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FORFÁS REGIONAL COMPETITIVENESS AGENDA: REALISING POTENTIAL: BORDER

# 1. Background & Context

Ireland is facing unprecedented challenges against the backdrop of a world recession, and is now operating within tough budgetary conditions and fiscal constraints. We have already seen the impacts in terms of a decline in economic activity and increases in unemployment. The more recent downturn in employment is particularly marked in both the construction and manufacturing sectors and has greater implications for the regions outside of the Greater Dublin Area (GDA) in the medium term.

The Government's 'Building the Smart Economy' document identifies the fundamental importance of returning to export-led growth. Returning to export-led growth requires that we create an environment that is conducive to attracting foreign direct investment (FDI), stimulating entrepreneurship and enabling companies to grow and serve global markets from an Irish base.

In this context, Forfás, together with the development agencies, has developed a suite of Regional Competitiveness Agendas (RCAs) for each of the regions at NUTS III Level<sup>1</sup>. The RCAs take an enterprise perspective, recognising that enterprise is a key driver for regional growth and national economic development. The document does not seek to suggest how immediate term issues might be addressed as these are being addressed through other channels<sup>2</sup>. It takes a longer term view, recognising that at the same time, it is vital that we prioritise and make strategic investments now that pump-prime the potential of each of the regions to position them as contributors to Ireland's national growth when this downward economic cycle comes to an end.

## This report should be read in conjunction with:

Regional Competitiveness Agenda: Volume I: Baseline Data and Analysis: Border Region which provides an overview of the region today based on an analysis of quantitative and qualitative indicators across a range of competitiveness factors; and

A final report: Regional Competitiveness Agendas: Overview, Findings and Actions. This report highlights findings arising from our analysis of all regions, differentiating factors for the regions, and priorities for regional enterprise development.

# The Objective of the RCAs is to:

Provide an economic overview to inform the updates of the Regional Planning Guidelines and specifically to:

- Highlight opportunities to build on each region's distinctive strengths
- Identify barriers to achieving objectives and/or issues specific to the region together with actions to address them
- Identify infrastructure priorities relevant to future enterprise needs within the regions.

<sup>&</sup>lt;sup>1</sup> East (Mid-East & Dublin), Border, Midlands, West, Mid-West, South-West, South-East

<sup>&</sup>lt;sup>2</sup> Refer to National Competitiveness Council's *Annual Competitiveness Report 2009* (www.competitiveness.ie)

The RCAs take a broader interpretation of infrastructures to include 'softer' factors such as innovative capacity, leadership and quality of life factors.

# Methodology

Desk-based research and one-to-one consultations with a range of stakeholders were undertaken to outline the current status of the region and highlight opportunities and challenges specific to it. A regionally based workshop was held to identify the areas where the region can build from its strengths to realise its potential over the coming years. These areas are not intended to be exhaustive, but provide indications of what is possible, and they serve to prioritise the infrastructures and supporting activities required to build on the region's assets and to address barriers to enterprise development.

# **Report Structure**

The report outlines:

- Global Drivers of Change that impact on enterprise needs
- The Competitiveness Factors that provided the framework for analysis
- A Summary of the Current Status of the Region Strengths and Challenges
- Realising Future Potential Identifying areas of opportunity:
  - Sectors and activities at firm level
  - Business environment factors
- Priority Actions

# 2. Regional Competitiveness

# Global Drivers of Change

It is never easy to predict how enterprise is likely to evolve over a given time, and within the context of the current economic downturn, it is even more challenging. Having said that, there are a number of global drivers that will continue to have implications for how companies will do business in the future<sup>3</sup>, and in turn, inform the needs of the business environment and factors of competitiveness.

Globalisation: The pace and extent of global competition has intensified significantly over recent years. Globalisation enables companies to reach new untapped markets. The supply chain is increasingly disaggregated so that companies tend to outsource non-core activities or to off-shore them to locations where it makes business sense. Even firms serving the domestic market are facing international competition (e.g. in retail, pharmacy, supermarkets). People are also more mobile and high-value talent is scarce relative to global demand. People can and will choose where they want to live and work. Quality of life factors take on a new dimension in this context.

Advances in Technology have a significant impact, not only on the ICT industry itself, but on almost every business, regardless of the nature of its activities. Technology advances have enabled companies to manage multi-site operations across the world. ICT has been, and will continue to be, a key enabler for the remote delivery of services. Increased convergence of technologies has seen companies from formerly discrete sectors enter into partnerships to provide end solutions to customers. Changes in business models, the convergence of formerly discrete sectors and increased mergers & acquisition (M&A) activity call for a work-force with multi-disciplinary skills and a flexible and problem-solving attitude.

**Rising Concerns About the Environment:** The increased focus on environmental (and energy related) issues presents opportunities for companies to innovate with alternative sources of energy, new solutions and services. Consumers will drive all companies to reconsider aspects of their business from an environmental perspective. For companies, this involves considering their own production and business processes, carbon footprint, materials and waste.

Shift Toward Services: Services contribute a higher proportion to GDP in developed economies driven by consumer demand, increased disposable incomes and a demand for 'personalised' solutions. Within the business to business (B2B) sector, companies are responding to the disaggregated supply chain model, and providing services which had been formerly managed 'in-house', including e.g. laboratory and testing services, R&D, logistics, supply chain management, and customer technical support. Manufacturing firms are 'bundling' services with their products to provide a more tailored and higher value solution to their customers. Competitively priced, high-speed resilient broadband networks and services are now a basic requirement to underpin future economic development.

The Importance of Dynamic Urban Areas: Ireland's economic structure is shifting towards a higher proportion of services exports, balanced with a core of high-value added

<sup>&</sup>lt;sup>3</sup> Forfás, Sharing our Future (2008), IBM, Drivers of Change (2008), Enterprise Strategy Group (2004) Ahead of the Curve

manufacturing activities - although this is more immediately apparent in the city of Dublin and to a lesser extent in the urban centres of Cork, Limerick, Galway and Waterford. International evidence shows that high-value added services are attracted primarily to urban areas, and that today, internationally, cities are competing with cities for enterprise investment. It also points to the fact that urban areas play a key role in driving the development of their hinterlands, and successful regions have a dynamic and vibrant city at their core. The RCAs acknowledge the importance of gateways and their role as drivers of regional economic development, and the need for strategic planning and development to optimise the inter-relationship between gateways and their immediate hinterlands.

# **Competitiveness Factors**

The global drivers highlighted above have implications for where and how companies do business. As companies respond to these global drivers of change they make location decisions based on economic and business imperatives. Higher value activities generally depend upon an educated and skilled workforce. Locations are not only considered in terms of (relative) cost, but in terms of access to skills and talent, access to markets and customers (whether physical or virtual), an innovative capacity and capability and a dynamic environment offering an attractive quality of life - basically a good place to work, live and to do business.

In this context it is important that a location or region provides a competitive environment that stimulates entrepreneurship, enables companies to grow and evolve, and attracts and retains foreign investment. The following factors of competitiveness were developed to facilitate analysis of the regions, incorporating a suite of both quantitative and qualitative indicators<sup>4</sup>.

#### **Competitiveness Factors**

Enterprise Dynamic	assessing the enterprise structure, employment and GVA, the contribution from agency supported enterprises, and sectoral diversity and/or clustering
Skills & Education	an analysis of the skills, educational attainment and education resources
Innovation	research and development investment and activity, collaborations and interlinkages between HEIs and firms, between firms and customers
Economic Infrastructures	transport and broadband infrastructures - recent investments and ongoing infrastructure needs
Quality of Life	based on factors relevant to the attraction of mobile investment and labour/talent
Leadership and Strategic Capacity	outlining relevant organisations and indications of locally driven initiatives and outcomes

<sup>&</sup>lt;sup>4</sup> Forfás, DOEHLG & Fitzpatrick Associates (2006) Implementing the NSS: Gateway Investment Priorities Study; NCC (2009) Our Cities: Drivers of National Competitiveness; Fitzpatrick Associates (2009) Preparation of a Gateway Development Index (Stages 1&2)

# 3. The Border Region Today: A Summary

This summary of the *Regional Competitiveness Agenda Volume I: Baseline Data and Analysis* is intended to highlight aspects that indicate the differentiating elements of the Border Region. The **complete Volume I is available separately.** 

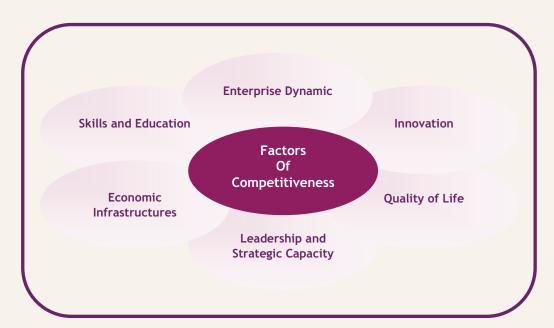


Figure 1: Regional Competitiveness - Framework for Analysis

# Overview - Population and Growth

The Border region, which has a population of 502,000 (11% of Ireland's total population)<sup>5</sup> is made up of the six counties situated along the border with Northern Ireland - Donegal, Sligo, Leitrim, Cavan, Monaghan and Louth. The border with Northern Ireland forms the basis for the structure of the region, and is a characteristic which sets it apart from the other NUTS III regions - in terms of the challenges and opportunities presented by proximity to Northern Ireland as well as and the particular challenge in achieving a cohesive approach to the development of the region.

The Border region experienced strong population growth over the 2002 to 2006 period, reflecting national trends. Growth has been in excess of the national average since 2006. An uneven pattern of growth has reinforced a dispersed settlement pattern across the region, with some clustering around the main towns (the three Gateways in particular) and in eastern areas within commuting distance to Dublin. The dispersed settlement pattern and low population density, while posing certain challenges from an infrastructure and service delivery perspective, is also a characteristic of the region which, along with its diverse landscape, adds to its physical attractiveness.

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<sup>&</sup>lt;sup>5</sup> CSO (2009) Population and Migration Estimates

While the age profile of the region shows a higher than average 'youth dependency', a significant proportion of its young adult population leave the region to pursue third level or early career opportunities, tending not to return.

# **Enterprise Dynamic**

The unstable political situation in Northern Ireland for many years militated against optimum economic performance in the Border region, as an artificial peripherality was imposed and compounded by underinvestment in strategic infrastructure. A simple division between North West and North-East shows pronounced differences in terms of enterprise activity and employment within the region.

In many respects, the Border region reflects the trends that have been exhibited across the country in terms of the main sources of employment growth and the shifting importance of certain sectors in the overall employment 'mix' within the region; for example, the declining role of manufacturing, the increasing scale of construction and the emergence of internationally traded services. The region experienced higher than average employment growth in Wholesale and Retail activity, which is facing particular challenges in the current economic climate, with the added dimension of cross border currency volatility. The region also accounts for about one-fifth of total employment in the Irish Seafood industry, which has seen considerable decline in recent years and remains vulnerable.

The region has experienced high levels of growth in terms of GVA (over the period 2000 to 2006); however, it continues to have one of the lowest levels of per capita GVA in the State, owing to its relative lack of 'high-value add' enterprise activities<sup>6</sup>.

Agency-supported employment is predominantly in the indigenous sector (70% compared to 50% nationally). The region contains many strong Irish-grown firms (particularly in food processing and engineering/construction related activities) and has had a relatively high number of EI supported high potential start-ups (HPSUs) in the last two years. Tourism in the region (including cross-border initiatives) has potential for further development having been negatively affected by the 'Troubles' and poor accessibility over many years.

# Skills, Education & Innovation

The changing sectoral profile of employment presents a skills challenge for the region. The challenge is compounded by lower levels of educational attainment within the region and a relatively high level of early school leaving (although this has reduced considerably in recent years).

The Institutes of Technology in the Border region are key resources in terms of skills development, research and knowledge transfer. Each are pursuing research agendas and providing supports to entrepreneurs and SMEs through their respective campus incubation centres, and are proactive in terms of developing industry-academic linkages (through course development and research partnerships with industry). However, there is a low level of

<sup>&</sup>lt;sup>6</sup> GVA or Gross Value Added is the value of the region's output less intermediate materials and services used in its production. Latest available data at NUTS III level is for 2006

expenditure on R&D, within business and the HEI sector. In addition, the desk-based analysis has found a diverse range of applied research activity across the HEIs in the region that could be described as fragmented and largely un-connected although efforts are on-going to identify collaborative opportunities<sup>7</sup>.

The range of business networks that support small businesses offer potential for increased collaboration, and for fostering innovation and entrepreneurship activities.

# **Economic Infrastructures: Access and Connectivity**

Although access to the Border region has improved greatly over recent years, significant connectivity issues remain to be addressed. Progress has been achieved in terms of road access over recent years, and there is a clear understanding, north and south of the border, of the main transport corridors that need to be developed. Priority road projects include: A1 (Newry-Belfast), N2 (Dublin-Derry), N14 (Lifford-Letterkenny), N16/A4 (Sligo-Dungannon) and N17 Galway-Sligo.

The development of Project Kelvin<sup>8</sup> is a significant boost to the region in terms of critical telecommunications infrastructure. However, additional investment will be required in broadband infrastructure throughout the region to realise the full potential of this resource.

Air access is of immense importance to the region underlining the need for good road transport links serving the international airports at Belfast and Dublin and the need to maximise the impact of regional airports, four of which serve the region at present (at Sligo, Donegal, Derry and Knock).

The region benefits from interconnection to the Northern Ireland electricity grid and further integration of the grids north and south is planned. The transmission network in the North West requires significant reinforcement which is essential if the significant un-tapped wind energy potential in this part of the region is to be realised.

# Quality of Life

International research shows that quality of life factors have become increasingly important in attracting (and retaining) a mobile workforce. Although quality of life is a subjective concept, the region has much to offer in this regard, with a high quality and attractive rural environment, improving accessibility and vastly improved cross-border political and community relations arising from the Good Friday Agreement. The key urban centres in the region, though relatively small, play an important role in the delivery of key services and as

<sup>&</sup>lt;sup>7</sup> Líonra is a network of the seven third level colleges in the Border, Midlands and Western (BMW) Region whose aim is to develop effective collaborative responses by the third level sector to the developmental needs of the BMW region. The group which was established in 2000 has recently announced a "Collaborative Research and Innovation Strategy"

<sup>&</sup>lt;sup>8</sup> Project Kelvin is a major cross-border project initiated by the Department of Enterprise, Trade and Employment and the North's Department of Enterprise, Trade and Investment. At a cost of €43m, it involves connecting a new submarine cable to an existing transatlantic cable 22 miles off the north coast of Ireland. The new cable has been brought ashore in Co Derry, and Hibernia Atlantic aims to complete the work by March 2010

focal points for a range of cultural, educational, sporting and recreational activities. A continued focus on development of the Gateways and Hubs will further enhance the attractiveness of the region.

# Leadership and Strategic Capacity

Within each region, there are a wide range of bodies and organisations seeking to promote and provide leadership in terms of economic, social and physical infrastructure development. The Border region is a significantly busier and more complex space in this regard due to the added dimension of the international border, and the financial supports emanating from the enhanced North-South governmental relationships. On one level this is a distinct positive for the Border region - and some strong initiatives are beginning to emerge, for example the Newry-Dundalk Initiative, or the NorthWestNow (IDA-INI) programme; however the degree to which there is coherence and a clear definition of roles needs to be further understood.

The baseline analysis has shown that the Border region is structurally diverse, and beyond the common thread that is the border with Northern Ireland (which has shaped the development path of the region to a large extent), there are few obvious commonalities or relationships within the region upon which to build and drive an overall vision. As the NSS and Regional Development Strategy for Northern Ireland have recognised, the future development of the Border areas north and south may be realised through building critical mass around the strongest functional relationships which traverse the border.

There are at least three overlapping geographical sub-regions which offer potential in this respect: Derry/Letterkenny (& Atlantic Corridor); Belfast/Dublin corridor (stretching westwards into Monaghan and Cavan; and a central border area encompassing the Sligo Gateway and stretching eastwards to include Leitrim, Cavan and Monaghan (including cross-border areas)<sup>9</sup>.

# Conclusion

The analysis highlights a number of key considerations in looking towards the future development of the region:

- The region is diverse in terms of economic activity and settlement patterns. There are at least three over-lapping functional sub-regions associated with the three Gateways in the region. This presents a challenge in terms of achieving effective regional leadership and governance.
- The three main population centres in the region can be considered as 'developing' Gateways relative to other designated Gateways.
- Future economic growth in the region will rely heavily (though not exclusively) on the performance of the indigenous sector, with enhanced competitiveness, innovation, productivity, and renewal (in terms of new firm formation and transformation of existing firms) being key elements.

<sup>&</sup>lt;sup>9</sup> Sligo can also be seen as part of the Western Corridor of Gateways from Derry to Cork

- Internationally traded services have gained a foothold in the region over recent years.
   Recent connections into international broadband infrastructures are a positive development for realising future potential in this area.
- The strong food sector in the region offers potential for further growth, with added value and increased productivity being key challenges. Similarly, tourism offers significant un-tapped potential.
- The changing sectoral profile of the Border (decline in construction and manufacturing activity in particular) alongside legacy issues in relation to educational attainment and early school leaving necessitates a key focus on skills development.
- The electricity grid infrastructure, in the North West in particular, requires upgrading if the potential for renewable energy generation is to be realised.
- Continued emphasis will need to be given to enhancing physical connectivity; specifically in relation to facilitating international access (incl. road links to Dublin and Belfast); the main road corridors linking the region's Gateways; and other strategically important intra-regional and cross-border transport links.

The following sections concentrate on the region's future in terms of key sectors with development potential (Section 4) and cross-cutting business environment enhancements necessary to support enterprise development in the region (Section 5).

# 4. Realising Future Potential: Sectoral Opportunities

This section considers the assets of the region, and how they might be harnessed to further develop enterprise. The challenge over the next decade (faced by the entire country), is to shift growth toward export oriented sectors and activities.

The opportunity areas discussed below were highlighted during the regionally based workshop and one-to-one consultations, informed by employment trends and the existing enterprise base<sup>10</sup>:

- Internationally Traded Services (including Financial Services)
- LifeSciences
- Agri-Food
- Clean Technology Renewable Energy & Environmental Services
- Tourism

The outline for each demonstrates the suite of assets that provide a platform for growth; for attracting investment from foreign and indigenous companies, stimulating entrepreneurship and enabling companies based in Ireland to grow and target international markets.

There has been investment both north and south of the border to enhance physical access, which is welcome from an enterprise development perspective (and relevant for all sectors). However, more needs to be done to further improve connectivity, with key priorities outlined later in this report.

# Internationally Traded Services (incl. Financial Services)

Today, a wide variety of services are traded internationally, including such activities as finance, insurance, computer-related activities, R&D, advertising, marketing, accounting and consultancy. In addition, there is an increasing level of services activity taking place within manufacturing firms - the so-called 'servicisation' of manufacturing. Moreover, globalisation, along with the enabling technologies that underpin it, has seen the emergence of new and more complex business models to accommodate the changing needs of global businesses. Increasingly, multinational companies are seeking to maintain competitive advantage by outsourcing, moving selected business processes to more economic or strategic locations, and gaining direct access to new and growing markets. This has generated a raft of new mobile investment activity in global business services to manage more complex global corporate structures, such as shared services, customer support & customer management, business process outsourcing, supply-chain/procurement, IT operations, human resources and finance/transaction processing.

Employment in internationally traded services (ITS) in the Border region accounts for some 22% of total agency supported employment (a close proxy for overall employment in ITS). This

<sup>10</sup> The sectors listed here should not be considered an exhaustive listing, and they are not listed in order of priority

represents a significant transformation over the past decade since 1998 when services accounted for just under 4% of agency-supported employment in the region, and far out-paces the growth in services employment in agency supported companies overall across the state.

About 60% of the total employed in ITS in the region are employed in Irish owned companies, with just under half of these employed in a small number of financial services companies (with Quinn Insurance most prominent in employment terms). Overseas companies in the region are primarily involved in ICT related services activities (including Bank of America (MBNA), Pramerica & Pacificare/United Health), and to a lesser extent financial services (with companies such as IFS, Halifax & Daiwa).

There is a contrasting sectoral profile between eastern and western parts of the region - the North East dominated by financial services while in the North West, ICT related services are

predominant. Perhaps more important is the emerging difference in terms of activity profile, with the North East, and the Dundalk/Drogheda areas in particular, attracting interest from overseas companies looking to establish European operations centres and headquarters in Ireland (for example, Netezza and Satir), existing companies expanding out of Dublin (e.g. IFS & Daiwa) as well as Irish financial services companies. Access to Dublin (and Dublin airport) is an important factor in these location decisions. North-western locations have proven attractive for 'back office' activities such as customer support and claims processing as well as software development (such as at MBNA, Pramerica and Pacificare).

# **Key Assets**

The existing company base supports further potential growth through the demonstration effect of reference sites, sub-supply opportunities, the enhanced skills base they develop over time (also acting as potential sources of entrepreneurial activity and innovation), the relationships established with the HEIs in the region, and the potential to add higher value activities and functions supported by improving infrastructures, particularly telecoms.

HEIs are demonstrating research capabilities in areas of relevance: for example the Software Technology Research Centre in North West Business and Technology Zone

The establishment of the North West Business and Technology Zone and the accompanying joint INI-IDA promotional programme, North-West-Now, which was substantially funded under the EU Interreg programme, seeks to capitalise on the collective assets of the neighbouring jurisdictions across a number of dimensions, including the existing enterprise base, population centres of Derry and Letterkenny, property solutions and expertise within the neighbouring HEIs, to attract technology-led business investment. The initiative will benefit greatly from the telecommunications infrastructure enhancements under Project Kelvin, particularly for the attraction of prospective investors with intensive telco requirements.

Specific projects that have progressed under the NWBTZ initiative to date include: NW Business Complex and Entrepreneurial Hub at Skeoge Enterprise Park; Timber Quay development in Derry; NW Labour Market Initiative (focussing on meeting the skills needs of the ICT and Financial Services sectors in the region) and the further development of IDA Letterkenny Business & Technology Park. The NWBTZ initiative is one of a number of cross border projects under the North West Gateway Initiative 'umbrella'.

DKIT<sup>11</sup>; the Centre for Design Innovation at IT Sligo; digital media at DKIT; and the WiSAR centre of excellence in wireless sensor technology in LYIT. In Northern Ireland, the multi-campus University of Ulster offers additional knowledge and expertise through for example, the Computer Science and the Business and Management Research Institutes.

Newry-Dundalk International Services Zone

The Newry-Dundalk Twin City Region initiative, led by Newry and Mourne District Council, Louth County Council and Dundalk Town Council, proposes the establishment of an International Services Zone (NDISZ), which seeks to capitalise on the collective assets of the Newry-Dundalk area at the centre of the Dublin-Belfast economic corridor.

The NDISZ is envisaged as a business zone harnessing the combined populations, graduate pools, education and research institutions and property solutions of Newry and Dundalk, and targeted at a range of high value added ITS activities, including noncustomer facing financial services and head office or business critical functions, both indigenous and foreign in origin. The collective strengths of the area, including property located in the two towns are to be marketed as part of a single zone.

Development of the skills base, entrepreneurial supports and continuing professional development relevant to the targeted sectors will involve enhanced linkages and greater co-ordination between DKIT and the Southern Regional College in Newry, and other HEIs in the wider region. It is also envisaged that the NDISZ would be jointly promoted by the enterprise development agencies including Invest NI, IDA Ireland and Enterprise Ireland.

The recently announced Lionra 'Collaborative Research and Innovation Strategy' for the Border, Midlands and Western Region (BMW) has the potential to maximise synergies between the region's HEI's research activities in areas related to international services (particularly Software Development).

Project Kelvin, which aims to deliver telecoms links at a speed and cost equivalent to those available in Dublin via a direct transatlantic connection with access at Derry<sup>12</sup>, will add greatly to the services sector value proposition for the region. This project, in addition to improvements in electricity supply infrastructure, puts the North West in a strong position to compete for Data Centre investments. This in turn could have knock-on effects in terms of enhancing the attractiveness of the region for other business activities.

### **Realising Potential**

There are a number of challenges that require attention to fully harness the potential of the sector within the region:

International evidence shows that high valueadded services are attracted primarily to cities<sup>13</sup>. In order to remain competitive for future ITS growth and investment, a focus on accelerating development of the **gateways and key urban centres** in the region and strengthening **connectivity infrastructures and strategic alliances** will be critical.

Software quality engineering, spreadsheet engineering, and knowledge engineering/human-computer interaction

<sup>&</sup>lt;sup>12</sup> The new cable will link Armagh, Ballymena, Belfast, Coleraine, Derry, Omagh, Portadown and Strabane to Europe and North America. In addition, the cable will also provide links to Letterkenny, Castleblayney, Dundalk, Drogheda and Monaghan

<sup>&</sup>lt;sup>13</sup> OECD (2006) Competitive Cities in the Global Economy

The changing nature of services in an increasingly globalised economy brings with it changing skills requirements. Steps are already being taken by the HEIs to help to generate, attract and retain appropriately skilled people who can support the needs of ITS. LYIT in conjunction with two regionally based multinational companies developed a Higher Diploma in Financial Services Technologies and LYIT has also developed an MSc in Computing in Enterprise Applications Development in partnership with the IT industry in the North West.

The recent Report of the Services Strategy Group<sup>14</sup> highlighted the range of skills relevant to the sector:

- Personal/inter-personal skills team-working, customer service, problem solving, planning etc.
- Humanities and social science skills
- Science, technology and innovation skills
- Creative and design skills
- Hybrid technical and business skills (combining discipline-specific technical knowledge (ICT, financial services etc. with entrepreneurial skills)
- Mathematics

The North West Gateway Strategic Alliance initiative currently underway (funded under the HEA's Strategic Innovation Fund) seeks to maximise the collective capabilities of LYIT and the University of Ulster and could provide a vehicle for collaborative initiatives in support of ITS in the region.

## LifeSciences

The LifeSciences sector in Ireland has been and will continue to be of critical importance to Ireland's economic growth and development. It employs in excess of 52,000 people in over 350 enterprises and contributes almost 30% towards total exports, valued at €44.4 billion in 2008¹⁵. The sector in Ireland is operating within a fast changing global environment where aging populations and increases in chronic illnesses, more informed consumers, and a focus on 'wellness' provide high growth opportunities. There is also a greater focus on enhanced efficacy of treatments and cost within increasingly pressurised health systems. Technological advances and convergence across the life sciences sub-sectors with other sectors such as engineering and ICT are enabling a shift towards convergent medical products and personalised healthcare. Business models within the sector are becoming increasingly complex as firms face growing pressures to reduce costs in the context of stringent regulation, loss of patent protection, and increasing R&D costs. In the race to gain access to new ideas and products, and to bring products to the market, there has been a shift towards greater collaboration, networking and mergers and acquisition activity.

Significantly there has also been an increase in the disaggregation of value chain activities within the sector creating opportunities for smaller companies to position themselves within

<sup>&</sup>lt;sup>14</sup> Forfás (2008) Catching the Wave: A Services Strategy for Ireland

<sup>&</sup>lt;sup>15</sup> Forfás (2009) Health LifeSciences in Ireland - An Enterprise Outlook

the global supply chain with innovative, technology intensive solutions, partnering opportunities, shared revenue deals and licensing.

The Border has a relatively small base of companies within the LifeSciences sector, located throughout the region and employing just under 3,000<sup>16</sup>. The sector is dominated by multinational overseas investment particularly in medical technologies manufacturing activities and includes companies such as Abbott, Hospira, Zeus, Amcor, and Becton Dickenson, and in pharmaceuticals with Fort Dodge Laboratories and Stiefel Laboratories (GSK).

#### Research Assets - The Border Region

The Centre for Applied Marine Biotechnology (CAMBio) at LYIT has a biomedical strand and collaborated with Tyndall Institute in Cork in the area of DNA bio-sensors<sup>1</sup>.

The EpiCentre which combines the expertise within UU Magee, LYIT and NW Regional College seeks to provide solutions to technological challenges within manufacturing industry.

IT Sligo has strong capabilities in the area of Biomedical Engineering

Dundalk IT's research activities include Regulated Software (specifically related to the Medical Devices sector), Electrochemistry and Biotechnology

The Wireless Sensor Applied Research (WiSAR) Lab at LYIT focused on developing solutions in the Body Area & Built Environment Networks for industrial collaborators.

### Northern Ireland

The Centre for Molecular Biosciences, University of Ulster focuses on molecular and nutritional aspects of degenerative diseases and microbial and pharmaceutical biotechnology.

The Centre for Functional Genomics, also University of Ulster focuses on research projects relating to biotechnology, biomedicine or high-added-value food production.

The Clinical Translational Research and Innovation Centre (C-TRIC) represents a collaborative initiative involving Derry City Council, University of Ulster (Magee) and the HSC (Western Health and Social Care Trust).

The region contains an eclectic mix of research capabilities of relevance to the sector (see box above).

A strong track record in engineering within the region (especially in the North East) provides a basis for the future development of advanced manufacturing for the medical devices subsector.

The IDA Strategic Site at Mullagharlin, Dundalk, located just off the M1 motorway is a 44 hectare (109 acre) land bank being specifically targeted for utility intensive LifeSciences investments. IDA Ireland has received advance planning permission from Louth County Council

<sup>&</sup>lt;sup>16</sup> Includes employment in agency supported companies only

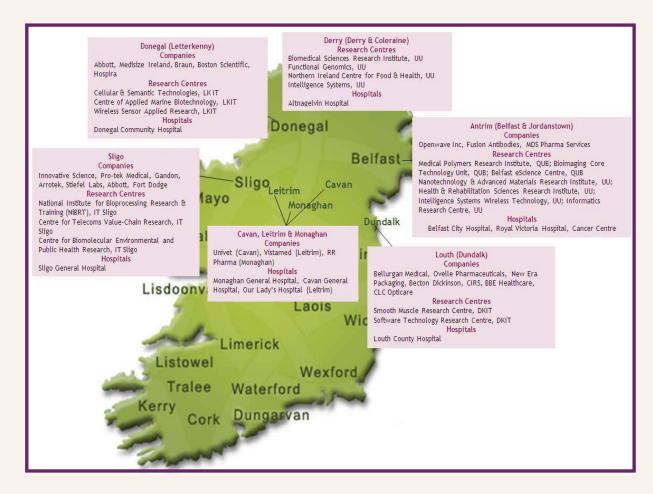
to facilitate the potential establishment of two major bio-pharma facilities and related high quality office developments on the site.

#### **Realising Potential**

While the region is unlikely to be a centre of gravity for LifeSciences in Ireland, the sector can continue to play an important role in the regional economy in the future. Initiatives to stimulate increased levels of interaction and partnering between LifeSciences companies, between companies and HEIs, and between HEIs north and south of the border will be required, with a particular focus on skills development and collaborative research (Figure 2).

The region's expanding international services base (including software development) together with enhanced telecommunications and road infrastructures provides a mix of skills and connectivity infrastructures in support of a broader range of activities associated with the LifeSciences sector such as shared services, sales and marketing and European headquarter operations.

Figure 2: Overview of LifeSciences Assets in the Border Region



# **Food Sector**

The agriculture and food industry is Ireland's largest indigenous sector, employing c. 155,000 people and accounting for over half of the country's indigenous exports. The food sector contributes the highest proportion of IEE (Irish Economic Expenditure) in terms of salaries and third party services and materials than any other agency supported sector (although this does not take into account contributions toward corporation tax). Teagasc predicts that the sector is likely to become even more important in the coming years. The nature of the sector is such that it should be considered as part of a wider 'bio-economy', as scientific advances, consumer trends and market developments create novel and non-traditional uses for natural resources (including agri-environmental products and services, as well as energy and bio-processing)<sup>17</sup>.

The dynamic for the agri-food industry has changed significantly in recent years, transitioning from being largely production-led, to now being led by market demands. Branding and labelling play a particularly important role as consumers look for products they feel they can trust. The increasing focus by leading retailers and manufacturers on the issue of sustainability informs the more environmentally friendly requirements they set for their suppliers.

#### **Key Assets**

The food sector makes the largest contribution to agency-supported employment in the Border region, with almost 8,000 employed. Combined with those directly involved in

Food Technology Centre - Sligo

St. Angela's Food Technology Centre was established in 1997 under Enterprise Ireland's Technology Centres Programme and is situated on the campus of St. Angela's College, Sligo.

The Food Technology Centre aim to develop the very highest standards in all areas of food production and supply, catering to the needs of the food industry including food production and processing, hotels, restaurants, catering and retailers. Some of the services provided by the centre include: product development, test kitchen, sensory analysis in a computerised lab, nutritional analysis, training courses, and food safety management consultancy.

agricultural production and related locally traded businesses, the sector is of immense importance to the region.

Focussing on the agency-supported enterprises, employment has grown over the past decade; although all of this growth took place in the North East (the North West experienced a small decline). The principal activities are meat & poultry processing, dairy (incl. cheese) processing and marine related activities (fishing, aquaculture and seafood processing).

Geographically the activities are concentrated in different parts of the region - not surprisingly, marine related activity is almost exclusively confined to north-western coastal areas (especially Donegal), with some activity also in Co. Louth. The majority of the dairy and meat processing is concentrated in the north east (and includes large employers such as: Rye Valley Foods (Monaghan), Carton Bros (Cavan), Liffey

<sup>&</sup>lt;sup>17</sup> Teagasc (2008) Towards 2030 Teagasc's role in transforming Ireland's Agri-Food sector and the wider Bio-economy

Meats (Cavan), Heinz (Louth), and Lakeland Dairies and Bailieboro Foods (Cavan). Pig production has been traditionally strong in the North East, and Cavan in particular<sup>18</sup>.

## **Realising Potential**

The well-established food production and processing activities, particularly in the central Border area, offers potential in terms of product development and processing, and locally produced/artisan foods. Recent initiatives in the region support the sector; such as the Food Hub in Drumshanbo Co. Leitrim; the development of a Food Centre in St Angela's College (NUIG) in Sligo; and there is also a proposal by Donegal Creameries to develop the country's largest organic farm on its Grianan estate near Lough Swilly in Co. Donegal.

The Food Hub - Drumshanbo

Drumshanbo Co. Leitrim is home to a state of the art food production facility called The Food Hub. The premises were originally home to the well known Lairds jam factory in the 1980s, and were taken over by the Kepak Group during the 1990s.

Leitrim County Council restored the premises as a state of the art food specific enterprise centre of 14 individual food business units. It offers world class food production facilities not only unique to the area but as one-of-its kind in the country.

Recent research by Bord Bia has highlighted significant potential market opportunities for the Irish dairy sector. Most of this exists in the hard/semi hard cheese area, as well as specialised dairy ingredients that deliver on market demand for products with health, nutritional and functional attributes<sup>19</sup>. The Department of Agriculture & Food is currently undertaking a review of the beef sector through the "Beef Forum" and Bord Bia is working closely with Teagasc to carry out a full life cycle analysis of Irish beef production which aims to quantify its environmental performance in the context of promoting the positive environmental attributes of Irish beef production. Ireland has a strong reputation from which to build and future development is likely to hinge on enhancing Ireland's image as a premium beef exporter with high standards regarding traceability etc.

Improving productivity and business processes are essential for the food sector. The relevant enterprise agencies actively support productivity enhancements, training and organisational change. A Productivity Guide for firms has recently been published by Forfás which should provide a useful practical tool for companies to identify actions they can take specific to their own company needs<sup>20</sup>.

<sup>&</sup>lt;sup>18</sup> The recall of pigmeat products due to some pigmeat produced in Ireland having traces of dioxin, impacted significantly on the trade towards the end of 2008. It will be some time before the full extent of the product recall is known

<sup>&</sup>lt;sup>19</sup> i.e. creating a new generation of high value food ingredients by extracting high value fractions from raw materials such as milk protein

<sup>&</sup>lt;sup>20</sup> Forfás (2009) Boost your Company's Productivity - Simple Steps

#### Fishing and Marine Potential

Killybegs, Greencastle and Clogherhead are the most significant fishing ports in the region, while aquaculture is important in counties Donegal, Louth and Sligo<sup>21</sup>. An expansion of activity in the marine area would diversify the region's industry base, adding extra value to the region's output, and would utilise a key natural resource and regional expertise.

Fisheries are under extreme competitive pressure however, and the industry is operating within tight profit margins while facing downward pressure on quotas for important fish stocks. Aquaculture is a challenging industry with volatile demand and international competition; especially from non EU countries (for example Chile) entering European markets in recent years.

While efforts at national levels need to be made to ensure that the fishing industry operates at its full economic potential (e.g. fleet efficiencies and quota negotiation), it will also be important to diversify marine activity into other areas to maximise the usage of the sea as a natural resource. Some examples of innovative marine based enterprises already exist in the area, and include firms operating in areas as diverse as surf schooling and packaged surf holidays (Bundoran Surf School, Strandhill Surf Club) to seaweed based cosmetics (Alargan), innovative food products (Seaveg), and Celtic Seaweed baths with its own range of 'VOYA' products.

# Clean Tech - Renewable Energy & Environmental Services

The renewable energy sector, encompassing a broad range of energy related activities, is one which has shown strong growth in recent years. This is driven principally by a move to cleaner sources of energy production as the costs of carbon and other polluting emissions of traditional fossil fuels are being priced into production processes. The sector is one from which the entire Border region, from East to West, has an opportunity to benefit.

#### **Key Assets**

The region has favourable geographical conditions for wind power generation and biomass production, a number of high profile building materials firms with strong interests in energy efficiencies and

#### Dundalk 2020

Sustainable Energy Ireland (SEI) Dundalk, is leading the Irish element of a pan-European project which has selected three European towns, each with a population of approximately 30,000, to develop pilot sustainable energy zones. Dundalk will provide a showcase of innovative technologies, policies and practices that will be needed in order to develop sustainable energy communities in Ireland.

Over the next four years, energy-efficiency technologies will be installed in a range of buildings across the Dundalk Sustainable Energy Zone. Each of the projects has a cross-border observer community, which in the case of Dundalk is the Newry & Mourne District Council. Under the Newry Dundalk Twin City initiative, the relevant stakeholders are seeking to deepen the links between Dundalk 2020 and Newry.

<sup>&</sup>lt;sup>21</sup> Donegal has the largest concentration of aquaculture licenses in Ireland at 122, with a smaller number granted in Louth (31) and Sligo (17). Oysters and Mussels dominate the activities associated with these licenses (Status of Irish Aquaculture 2007 - BIM, Údarás na Gaeltachta, & Marine Institute)

growing research strengths in the field.

There are also a number of bodies operating in the region with an interest in the promotion of the renewable energy sector. The Border, Midland and Western Regional Assembly and the Western Development Commission (WDC) have both articulated views on the development of the sector in the region. The WDC has produced two reports on the renewable energy sector<sup>22</sup>; Enterprise Ireland and IDA Ireland are also key agencies in the promotion of the renewables sector both in a regional and in a national context.

The Donegal Energy Action Team (DEAT)

The Donegal Energy Action Team DEAT, along with its NI counterpart, the Foyle Regional Energy Agency, is involved in a number of projects, including: Renewable Energy Planning using Geographic Information Systems; Energy Awareness Temperature Card; Audits of energy use by Donegal County Council; Renewable Energy Capacity Building; and Community Energy Awareness Programme.

# **Realising Potential**

The development of the renewable energy sector in the Border region will require significant public investment in a range of areas, not least in strengthening the local transmission network. A focused strategy for the development of the renewables sector in the region will be required to prioritise the areas where scarce public funding is necessary in order to efficiently access national funds. A strategy will also be required to identify where agencies and bodies involved in the area can best work together to achieve common aims.

Clear articulation of what is achievable: Even though a number of strategies and initiatives exist in the area of renewable energy, there is still a lack of clarity on what precisely can be achieved for the region with the expansion of this sector. It is important that benefits are clearly articulated<sup>23</sup> and quantified to the extent possible so that a reasonable expectation of what can be achieved is prepared for stakeholders whose involvement will be required in project delivery.

**Stakeholder/Community Buy-in:** Significant physical development, often in scenic areas, will be required to support the sector, and needs to be sensitively undertaken. A renewable energy strategy for the region should consider the possibility of opposition to the development of the sector and means by which this opposition can be appropriately addressed.

To Catch the Wind - The Potential for Community Ownership of Wind Farms in Ireland (2004) and Wood Energy Strategy for the Western Region: Growing the Wood Heat Market in the Western Region (2008)

Including, for example, employment, lower energy costs and carbon emissions, increased energy efficiency, increased technical expertise and skills

**Strengthening of the Transmission Network:** Eirgrid has identified the following projects as investment priorities in the North West:

- An additional investment of approximately €750m to upgrade almost 700 km of the existing transmission network and to build new circuits
- Extension of the 220 kV network into Sligo, already in progress
- 110 kV reinforcements between Killybegs (Binbane station) and Letterkenny
- Further integration of the Donegal and Northern Ireland networks.

**Community Developed Renewable Projects:** Small scale renewable projects should be encouraged and facilitated. This requires informing individuals and communities about what they can do to produce a portion of their electricity requirement, and encouraging such developments through the promotion of grid access to small scale producers, so that additional energy produced can be sold into the national grid. SEI has developed a guide to grid connection for smaller electricity producers<sup>24</sup>.

The Renewable Energy Skillnet may be a useful format to promote information on this area for interested parties. This Skillnet provides information on providers of renewable energy alternatives for domestic users, and training on the installation and utilisation of renewable energy technologies.

#### Innotech Centre at South-West College

SWC's Innotech centre sustainability strand provides expertise for businesses and entrepreneurs in the area of renewable technologies. The South-West College at Omagh is the only City & Guilds accredited centre in Ireland to offer Domestic Wind Turbine Installers training. This course is delivered using in-class resources and the SWC wind lab facilities which include a wind tunnel, grid connection apparatus, domestic scale wind demonstrator and fluid dynamics testing apparatus for turbine blade design

Centre for Renewable Energy (CREDIT)

The Centre for Renewable Energy (CREDIT) was established in DKIT in June 2002. The Centre's mission is to assist with Ireland's transition to a renewable energy-based economy. The centre aims to become a national focal point for renewable energy research and development and academic programmes. Its main areas of research activity are wind energy, energy storage and bio energy.

<sup>&</sup>lt;sup>24</sup> SEI (2009) Your Guide to Connecting Micro-Generation to the Electricity Network (in association with Econnect Ireland)

# **Tourism**

Tourism is an established and important enterprise sector in the Border Region. Initiatives to promote tourism enterprise often have the added benefit of improving the quality of life of a region's residents - making the region more attractive to skilled labour and investment.

Employment in the tourism or related sectors is estimated in 2007 to be above 28,600<sup>25</sup> across the border region (excluding Louth<sup>26</sup>). While tourism is generally a low value activity, it is an important employment creator.

While there are well established tourism products in the region (e.g. the Shannon-Erne Waterway) and there has been a considerable amount of new development in terms of hotels, golf courses and leisure resorts, the tourism product in the Border region is relatively underdeveloped.

Firstly, the 'Troubles' over the latter half of the past century contributed to a negative perception of the area as a dangerous place to visit. Secondly, poor access to the region, particularly to the North West, hampered expansion in the tourism sector, especially as the tourism market has trended towards shorter breaks. The region's circumstances have improved greatly over recent years. The region's tourism 'brand' is relatively new, and has a differentiating potential as an 'unexploited' destination.

#### Green Box Tourism Project

The Green Box Tourism Project is a useful illustration of the possible options to diversify Ireland's tourism. The project, launched in 2003 with the support of INTERREG, is centred on tourism development and marketing and forming the first integrated ecotourism destination. The area of the Greenbox includes Counties Fermanagh, Leitrim, West Cavan, North Sligo, South Donegal and North West Monaghan.

**Destination North-West Initiative** 

Destination North West is a cross-border tourism marketing project funded by the North West Region Cross Border Group through the EU INTERREG IIIA programme. BrilliantIreland.com is the website dedicated to the Destination North West and Glens & Lakelands initiatives. It highlights the main tourism attractions in the region in its recently published brochure.

### Rotterdam Charter

An in-bound Charter air service between Donegal Airport and Rotterdam was launched last year and has proven to be very successful with high loadings being achieved on the route. Plans exist to continue the initiative.

Fáilte Ireland's current strategy seeks to develop and promote the North West as an adventure holiday destination, while the East region, of which Louth is a part, is promoted for its landscape and heritage.

As well as Fáilte Ireland's strategy, there are a number of initiatives aimed at the development of the tourism sector currently being implemented in the Border region. Many of these initiatives have a strong cross border element, especially since a number of attractions in the region span the border, such as the Marble Arch Caves Geopark; the proposed Newry-Dundalk Geopark or the proposed re-opening of the Ulster Canal. The development and marketing of attractions North and South in a combined fashion also serves to improve the

<sup>&</sup>lt;sup>25</sup> Fáilte Ireland Tourism Employment and Training Survey 2007

<sup>&</sup>lt;sup>26</sup> Louth is in Fáilte Ireland's 'East' region.

Shannon-Erne Waterway and Ulster Canal

The Shannon-Erne waterway was re-opened in 1994, restoring the navigable link between the Shannon and the Erne.

The first phase of the Ulster Canal is being reinstated through funding from the Irish Government. This project will link up the Erne system and the Shannon, to Clones in County Monaghan, and will be a model of new cross-border projects at work.

variety of the tourism product on offer. From a Southern perspective, a key tourism market for the North West is Northern Ireland.

## **Realising Potential**

Inter and Intra-regional road networks require continued improvement to facilitate access to the region. At the same time, improved access and the various access options (esp. airports) need to be marketed to potential visitors.

In terms of intra-regional connectivity,

consideration needs to be given to how attractions are linked and how tourists can navigate the region. The region has poor public transport provisions, and this is especially the case with regard to the more remote locations tourists may wish to access. Options for improving accessibility to areas with poor or no public transport connections could include seasonal or 'tourist' bus services and/or improved cycling facilities.

A perceived weakness of the Border region's tourism product (as raised at the workshop held within the region) is the lack of developed national heritage sites. National heritage sites can act as attractors to the region in which they are sited. The development of a significant heritage site in the region in a sustainable and sensitive way may be considered in light of this.

Product Development & Marketing: A greater level of 'packaging' is required of the tourism products within the region and on a cross-border basis. A joint approach needs to be taken to the Border's tourism product by stakeholders and tourism promoters for the successful exploitation of particular market segments. Conflicting brand messages may weaken the appeal of the region.

# 5. Realising Future Potential: Enhancing the Business Environment

The region has many of the building blocks in place to attract investment from foreign and indigenous firms. To achieve Ireland's ambition as outlined in the Smart Economy, the business environment needs to continuously evolve to meet the changing needs of companies - to provide a dynamic environment that is supportive of early start ups and entrepreneurial activities, that stimulates company engagement in innovation and R&D, and that ensures that companies have access to the high quality skills and supports they require.

# Leadership & Strategic Capacity

The NSS designated three regional gateways in the Border region: Letterkenny, Sligo and Dundalk. The importance of building critical mass focused on the gateways as a base for stimulating and supporting enterprise development is key to realising potential. Strong leadership within the local authority structures in Sligo has resulted in several important enhancements to the Sligo Gateway, and a vision for the future development of the Gateway in terms of its physical development, in a plan-led approach.

The NSS also stressed the importance of building cross-border inter-regional links. Coalitions of relevant stakeholders are developing around focused agendas (and 'fuzzy' boundaries) rather than existing administrative configurations, as evidenced with the emergence of the North West Gateway Initiative and the Newry-Dundalk Twin-City development framework. It will be important that these initiatives themselves do not become too insular and that there is openness to seeking partners and leveraging assets within and beyond the region. In addition, it is important that these two groupings make space to share with each other the experiences and learning from the initiatives they progress, particularly in relation to cross-border collaborative actions.

#### North West Gateway Initiative

In 2006 at a meeting of the British Irish Inter-Governmental Conference (BIIGC), Ministers agreed to a North West Gateway Initiative (NWGI) - a non statutory integrated spatial planning and development framework focussing on the Derry-Letterkenny Gateway and Donegal. The framework examines the potential for joint investment in key infrastructure projects, undertakes joint analysis and actions by agencies in areas such as trade and investment promotion, tourism, skills/training, further and higher education, innovation and business development, and seeks to achieve better co-ordination of public services - especially in health, education and information services.

A range of initiatives are being progressed under the NWGI 'umbrella', the more prominent being: North West Business & Technology Zone and Project Kelvin.

Although there is a high degree of clarity in relation to strategic infrastructure priorities both North and South, building a coherent enterprise development strategy remains challenging. There will be initiatives in certain enterprise development areas (such as entrepreneurship

promotion, innovation, infrastructure, tourism and sectoral development) that will benefit from cross-regional and cross-border collaborative approaches (for example the TRANSFORM (pilot programme) and PROPEL enterprise incubation programmes promoted by INI and EI).

#### Newry-Dundalk Twin City Region Initiative

The Newry-Dundalk Twin-City Initiative originated in a jointly commissioned study conducted by Colin Buchanan & Partners on behalf of Newry & Mourne District Council, Louth County Council and Dundalk Town Council in 2006.

A steering group chaired by ITI was established including representatives from the local authorities, cross-border bodies (NSMC, ITI, and Centre for Cross-Border Studies), Chambers of Trade and Commerce in Newry & Dundalk, the business sector (CBI) and central government (DOEHLG and DRD) as well as a research team from the ICLRD, to formulate a development strategy and to drive the process forward.

Four specific cross-border projects for the Newry-Dundalk Twin City region were advanced and a number of proposals were put forward regarding the strengthening of the co-ordination structures which are now being progressed (including a Joint Senior Management Group) a Twin City Region Advisory Group and Joint Technical Teams to implement the proposed projects). The four projects put forward by the Steering Group include a:

- Dundalk/Newry Centre of Excellence for Sustainable Energy
- Newry-Dundalk cross-border international services zone
- Geo-tourism initiative encompassing the Mournes, Cooley, Slieve Gullion and Carlingford Lough areas
- Regeneration strategy for older areas within Newry and Dundalk.

The workshop participants highlighted the fact that 'Border' as a title for the region is loaded with negative connotations - invoking perceptions of 'peripherality' and not fully integrated with the rest of the economy. It also misses the important geographical position of the territory as part of a wider 'northern' region accessible to two major metropolitan areas Derry and Belfast. A positive step would be to consider renaming the region.

# Innovation and R&D

Innovation is about translating ideas into high-value products and services and is a key factor in driving regional competitiveness. There are many sources of innovation, including end customers, firms with complementary products and/or services, and research institutes.

The entire 'innovation system' involves a number of elements, each of which is important in its own right. A successful innovation system 'on the ground' is based on the effective interaction between the elements and engagement by firms and their customers, Higher Education Institutions, Government Departments, Development Agencies, Local Authorities and the financial system.

Innovative regions do not operate in isolation, but do so within a wider national context. Interactions at both national and international level play an important role.

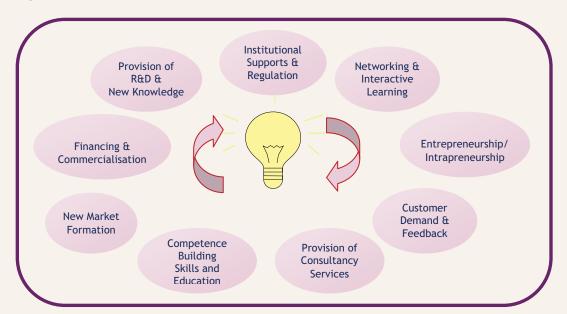


Figure 3: Activities that Stimulate Innovation

Source: Based on Edquist (2005) 'Systems of Innovation - Perspectives & Challenges' in Fagerberg et al (2005) *The Oxford Handbook of Innovation* 

The factors that influence the development, diffusion and use of innovation are not independent of each other:

- Innovative thinking and creativity is stimulated in an environment that is dynamic, interactive and collaborative
- Enablers and supports provided by government facilitate innovation and range from establishing the 'right' fiscal, IP and regulatory environment, to supporting education and training, to providing funding for R&D initiatives and through to facilitating networks and 'on-the-ground' introductions and ease of access to technologies
- Government departments and agencies themselves can directly stimulate innovative capacity by developing innovative ways of enhancing service delivery and by engaging with the business community.

Realising potential (regardless of sector) will depend on the ability of existing firms to add value to the products and services they produce as well as the processes they employ to create them (enhancing productivity). It will also rely on the region's ability to stimulate entrepreneurship and promote entrepreneurial thinking. The capacity to innovate is at the heart of that ability and the challenge presents itself for regional actors to harness resources and existing assets in a collaborative and cohesive way to continue to stimulate innovative activities, and engagement of SMEs in particular.

#### North-West Science & Technology Partnership

Under the auspices of InterTradeIreland (ITI), the North West Science and Technology Partnership is a cross-border network formed between industry, academia and other stakeholders to promote, and strengthen science and technology based innovation and business in the North West.

Amongst its key objectives the network aims to: identify relevant infrastructural projects for the region and to support the development of new science & technology-based business in conjunction with existing stakeholders such as IDA, INI and EI; to facilitate networking and knowledge sharing to increase collaborative research opportunities and to identify funding and partnering opportunities for partnership members; and to develop a public profile, providing informed opinion on science & technology issues for the region, and to work to support S&T training & education.

While many 'building blocks' are in place in terms of incubation centres, research institutes, technology parks and business networks, the region is showing some indicators of underperformance - for example relatively low levels of expenditure on R&D within industry and the higher education institutes. In addition, the most recent GEM Entrepreneurship Report showed that the Border region was behind other parts of Ireland in terms of new firm formation.

#### **BMW Programme of Innovative Actions**

The BMW Regional Assembly has implemented a range of pilot actions arising from their Regional Programme of Innovative Actions 2006-2008. The pilot actions included the roll out of Research and Intelligence Briefings, a Research Voucher Scheme, and a Food Technology Transfer programme.

Innovation for Competitive Enterprise (ICE)

DKIT is leading a 3 year programme in partnership with University of Ulster & other partners in Scotland aimed at promoting inhouse innovation in SMEs. It is intended that ICE will work with 90 companies focussing on skills development in a network across the participating areas. ICE includes the counties of the Border region, all of N.I, and parts of Scotland.

The Lionra Network, which comprises the seven partners in Higher Education in the Border Midland and Western (BMW) region<sup>27</sup>, has recently announced a Collaborative Research and Innovation Strategy. The Strategy has been produced in response to the need for a co-ordinated approach to Research, Technological Development and Innovation (RTDI) across the BMW region.

Proximity to Northern Ireland is a dimension that may be an additional stimulant for innovative activity (networking with other firms and customers, exploiting new market opportunities, leveraging expertise within research institutes etc.). ITI's most recent Quarterly Business Monitor shows that an increasing number of companies engaging in cross-border activities and trade are benefiting from those links, be they formal or informal, and plan to develop their cross-border linkages over the coming year.

Athlone Institute of Technology, Dundalk Institute of Technology, Galway-Mayo Institute of Technology, Institute of Technology, Sligo, Letterkenny Institute of Technology, National University of Ireland, Galway, St Angela's College, Sligo

# Stimulating Entrepreneurship

Over 70% of agency supported employment in the Border region occurs in the indigenous sector compared to approximately 50% nationally. As a percentage of total employment, the FDI sector accounts for only 4.5% of those employed in the region, a significantly lower proportion than the 7.4% average for the State. As such, the indigenous sector is of immense importance to the Border economy. The challenge for the region is to ensure that the cohort of indigenous companies is renewed and expanded with new business start-ups, and that new companies and SMEs are encouraged to scale up and internationalise.

There are a number of factors that can influence where new companies establish, and the regional local authorities, agencies and education institutes can work together to ensure that all the elements are in place and working in a complementary and interactive way.

## **Physical Infrastructures**

- The availability of competitively priced and attractive business parks that accommodate mixed-use businesses in a strategic way that recognises the different needs of business activities
- Serviced office / business locations, that enable companies to access core support services such as reception, secretariat, accounting, HR, facilities management etc
- Car parking and/or effective public transport networks
- Broadband capacity and availability in business premises and in the home
- Quality of life housing infrastructures, travel to work times etc.

# **PROPEL & Enterprise START**

El has taken a proactive step to drive the development of scalable businesses in the Border region through their 'PROPEL ideas into business' programme. The programme aims to have facilitated ten scalable businesses, with global potential, located within the Border counties by the end of the one year programme.

The programme includes financial support, an enterprise development training programme, incubation space and facilities, mentoring and other soft supports in the form of networking events and access to potential investors. The programme is also being run by INI in Northern Ireland and there will be opportunities for participants on both sides of the Border to interact during the course of the initiative.

El is also rolling out a regional seminar series called EnterpriseSTART to encourage potential entrepreneurs to develop their business ideas.

# 'Softer' Factors

- Access to regionally based skills
- Ease of access to business management development, mentoring support and training
- Ease of access to harness the capabilities of HEIs and support to invest in in-firm innovation
- Access to markets and to market intelligence
- Facilitated networking, introductions and access to shared learning opportunities (e.g. through business networks, workshops, seminars).

The region needs to ensure that it facilitates ease of access to the 'right' information at the right time and in the right way to enable individuals to realise their potential.

North West Gateway Strategic Alliance

The North West Gateway Strategic Alliance project funded under the HEA Strategic Innovation Fund has completed a Scoping Study looking at opportunities to upgrade the higher education capacity in the North West through a strategic alliance between LYIT and University of Ulster. The project is moving to a second phase in which a blueprint for future development will be laid out.

(A strategic review is also underway in IT Sligo as part of the HEA's future analysis of the IT sector including the identification of opportunities for potential alliances).

# Skills and Education

The skills development and deployment issues faced by the Border region mirror those which are being experienced nationally, although because of a historic skills deficit, the challenge of supplying the skills required by Irish based enterprise will be greater in the Border region than in many other parts of the State.

Today, although with an improving performance, the Border region still has more people without a leaving certificate level qualification than any other region in the country, and one of the lowest levels of third level qualifications.

Of paramount importance will be the role of third level educational providers in the region (and in adjacent regions) in producing graduates with enterprise-focused skills (including generic/transferable skills) oriented towards sectors which are growing or have strong potential to grow within the region. An example of such industry focused education are the courses in Financial Services offered by LYIT and IT Sligo developed in conjunction with local multinational companies.

Alongside the need to produce industry oriented graduates will be the requirement to retrain workers whose skillsets are less in demand. The IoTs alongside FÁS in the region will have a key role to play in this regard. Initiatives such as the North West Cross-Border Workforce Development Forum can be important tools in identifying how the existing skills base can be reoriented towards areas of growing skills demand within the region<sup>28</sup>. The forum is made up of representatives from business, higher education and local government. Because of the historic deficit and particular skills challenges for the Border region, such a forum, if successful, could be established in other parts of the region.

# **Creating Entrepreneurial Graduates**

The ACE Initiative (Accelerating Campus Entrepreneurship) is a collaborative initiative involving DKIT (lead), IT Sligo, Cork IT, Blanchardstown IT and NUIG which aims to bring innovative approaches to entrepreneurship education so as to ensure students from non-business programmes take enterprise related modules.

# **Connectivity Infrastructures**

### **Access Infrastructures**

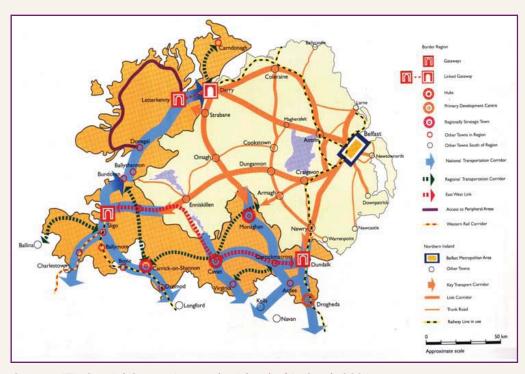
The Border region (with the exception of Louth) is perceived to have relatively poor transport infrastructure. In many instances the perception matches reality; however there have been major improvements in access to the North West in recent years, with a number of road

<sup>&</sup>lt;sup>28</sup> www.delni.gov.uk/workforce\_development\_forum\_final\_report\_pdf.pdf

projects and air services having come on stream. That said, a number of areas remain to be improved, chief among these is intra-regional connectivity. Each of the region's transport elements, road, air and public transport, should be considered in unison to provide the optimum access and connectivity mix for the region.

#### Roads

The main arterial routes to the Border are the M/N1, N2 (A5), M3 and M4 (from Dublin to Louth/Belfast, Monaghan/Donegal/Derry, Cavan and Sligo respectively); the N17 from Galway to Sligo/Donegal; and the A6 from Belfast to Donegal. As can be seen from the map below, the majority of routes radiate from Dublin to the region, and terminate at a single centre within the region. Intra regional links need to be enhanced. Utilisation of and integration with NI transport infrastructure can assist in this regard, both in terms of connections to the North West, and from the point of view of East-West connections within the region, for example the N16 route linking Sligo with Enniskillen, the A4 and A5, and on to the N2. In addition, improvements which have occurred in terms of access to and within the Border region need to be promoted.



Map 1: Key Transport Routes in the Border Region

Source: ITI, Spatial Strategies on the Island of Ireland, 2006

#### Air

Air is the other major means of access to the Border region. International air access to the region is primarily through Dublin or Belfast. The east of the region is well served in this regard. North West regional air services are provided through Derry, Donegal, Sligo and the

Ireland West Airport at Knock. Principal routes from these airports are to Dublin and the UK (Knock also has a sizeable charter airline tourism business).

Air access is of major importance and a key challenge for the region is to optimise the airport resources within the North West in particular, so as to provide an expanded range and quality of air services to this part of the region<sup>29</sup>.

# **Public Transport**

Development of public transport in the region is hampered by the dispersed nature of the region's population and the absence of critical mass. Certain forms of public transport, though costly to provide, are necessary for the development of the region, in terms of the enhancement of quality of life for the region's residents, to provide mobility to labour and to facilitate access for visitors. A regional public transport strategy should be developed to establish where demand currently exists for public transport, where it could be stimulated if public transport were provided and what service is deliverable given constrained budgetary circumstances. Such a strategy could also seek to maximise the potential for cross-border service delivery, incorporating the services of Bus Éireann and Ulster Bus (NI). The Northern Ireland Regional Transport Strategy envisages rail line upgrades and new rolling stock between Derry and Belfast which may result in reduced journey times on this route.

#### **Broadband**

High speed broadband is the critical infrastructure to enable regional development, and is a fundamental requirement for all businesses of the future. The opportunity for SMEs to improve business productivity, tap into new markets and to innovate in new service delivery can be facilitated through effective use of IT applications and broadband infrastructures. Broadband challenges need to be addressed at a national level. From a regional perspective, the high cost of backhaul is a significant disincentive for companies to base outside of Dublin.

Northern Ireland has achieved 100% broadband coverage<sup>30</sup>, and has advanced plans to increase the quality of the broadband coverage available as it upgrades its network to next generation broadband technology. Cross Border co-operation in the area of Broadband provision will see some areas of the Border region access very high capacity broadband connections to international networks as part of the Project Kelvin initiative (in particular Letterkenny, Cavan and Monaghan)<sup>31</sup>. Another cross-border collaborative initiative is the NIRAN/HEANET education connection linking Letterkenny IT to the NIRAN Derry PoP. The entire NERN education and research network in the Republic (HRAnet) is connected to Northern Ireland's SuperJANET network (NIRAN).

A paper has been published by the BMW Regional Assembly which looks at the economic potential of the four airports in the BMW region: *Maximising the Economic Impact of Airports in the BMW Region* (September, 2009)

Northern Ireland should be considered a proximate case study in broadband roll-out and take up for agencies and groups considering initiatives in this area

<sup>31</sup> Hibernia is also completing a cross-border build linking its existing communications network into the North-West of Ireland

As is the case nationally, 'last mile' connection issues continue to hamper the roll out of broadband access to many SMEs and households. National efforts will have to be made to overcome these issues in the main, however, regional broadband solutions are possible in the interim as is demonstrated by a project in Dundalk where Louth County Council offices were connected to the local MAN by passing fibre connections through the sewerage system.

# **Energy Infrastructures**

Energy infrastructure in the Border region weakens from East to West. Local electricity transmission infrastructure is particularly poor in the North West and will need to be greatly enhanced, both to provide security of supply to existing customers, to give investment confidence to enterprise in the region and to take advantage of potential opportunities from the growth of the renewable energy sector in the region. Eirgrid has outlined plans for what investment is necessary in this regard, and the implementation of these expenditure plans should be supported. The *Grid 25* plans include:

- An additional investment of approximately €750m to upgrade almost 700 km of the existing transmission network and to build new circuits
- Extension of the 220 kV network into Sligo, already in progress
- 110 kV reinforcements between Killybegs (Binbane station) and Letterkenny
- Further integration of the Donegal and Northern Ireland networks
- The North-South Interconnector (400 kV) connecting Kingscourt in Cavan to Turleenan in Tyrone
- A new 400 kV circuit from Woodland in Meath to Kingscourt in Cavan
- Strengthening of power circuits between the North West region and the North East region facilitating power flows;
- Reinforcement of 110 kV networks supplying Cavan and Monaghan
- Upgrading about 240 km of the existing transmission network.

The region is benefiting from interconnection to the NI electricity grid. As well as large scale interconnection projects of national importance, some smaller scale interconnections are occurring across the region. These initiatives serve to strengthen electricity infrastructure and supply across the region, and the benefits of such work should be communicated to the public to dissipate the largely negative coverage such projects usually generate, such as was the case with the main north-south interconnector which traverses county Monaghan.

# 6. Priority Actions

There are many actions that can be taken at a regional level to address a number of the opportunities and challenges identified in this report, while addressing other issues will require a national response. It is incumbent upon the regional actors to consider how they can take best advantage of national initiatives and their delivery locally.

A number of cross-cutting recommendations concerning national level action arise from Forfás' work in relation to all of the individual regions as part of the Regional Competitiveness Agendas process. These are set out in the final report: Regional Competitiveness Agendas: Overview, Findings and Actions, which is available separately. Key areas of focus are: infrastructure - planning, development & delivery; accelerated development of the gateways (including leadership and governance issues); and mechanisms to initiate and support enterprise related regionally based initiatives).

The following action areas are considered of primary importance in the context of the Border region.

# Regional Governance & Leadership

The distinctive characteristics of the Border region require a collaborative focus on developing workable regional governance structures, to accommodate:

- Three 'developing' Gateways (and 'sub-regions') and the need for strong gateway focused development initiatives
- The cross-border dimension to development of the region
- The sharing of experience and the fostering of strategic partnerships with players across and beyond the region
- The need to drive and co-ordinate cross-regional sectoral initiatives
- The need to provide ongoing feedback on regionally based initiatives (whether driven by the enterprise development agencies themselves or otherwise), to share experiences on what is working (or not) which will in turn inform the policy and planning process
- The need to reconsider the 'Border' as an appropriate name for the region
- Planning more sophisticated, sensitive planning measures are required to preserve the environment and natural heritage of the Border region.

# **Enhanced Agency Collaboration**

As ways of doing business are changing, firms will increasingly engage in alliances, partnerships and networks, both in Ireland and across the world. Business models are being transformed whereby open innovation (across companies) is becoming a reality; smaller technology intensive companies have a range of options for targeting their end customers, including entering into licensing and/or revenue sharing arrangements with larger global companies. As companies increasingly network, the enterprise development agencies can also enhance their collaborative actions to facilitate companies in this environment.

- Develop a more proactive approach for ongoing and structured communications with the HEIs (including those in Northern Ireland) - in terms of innovation, technology transfer, skills needs etc., and focused on a clear agenda, objectives and actions
- Working across the community of multinational and indigenous firms, facilitate structured interactions and networking between firms, and between HEIs and firms, by promoting awareness of existing initiatives, in particular: the Industry Led Research Programme, Competence Centres Initiative, etc.
- Stimulate interactions between sectors particularly where there are opportunities for convergence (e.g. medical devices and ICT; agri-business and environment/life sciences), working with the relevant industry associations and the HEIs.
- Promote interaction between indigenous SMEs and MNCs in the region for example, include relevant indigenous companies as demonstration sites on inward investment itineraries and encourage joint foreign and indigenous company participation in trade missions.
- Further engagement will be required to advance specific actions to achieve the potential of opportunity sectors in the region. Where relevant, small, sectorally focused teams could be an effective mechanism to further explore and develop specific opportunities in identified sectors. Existing initiatives in the region and elsewhere should be considered by the sector teams to explore potential synergies and optimise knowledge sharing.

# Skills Development

 Examine the template of North West Cross Border Workforce Development Forum for replication in other areas of the region for the purposes of the identification of local skills needs and workforce development solutions.

# **Innovation**

- Encourage an innovative mindset in the region through the promotion of examples of successful innovation from across the public and private sector.
- Government bodies and agencies in the Border region could assess how they themselves can engage in innovation, improve performance, increase service efficiency and minimise costs. Innovation in the public sector can improve innovative capacity within its own workforce, and stimulate innovative practices in business-facing services.
- Consider how best to enable companies to access technologies and research from HEIs, for example:
  - HEIs and research institutes to provide information on their websites from the perspective of the end-user (including industry interests in research) so that research capabilities are demonstrated and searchable in terms of technologies and their application to 'real' industry problems/potential (and not by research department).

# Physical Infrastructures

The following infrastructures have been identified as key priorities and critical to underpin enterprise development in the region:

#### **Roads**

- Up-grade the N2/(A5)/N14 Dublin-Derry/Letterkenny road, the N13 Letterkenny-Derry link to the A6/M2, and the N4 (Carrick-on-Shannon/Dromod & Colloney/Castlebaldwin sections) in order to: boost North West connectedness to remainder of country; improve access for inward investment; increase labour mobility; improve access for tourism<sup>32</sup>.
- Identify and prioritise optimal intra-regional road connections in order to: improve interconnectedness of region; build critical mass in regional settlements; increase labour mobility; improve access for tourism and trade. The N16 (various improvement schemes including the by-pass of Manorhamilton) is of particular importance in enhancing east-west connectivity in the region

#### Air

 Review air service provision in the North West with a view to increasing efficiency of air access to the area and optimising investment in airport infrastructure and services.

#### **Broadband**

Upgrade/expand broadband infrastructure and services across the region. Stimulating further investment in broadband will require action at the national level, however in the regional context efforts can be made to promote demand and highlight the existence of lower cost options for individuals and small businesses where available, as well as facilitate alternative approaches to telecommunications infrastructure roll-out (as demonstrated by Louth Co. Council).

#### **Public Transport**

 Review public transport provision in order to improve quality of life for residents, increase the attraction factors for potential investors and facilitate tourist mobility within region.

#### **Energy**

- Strengthen electricity transmission infrastructure as envisaged under Grid 25 plans, especially where weaknesses pose a potential barrier to the development of renewable energy sources (in the North-West in particular).
- Small scale renewable projects should be encouraged and facilitated. This requires informing individuals and communities about what they can do to produce a portion of their electricity requirement, and encouraging such developments through the promotion of grid access to small scale producers, so that additional energy produced can be sold into the national grid.

<sup>&</sup>lt;sup>32</sup> The preferred route for the 85km long A5 road project was announced by the Transport Ministers North and South in July 2009. The Irish Government gave a commitment of £400m (€580m) for this project

# Appendix I

### Enterprise Agencies, Initiatives and Supports

The enterprise development agencies play a key role in stimulating the development of new businesses, facilitating the expansion of existing companies, and targeting new foreign direct investment through a broad range of initiatives. In conjunction with Forfás they influence policy by providing on-the-ground information about the real issues facing business (in areas such as infrastructures, education and regulatory environment).

The agencies work together to market and promote Ireland internationally as a 'good place to do business' and with a strong reputation for high quality exports, and within that context marketing the capabilities of regions specific to potential investors' needs. All of the agencies work to deliver value for money for their expenditure, which is monitored using a range of indicators including increased exports, productivity, innovation and employment.

# **Enterprise Ireland**

Enterprise Ireland's core objective is to drive export growth by creating and growing internationally competitive businesses and facilitating entrepreneurship. They have offices and representatives established in a range of locations throughout the country and their regional headquarters is based in Shannon. They also have a range of offices overseas that facilitate and support companies in gaining a foot-hold in new markets. They provide both financial and 'softer' supports to:

- Stimulate and support entrepreneurship
- Stimulate investment in R&D and innovation through financial supports, Intellectual Property advice, TechSource (technology acquisition)
- Support company expansions and investment in capital and productivity initiatives
- Provide supports for training and management development
- Facilitate companies to participate in trade missions around the world, enable introductions and provide guides to accessing new markets
- Provide supports for mentoring specific to a business' requirements (e.g. in marketing, finance etc.)
- Facilitate establishment of business networks and facilitate linkages with HEIs (through Innovation, Industry-Led Research Platform and Business Networks programmes, and through supports for Technology Transfer Offices)
- Support the provision of a range of property solutions.

#### Enterprise Ireland Activity in the Border region

The Enterprise Ireland client base in the Border (in 2008) employs over 21,970 people, accounts for approximately 10% of total employment and is dominated by firms in the food & drink, basic & fabricated metal and financial services sectors (see figure (a) overleaf).

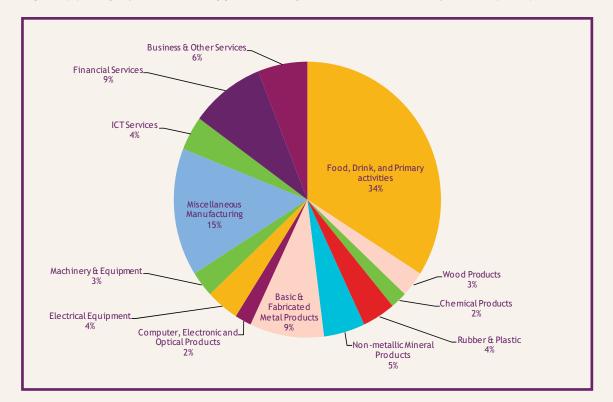


Figure (a): Employment in El supported companies in the Border, by sector (2008)

Source: Forfás, Annual Employment Survey, 2008

Enterprise Ireland has supported the development of Community Enterprise Centres across the region with 12 in Donegal, 10 in Leitrim, 9 in Louth, 7 in Monaghan, 6 in Cavan and 5 in Sligo.

The Agency has also provided funding for the development of Campus Incubation Centres at Letterkenny, Sligo and Dundalk ITs.

Other activities include roll-out of the EnterpriseSTART campaign in the region to encourage the emergence of new high potential start-up companies and provide information and referral for established and nascent entrepreneurs about EI and other enterprise supports at a local level. EI also works closely with the CEBs in the region, for example enabling access to the EI 'First Flight' programme to eligible CEB client companies who are ready to enter export markets.

El are also running the 'Propel' programme in each of the Border counties. The Propel programme is designed to provide entrepreneurs with the necessary business skills to establish a successful global business. Programme supports include;

- Financial support of up to €30,000
- Specialised expertise and customised mentoring
- Hot desk facilities
- Start-up training
- Access to potential investors

Access to local and global contacts and networks

### **IDA** Ireland

IDA is responsible for the attraction and development of foreign investment in Ireland. It is focused on securing investment from new and existing clients in the areas of High End Manufacturing, Global Services and Research, Development and Innovation. Key sectors include Life Sciences, ICT, Engineering, Financial Services, International services, Digital Media and Consumer Brands. The IDA is also focused on emerging areas such as Clean Technology, Convergence and Services Innovation - areas that offer exciting new investment opportunities.

The IDA attracts overseas and inward investment by:

- Focusing on business sectors that are closely matched with the emerging needs of the economy and that can operate competitively in global markets from an Irish base.
- Building links between international businesses and third level education, academic and research centres to ensure the necessary skills and research and development capabilities are in place.
- Pursuing Ireland's policy of becoming a knowledge-based economy by actively building world-leading clusters of knowledge-based activities.
- Compiling up-to-date statistics and facts for research into industry, the economy and foreign direct investment in Ireland.

The IDA also provides serviced sites, pre-planning approval and buildings (buildings are provided by the private sector on IDA serviced sites). IDA is developing a limited number of larger scale strategic sites that are intended to service utility intensive enterprise activity (e.g. bio/pharma manufacturing, data intensive services).

#### IDA Ireland activity in the Border Region

The IDA Ireland client base in the Border (in 2008) employs over 9,470 people, accounts for 4% of total employment and is dominated by firms in the ICT services and Medical Technologies sectors (Figure (b) overleaf).

A key activity for IDA in the regional context is the development of a strong value proposition for attracting high value foreign direct investment to the region based on its particular strengths and competencies, and leveraging complementary strengths and competencies in other regions.

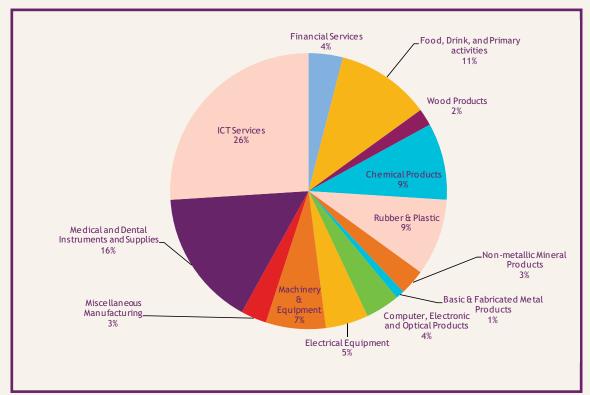


Figure (b): Employment in IDA supported companies in the Border, by sector (2008)

Source: Forfás, Annual Employment Survey, 2008

Recent FDI investments (2006-2008) in the Border region include:

Company	Sector/Activity	Estimated Job Numbers
Bank of Scotland	Finance	300
IFS	Finance	235
Vesta	Finance	350
Pillar Data Systems	ICT Hardware	200
Daiwa Securities	Finance	300
Netezza	ICT Hardware	65
Sita Inc	ICT Software	123
Zeus	Medical Technologies	150
Abbott	Medical Technologies	155
Tiscali/CPW	ICT Services	300
Pramerica	ICT Software	70
Pauwels Trafo	Energy	70
Satir	Engineering	40

### Science Foundation Ireland

Science Foundation Ireland (SFI) is the state agency that promotes investment in basic research, particularly in the science and engineering that underpin the fields of biotechnology, information and communications technologies (ICT), and energy efficient technologies<sup>33</sup>.

SFI's stated mission is to "help build in Ireland research of globally recognised excellence and nationally significant economic importance through strategic investments in the people, ideas and partnerships essential to outstanding research in strategic areas." Specific functions in this regard include:

- Promoting, developing and assisting the carrying out of oriented basic research in strategic areas of scientific endeavour particularly in the fields of biotechnology, ICT, and sustainable energy;
- Endeavouring to ensure that a standard of excellence in the oriented basic research, as measured by competitive peer review on an international basis, is consistently adhered to at the highest level;
- Developing and extending the national capability for the carrying out of oriented basic research in institutions;
- Promoting the attraction of world class research teams and individuals with a view to their carrying out oriented basic research in the State;
- Cooperating and collaborating with other statutory bodies in the promotion and encouragement of oriented basic research; and
- Devising, administering, allocating, monitoring and evaluating any grants, schemes and other financial facilities requiring disbursement of any funds authorised from time to time by the Minister with the concurrence of the Minister for Finance.

# Údarás na Gaeltachta

Údarás na Gaeltachta is the regional authority responsible for the economic, social and cultural development of the Gaeltacht areas of Ireland. Its overall objective is to ensure Irish remains the main language of the Gaeltacht region and is passed on to future generations. Its economic mission seeks to encourage new investment and employment opportunities in Gaeltacht areas.

The Gaeltacht covers parts of counties Donegal, Mayo, Galway and Kerry - along the western seaboard - and also parts of counties Cork, Meath and Waterford. Údarás is structured on a regional basis (North, Connacht/Leinster and South) and has offices in Donegal, Mayo, Galway, Kerry and Cork.

SFI was established in 2000, as a sub-board of Forfás, to administer Ireland's Technology Foresight Fund. In July 2003, SFI was established on a statutory basis under the Industrial Development (Science Foundation Ireland) Act, 2003. SFI's remit was extended in 2008 to include energy. SFI does not have a specific regional development (or spatially driven) mandate and its activities are guided by the overriding objective to develop and support research excellence

Key economic development activities undertaken by Údarás within the Gaeltacht areas include:

- Attracting high value investments (especially in high technology services), both indigenous and from overseas, to the Gaeltacht
- Providing attractive property solutions for enterprise development in the Gaeltacht
- Working to upgrade services and infrastructure (physical access and telecommunications) - especially where Industrial Estates and Business Parks are located
- Initiatives to strengthen the competencies and qualifications of the workforce
- Initiatives in support of entrepreneurship and early stage start-up companies, including provision of incubation facilities

In providing supports to both FDI and indigenous enterprise investments, Údarás operates within the same regional aid framework as EI and IDA and offers a similar suite of supports to enterprise as the other national agencies, in some instances effectively acting as an 'agent' for mainstream programmes managed by EI or IDA (for example the R&D programme and the more recent Enterprise Stabilisation Fund).

### County Enterprise Boards (CEBs)

The CEBs support the start-up & development of local business in Ireland. There are six CEBs in the Border region. Supports include advice, mentoring & grants or financial supports for training and growth (as a guideline, the CEBs deal with client companies that employ less than 10 people). Through the CEB Co-ordination Unit based in Enterprise Ireland regional headquarters in Shannon, the CEBs are developing a closer working relationship with Enterprise Ireland, through for example the extension of the EI First Flight programme to eligible CEB clients ready to begin exporting or already exporting overseas and the EnterpriseSTART initiative.

# **Integrated Local Development Companies**

In 2007, new more coherent arrangements were put in place to have one integrated local development company providing a single access point for local communities. These local development bodies are responsible for the disbursement of significant public funds under a wide range of programmes in the NDP, including the Local Development Social Inclusion programme and LEADER, and provide a range of enterprise supports to SMEs and start-up businesses. ILDC groups operational in the Border region include:

- Breffni Integrated Development Ltd.
- Donegal Local Development Company
- Inishowen Area Based Company
- Leitrim Integrated Development Company Ltd.
- Monaghan Integrated Development Company Ltd.
- Sligo leader Partnership Company
- Louth Leader Partnership Ltd.

# FÁS

FÁS is the National Training and Employment Authority and provides training courses, apprenticeship programmes and reskilling/supports. FÁS' Corporate Strategy sets out the strategic direction taken by the Authority and outlines the action that it will take to progress the strategy under eight high priority goals. These goals cover areas such as services for jobseekers and the unemployed, workforce development, labour market policy, social inclusion, equality and diversity, and customer service. FÁS have nine employment services offices in the Border Region, and Regional Training Centres located in Gaoth Dobhair and Letterkenny in Donegal, Sligo and Dundalk.

#### Fáilte Ireland

Fáilte Ireland has three principal areas of operation; firstly, the agency helps to develop product offerings for both the domestic and overseas markets and leads the marketing effort to promote Irish holidays to the domestic consumer.

Secondly, it supports enterprise development in Irish tourism, promoting best practice in operations, quality and standards and facilitates investment in tourism infrastructure.

Thirdly, it builds human resource capability in the industry, investing in training provision and standards across the publicly supported educational system, through a training network of outreach centres and also via executive and management development programmes for the tourism industry.

Regional support for people and enterprises is provided at a local level through the office of the Business Development Manager. The role of the Business Development Manager in each region is to liaise with industry stakeholders to provide support in developing businesses' capability and standards to support business goals, service standards, profitability and long-term sustainability, in line with the key strategic themes identified in each region's operational plan.

#### Skillnets

Skillnets provides industry specific training programmes to employees of networks of firms, based on their defined needs. They primarily facilitate an enterprise-led approach to training and development and also aim to address the lack of investment in human resource development by business by tackling some of the real and perceived barriers to training. Skillnets is funded under the National Training Fund through the Department of Enterprise, Trade and Employment.

# Appendix 2

### Business & Technological Parks and Properties

The availability of a choice of high quality property solutions to a potential investor or startup company is essential. It is key to stimulating enterprise investment, concentration and well-planned structured growth within a region.

Such assets need to be regularly enhanced and strengthened in order to meet changing business needs. Below is a list of IDA Business and Technology parks in the Border region.

**Letterkenny Business & Technology Park** is a 44 hectare park. The Business Park has been completed to a high standard with a services infrastructure in place to suit all client requirements. It is within 30 minutes of Derry and its regional airport with flights to Dublin and the UK. Sligo Regional Airport is 112km away, Donegal Airport (Carrickfinn) is 58km, Belfast International Airport 153km and Dublin International Airport 245km. There are advance offices and advance technology buildings in place to suit all sectors - including greenfield sites for future development.

**Sligo Business & Technology Park** is a fully landscaped 42 hectare business park, 1km from Sligo. The town is well connected with daily rail services and the N4 Motorway / Dual Carriageway links Sligo to the national road network. Sligo is located within 200 km of Belfast, is 227 km from Dublin and147km from Derry.

The Park has been designed to accommodate a range of clients in both international services and manufacturing sectors. Advance office and manufacturing facilities are in place as well as greenfield sites for future development. IDA also owns a 90 acre land bank at Oakfield to the south of Sligo for future development requirements.

Monaghan Business & Technology Park is a 12 hectare (29 acre) park located on the N12 National Primary Route east of Monaghan Town, 125km from Dublin Airport. The park has been landscaped to a high standard and has a full services infrastructure in place. The Park has property designs available to suit both manufacturing, and international services clients. There are also greenfield sites available for future development.

**Cavan Business & Technology Park** is a 15-hectare park with direct access to the N3 National Primary Route that connects the town to Dublin.

The Business Park is landscaped to a high standard and has a services infrastructure to suit the needs of both manufacturing and international services sectors. There are property solutions available to suit all sectors including greenfield sites.

**Dundalk Business & Technology Park** is a 37 hectare park located on the main M1 Dublin to Belfast route. Approximately 8 hectares are currently available. The park has been developed and maintained to a high standard. There are designs currently in place for advanced offices and advanced technology buildings as well as greenfield areas available for future development. The services infrastructure has been designed to suit manufacturing and international services clients.

**Mullagharlin Strategic Site:** The 44 hectare IDA owned land bank at Mullagharlin, south of Dundalk, has been selected as a location for the establishment of a world-class Science and Technology Park. IDA Ireland has received advance planning permission from Louth County

Council to facilitate the potential establishment of two major BioPharma facilities and related high quality office developments on the strategic land bank.

**Drogheda Business & Technology Park** is a 26 hectare park located on the Donore Road, adjacent to the M1 motorway linking Dublin and Belfast. The park has been designed to include advanced office facilities and advanced technology buildings of high standard to suit both manufacturing and internationally traded services sectors. There are ample greenfield areas available for future development.

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