital superstructure.

1.1.8 Powerline Communications Systems

ESB and the Department of Communications, Marine and Natural Resources are funding a major trial of broadband powerline technology trial, which will take place over the coming months. The trial will concentrate on a smaller town in the West of Ireland and aims to trial this rapidly developing technology in homes, schools and businesses in the area. This project is part of a €50 million project been co-funded by the Department under the NDP 2000-2006 to broadband enable ESB's transmission network nationally. This project will also build on recent trials of emerging broadband technologies including wireless and satellite.

1.1.9 Broadband in Clár areas

The Department of Communications, Marine and Natural Resources is working with the Department of Community, Rural and Gaeltacht Affairs, to develop communications and Information Society infrastructure and services in up to 15 locations throughout the Clár areas. These are areas where there has been significant population decline in recent decades. The process of evaluating the applications received in response to that invitation is currently underway.

The trial will evaluate the broadband technology used for its potentially wider deployment throughout the Clár regions. The trial is technology neutral and should enable local industries, public services, educational institutions and the wider communities there to obtain access to broadband networks. A total of up to €500,000 is available initially, to extend advanced communications infrastructure and services to the Clár area.

1.2 Future Planning Permissions

The Planning and Development Act, 2000 makes the roll-out of telecommunications infrastructure a mandatory element of Local Authority development plans. Local Authorities have the power to impose conditions relating to the provision of ducting etc.

in granting planning permissions, and these conditions are currently being imposed in many appropriate cases. The Department of Environment and Local Government will shortly engage with the Department of Communications, Marine and Natural Resources on this issue and, pending the outcome of those discussions, will issue advice to local authorities before the end of the year.

2. LEGAL AND REGULATORY ENVIRONMENT

ENSURING A SECURE AND PREDICTABLE LEGAL FRAMEWORK FOR
ELECTRONIC TRANSACTIONS THAT PROVIDES THE NECESSARY CONFIDENCE FOR
CITIZENS AND BUSINESSES.

2.1 Market Regulation

Recent developments in both national and EU telecommunications regulation and the legislative framework that supports it will help to bolster progress already made. In January 2003, the Minister for Communications, Marine and Natural Resources issued policy directions to the Commission for Communications Regulation, in accordance with section 13 of the Communications Regulation Act 2002. These directions established key policy priorities for the Commission in the short term, including the introduction of flat rate Internet access nationwide. FRIACO services have subsequently been introduced and currently a number of companies are offering this low-speed and relatively low cost (non-broadband) option to approximately 30,000 customers.

The Minister for Communications, Marine and Natural Resources will issue further Policy Directions by to the Commission for Telecommunications Regulation (ComReg) early in 2004. These will focus, among other things, on the matter of DSL pricing, accelerating local loop unbundling and expediting market opening, and will be designed to foster greater competition and to eliminate any spatial divide between urban/rural areas with respect to the cost of access to DSL broadband services.

2.2 Data Protection

❑ *Enact the Data Protection Amendment Bill transposing the outstanding provisions of the Data Protection Directive 95/46/EC*

The Data Protection (Amendment) Act 2003 was enacted on 10 April 2003.

By order, SI No. 207 of 2003, made by the Minister for Justice, Equality and Law Reform, the Data Protection (Amendment) Act 2003 (Commencement) Order 2003), the provisions of the Data Protection (Amendment) Act took effect from 1 July 2003, except the provisions relating to registration of data controllers and data processors (section 16 of the Act) and the provision relating to enforced subject access requests in connection with employment (section 4(13) of the Data Protection Act 1988, as inserted by section 5). Existing registration requirements will continue to apply pending a consultation process.

2.3 Electronic Commerce

❑ *Transposition of the outstanding provisions of the Electronic Commerce Directive 2000/31/EC was completed during 2002*

The Regulations giving effect to the essential provisions of the Directive on Electronic Commerce - Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2002 on certain legal aspects of information society services, in particular electronic commerce, were signed by the Tánaiste and Minister for Enterprise, Trade and Employment on 24 February 2003 and came into force on that date. Guidelines to the Regulations are available on the Department's website.

2.4 Public Service Identity

❑ *To provide a legal framework for the e-enablement of the Civil Registration process and in particular, for the use of the PPS number, as the key identifier in the registration of future life events*

The 2002 Social Welfare Act provides the legislative base for allocation of a Personal Public Service Number PPS No. to a child at birth registration, and the setting up of a child's Public Service Identity.

The Civil Registration Bill published on 22 July 2003 will provide the legislative base for e-enablement of the Civil Registration process. The Department of Social and Family Affairs (DSFA) is seeking to develop a common Public Service Identity database to be made available to all Departments for validation of customer identity details in line with the programme of work being undertaken centrally on identity management issues. Development of PSI is crucial to advancing the Public Service Broker.

DSFA has also initiated a cross-Departmental consultation process to feed into the development of a policy on the use of a Public Service Card or cards, with the aim of submitting the matter to Government in the coming months.

2.5 Electronic Money

❑ *Transposition of two Directives relating to e-money: 2000/46/EC and 2000/28/EC*

The Minister for Finance signed the Statutory Instrument bringing the Directives into force in May 2002.

2.6 Radio Spectrum

❑ *Enactment of Radio Communications Bill*

Work has commenced on drafting the Heads of the Bill in the Department of Communications, Marine and Natural Resources.

2.7 Digital Hub

❑ *Enactment of Digital Hub Development Agency Bill*

The Digital Hub Development Agency Act, 2003 was signed into law on 8 July 2003. On 21 July 2003, in accordance with Section 4 of the Act, the Minister for Communications, Marine and Natural Resources signed the order, which established the Digital Hub Development Agency. The new Agency will continue the work undertaken by Digital Media Development Ltd in developing the Digital Hub, the Government's flagship project in digital content located in the Liberties/Coombe area of Dublin.

2.8 EU Directives on Electronic Communications

❑ *Transposition of the EU Directive 2002/19/EC on Access to and Inter-connection of networks*
❑ *Transposition of the EU Directive 2002/20/EC on Authorisations*
❑ *Transposition of the EU Directive 2002/22/EC on Universal Service and User Rights issues*
❑ *Transposition of the EU Directive 2002/21/EC on Common regulatory framework*
❑ *Transposition of EU Directive 2002/58/EC on processing of Personal Data and the protection of privacy in the electronic communication sector*

The Department of Communications, Marine and Natural Resources transposed the first four Directives into Irish Law on 21 July 2003 by Regulations Under the European Communities Act. The Data Protection Directive was transposed into Irish Law on 6 November 2003. The EU Electronic Communications Regulatory Package is designed to bring current Community legislation on electronic communications into line with the far-reaching changes, including technologic convergence, taking place in the telecommunications, media and information technologies sectors. The legislative package consists of a Framework Directive, four other Directives on Authorisations; Access and Interconnection; Universal Service and User Rights and Data Protection and a Decision on Radio Spectrum.

2.9 Network Security

❑ *Completion of review of existing national arrangements regarding computer emergency response and implementation of a national campaign to increase awareness of network security issues amongst SMEs, citizens and the public sector*

On 2 July 2003 the Minister for Communications, Marine and Natural Resources launched the website www.netsecure.ie which forms the central focus of the national network security awareness campaign. The website provides basic information on network security issues and is focussed on the needs of citizens and SMEs. A booklet based on the website has been distributed to FÁS offices, libraries, ECDL centres and Chambers of Commerce. A review of existing national arrangements regarding computer emergency response is currently being undertaken.

2.10 Telecommunications Regulation

❑ *Create Commission for Communications Regulation*
❑ *Dissolve the Office of the Director of Telecommunications Regulation and transfer to the Commission*
❑ *Increase penalties for breaches of licence conditions by operators from £1,500 to €1,000,000*
❑ *Provide for the improved management of public road opening for the purpose of laying telecommunications infrastructure*

The EU Electronic Communications Regulatory Package is designed to bring current Community legislation on electronic communications into line with the far-reaching changes, including technologic convergence, taking place in the telecommunications, media and information technologies sectors. The legislative package consists of a Framework Directive, four other Directives on Authorisations; Access and Interconnection; Universal Service and User Rights and Data Protection and a Decision on Radio Spectrum.

The Department of Communications, Marine and Natural Resources transposed the first four Directives into Irish Law on 21 July 2003 by Regulations Under the European Communities Act. The Data Protection Directive was transposed into Irish Law on 6 November 2003. The Decision on Radio Spectrum has direct effect and does not require transposition.

3. e-Business

3.1 The Digital Hub

❑   *The Digital Hub http://www.thedigitalhub.com/ will provide:*
  o *Start-up facilities for early stage, fast growth and established companies to undertake R&D into digital industries*
  o *The Digital Hub Development Agency Bill will be progressed during 2002 to provide a statutory basis for Digital Media Development Ltd.*
  o *Dublin City Council to have the necessary telecommunications infrastructure for the Hub in place by mid 2002*

Currently, Media Lab Europe and 8 digital media companies are located in The Digital Hub and employ in the region of 200 people. They cover a mix of sectors including eLearning, ePublishing, web development, digital TV, multimedia, digital asset management and audiovisual production. They are now operating at 157 Thomas Street and the upper floors of 10 – 13 Thomas Street.

A new project office opened at 10-13 Thomas Street in December 2002. The office also includes an information centre, a learning space for the local community and local schools and facilities to showcase digital media projects as well as lettable office space on the upper floors.

Refurbishment is now complete on the former Guinness Print Depot, a landmark 1950's building on Thomas Street, as a high-tech, broadband enabled facility catering for established and high potential start-up digital media companies. Digital Depot comprises 20,000 sq ft of flexible enterprise space specifically created to meet the demands of the Digital Content /Media sector. It will provide 20,000 sq. ft. of flexible enterprise space. The development is being undertaken as a joint venture between Enterprise Ireland, Dublin City Council and the Digital Hub Development Agency. Havok, an international player in the Games Sector, intend locating their Corporate Headquarters in The Digital Hub and was the first tenant for the Digital Depot when they took up residence in September 2003.

Four consortia have been shortlisted for the development of the second phase of The Digital Hub. The project is estimated to deliver in the region of 500,000 sq ft of development through a mix of enterprise, retail, residential and learning & educational space.

The Digital Hub Development Agency Act, 2003 was signed into law on 8 July 2003. On 21 July 2003, in accordance with Section 4 of the Act, the Minister for Communications, Marine and Natural Resources signed the order, which established the Digital Hub Development Agency.

4. LIFELONG LEARNING
ENSURING THE AVAILABILITY OF KNOWLEDGE AND SKILLS AND
SUPPORTING NEW WAYS OF LEARNING.

4.1 Schools Internet connectivity

❑   *Provide schools with affordable access to adequate bandwidth*

Following consultation with the Departments of Communications, Marine and Natural Resources, Finance and Taoiseach, the Department of Education and Science has commissioned a study to advise on the range of options for rolling out broadband connectivity for schools in the light of evolving market capability, developments in technology and infrastructure, and school size/ location.

Datanet Ltd. were commissioned to undertake the study examining the relevant cost, funding, phasing and procurement issues and providing a tender specification for the Department which could form the basis of an approach to the market in the light of available funding. The report in this regard has now been submitted and is under consideration within the Department.

In mid 2003 the Minister for Communications, Marine and Natural Resources raised the potential of instituting a levy on industry to fund the roll-out of broadband to schools.
In August 2003 discussions commenced between the Departments of Communications, Marine & Natural Resources, Education & Science and IBEC, representing the Telecommunications and ICT sectors, to investigate whether an alternative method of industry support to the levy could be agreed. These discussions are currently ongoing and are due to reach a conclusion shortly. The likely outcome is a voluntary agreement with the ICT sector to deliver high-speed broadband to all primary and post primary schools in the State by end 2005.

4.2 Industry Advisory Group

❑   *Establish an IT Industry Advisory Group to formalise links between the IT industry and schools at national level in the development and implementation of innovative IT projects and in the process extend the boundaries of traditional education through the use of ICT*

The composition of this group and its terms of reference are under consideration by the Department. It is hoped that the dialogue commenced with IBEC and the Telecommunications and wider ICT sectors referred to above will inform deliberations in

this regard and lead to a more formal and on-going interaction between the Department and Industry.

5. e-Inclusion

ENSURING AN INCLUSIVE INFORMATION SOCIETY THAT ADDRESSES
DISADVANTAGE AND EXCLUSION.

5.1 Coordination and Policy Development

❑   *Review and rearticulate the implementation strategy*

The Information Society Policy Unit presented a review of the e-Inclusion implementation strategy to the Assistant Secretaries Implementation Group and the Cabinet Committee on the Information Society in September. This Review has taken account of experiences gained to date and of new research commissioned by the Information Society Commission.

5.2 Universal Participation Initiative

❑   *To promote participation in the Information Society through a Local Authority led initiative aimed, inter alia, at building computer skills and providing local content*

An application for funding for a pilot is with the Information Society Fund Evaluation Team. The Department of the Taoiseach is currently undertaking a review of e-Inclusion initiatives and the role of County and City Development Boards in this area is being examined. The future direction of this project will be informed by the outcome of the review.

5.3 Internet Services Provision for Community & Voluntary Sector

❑   To *pilot the development of low-cost ISP, web-hosting and technical support solutions for community and voluntary groups*

Muintir na Tíre, with the assistance of the Department of Social and Family Affairs, piloted the implementation of ISP facilities in 2002 by building a portal for use by community and voluntary groups. An evaluation of the project including a set of recommendations on enhancements to the facility was published in November 2002 www.muintir.ie/ict/ict.html.

Work is ongoing to prioritise follow-on actions for 2003 that will build on the achievements of 2002 and will inform a submission for additional funding. Any such funding decisions will be considered in the context of the review of the e-Inclusion Implementation Strategy incorporating the evaluation of the Munitir na Tíre Project. In

the interim, Muintir na Tíre are conducting, from their own resources, a six month ICT training and awareness programme aimed at community groups.

5.4 CAIT Initiative

❑ *Encourage late adopters to engage with information and communication technologies in a beneficial way*
❑ *Empower communities to harness the benefits of the new technologies*
❑ *Employ information and communication technologies to overcome particular socio-economic barriers which exist for some communities*

The second CAIT Initiative was launched in February 2002, and has now closed. Up to €3 million was made available from the Information Society Fund to fund the scheme. This figure includes administration costs for the scheme as well as funding for the individual projects. 75 projects throughout the country have been funded under this 2nd initiative – giving a total of 126 projects funded under CAIT.

Work Research Co-operative: Social and Economic Research Consultants Ltd. conducted an evaluation of how successfully the CAIT projects achieved their goals of encouraging the target groups to participate fully in the Information Society. This evaluation report was published in Summer 2003 and is now available on http://www.pobail.ie. This evaluation report and its recommendations have been taken into account in the review of the e-Inclusion Implementation Strategy.

5.5 Capacity building

❑ *Develop a programme of structured support to build and enhance ICT capacity among community and voluntary organisations*

Building the capacity of the Community and Voluntary Sector is currently being examined in the context of the review of the e-Inclusion implementation strategy.

The Department of Community, Rural and Gaeltacht Affairs will examine the provision of an IT support structure for the sector as part of any possible future CAIT initiative. In addition, the Department of Social and Family Affairs, the Information Society Policy Unit and the Economic and Social Policy division in the Department of the Taoiseach will be consulted in the context of modifying personal development programmes for the sector to incorporate basic ICT support training.

5.6 Equalskills

❑ *Provide 100,000 people in the South West and Shannon regions with training in basic ICT skills*

This pilot was launched in September 2001 and completed at the end of 2002. An evaluation report was presented to the ISC's e-Inclusion Working Group in December 2002. Overall the Report endorsed the project and recommended that it be continued. ECDL Ireland (now ICS Skills), who ran the pilot, have decided to continue the course.

5.7 Research

❑ *Research into the nature and extent of the Digital Divide in Ireland*

The Information Society Commission contracted Itech Research (formerly Models Research) to research into inclusive Information Society development. The Report was published on 9 October 2003.

5.8. IT Accessibility Guidelines

❑ *Development of guidelines for electronically delivered services, to minimise the risk of introducing accessibility barriers by service providers in the public and private sectors*

5.9 Centre of Excellence in Universal Design

❑ *Establishment of a Centre of Excellence in Universal Design with a remit to include the promotion of design for all principles in electronic and ICT-based products, services and systems*

The European Design for All e-Accessibility Network EDeAN was established in July 2002 in accordance with the eEurope 2002 Action Plan goal to ensure the establishment and networking of national centres of excellence in design-for-all and create recommendations for a European curriculum for designers and engineers. See www.e-accessibility.org.

EDeAN National Contact Centres form the primary nodes of this European network and are also responsible for establishing national Design for All e-Accessibility networks in their own countries. National Contact Centers (NCCs) have been selected in 15 countries

throughout Europe. These organisations are already actively working with Design for All, e-Accessibility and Assistive Technology issues.

In its work with the e-Accessibility Working Group of ESDIS the "High Level Group on the Employment and Social Dimension of the Information Society", the Department of Justice, Equality and Law Reform is responsible for setting up the Irish NCC, at the Central Remedial Clinic in Dublin, in June 2002. As of December 2002, the Department's role with the e-Accessibility Working Group is complete. Responsibility has now passed back to ESDIS under the Department of Enterprise, Trade & Employment.

Broadband Profile
February 2003
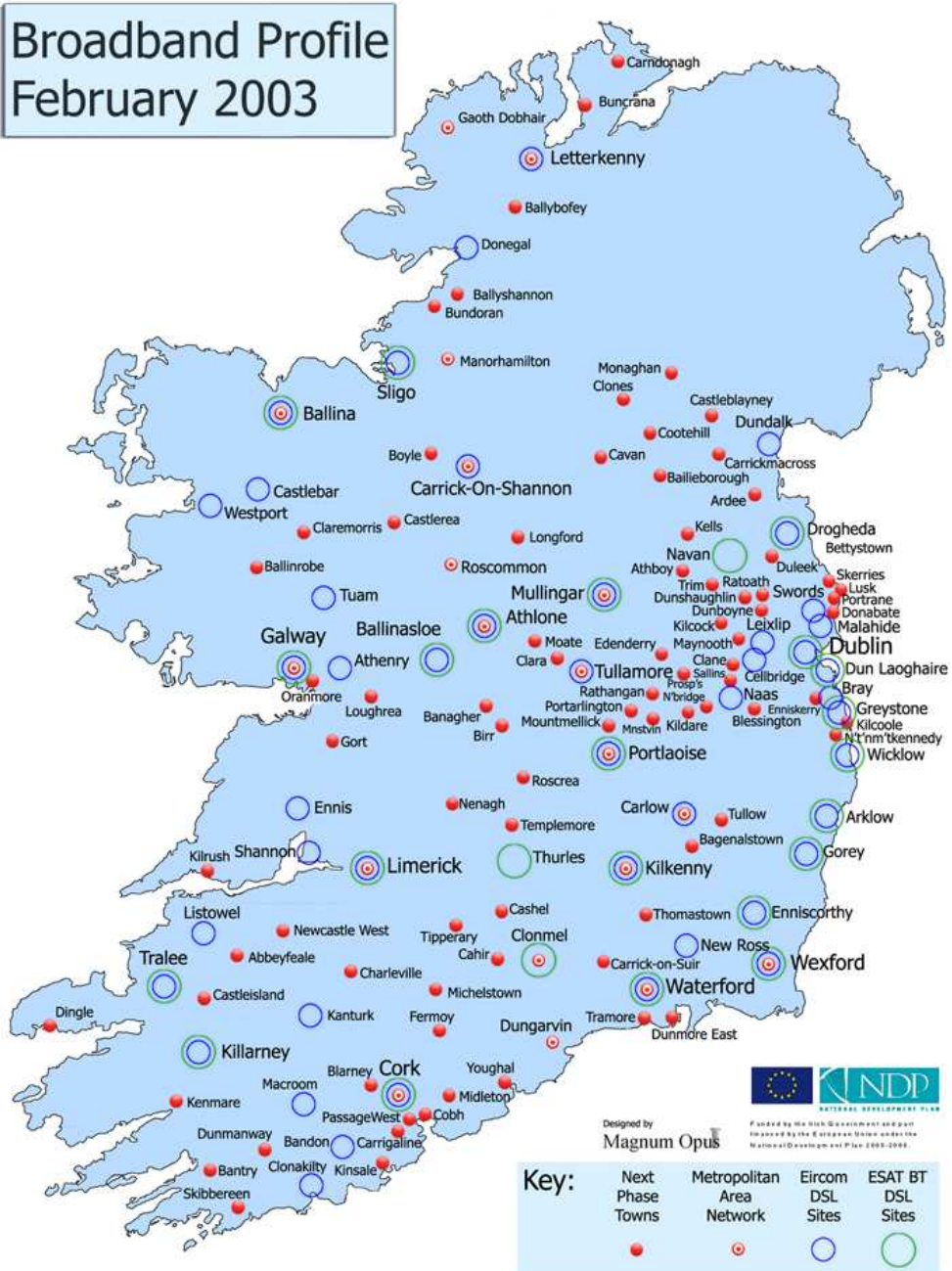
National Broadband Programme Phase 1

Gaoth Dobhair
Letterkenny
Manorhamilton
Ballina
Carrick-On-Shannon
Roscommon
Mullingar
Athlone
Galway
Tullamore
Portlaoise
Carlow
Limerick
Kilkenny
Clonmel
Wexford
Waterford
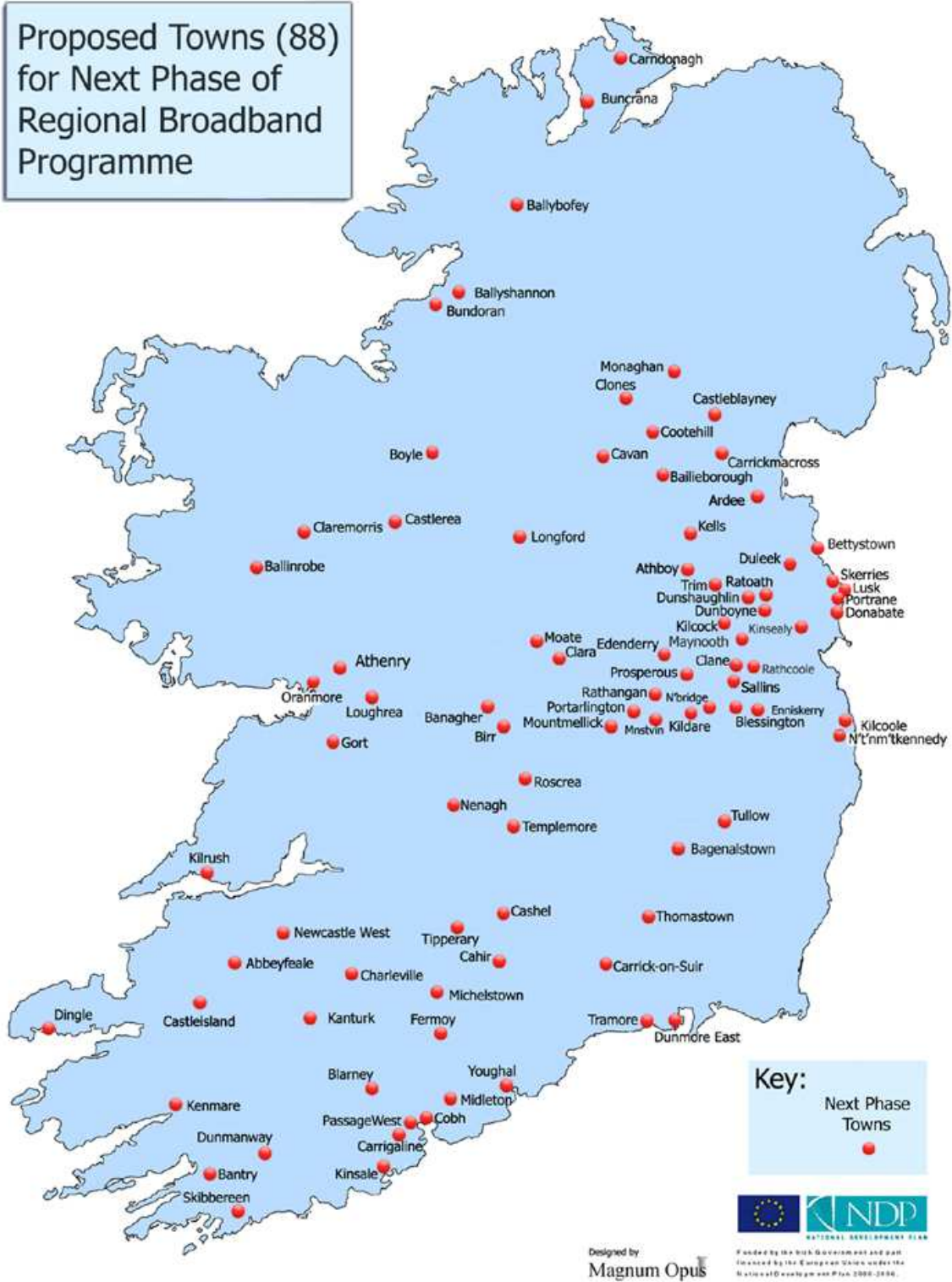Dungarvan
Cork

Key: Phase 1 Towns

Designed by
Magnum Opus

Funded by the Irish Government and part
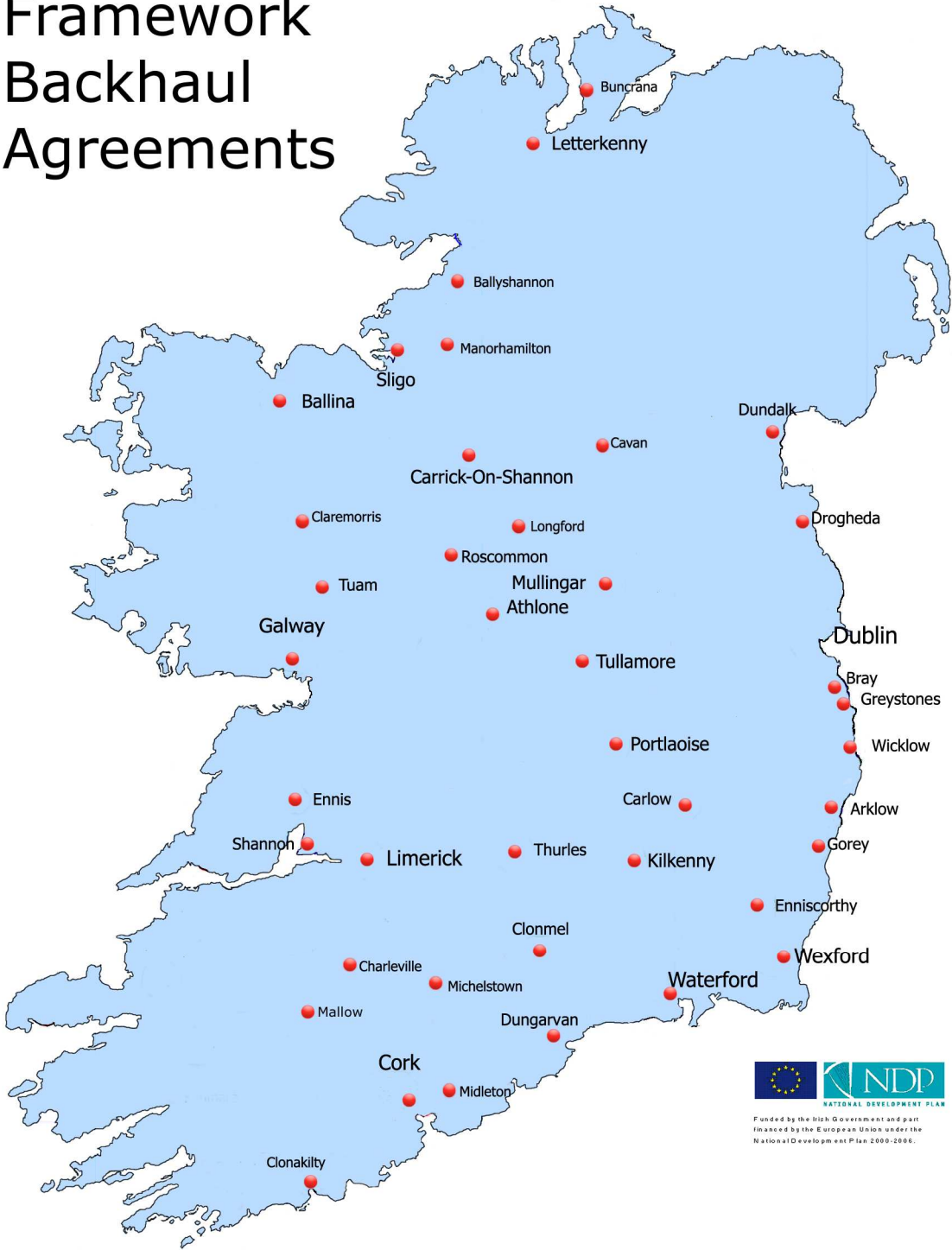financed by the European Union under the
National Development Plan 2000-2006.

Annex III

Proposed Towns (88) for Next Phase of Regional Broadband Programme

Annex IV

Regional Broadband
MAN Towns (19)
&
Proposed Next Phase
Towns (88)

Carndonagh
Buncrana
Gaoth Dobhair
Letterkenny
Ballybofey
Ballyshannon
Bundoran
Manorhamilton
Monaghan
Clones
Castleblayney
Ballina
Cootehill
Boyle
Cavan
Carrickmacross
Carrick-On-Shannon
Bailieborough
Ardee
Castlerea
Kells
Claremorris
Bettystown
Longford
Duleek
Skerries
Ballinrobe
Roscommon
Athboy
Trim Ratoath
Lusk
Mullingar
Dunshaughlin
Portrane
Athlone
Dunboyne
Donabate
Galway
Moate
Kilcock Kinsealy
Clara
Edenderry Maynooth
Athenry
Tullamore
Clane
Rathcoole
Oranmore
Prosp's
Sallins
Rathangan N'bridge
Loughrea
Portarlington
Enniskerry
Banagher
Mountmellick
Blessington
Gort
Birr
Mnstvn Kildare
Kilcoole
Portlaoise
N't'nm'tkennedy
Roscrea
Nenagh
Carlow
Tullow
Templemore
Bagenalstown
Kilrush
Limerick
Kilkenny
Cashel
Thomastown
Newcastle West
Tipperary Clonmel
Abbeyfeale
Cahir
Carrick-on-Suir
Wexford
Charleville
Waterford
Michelstown
Dingle
Kanturk Fermoy
Tramore
Castleisland
Dungarvan
Dunmore East
Blarney Cork
Youghal
Kenmare
Midleton
PassageWest Cobh
Dunmanway
Carrigaline
Bantry
Kinsale
Skibbereen

Key: Next Phase Towns   Metropolitan Area Network

Designed by
Magnum Opus

NDP

Annex V

Framework Backhaul Agreements