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FORFÁS REGIONAL COMPETITIVENESS AGENDA: REALISING POTENTIAL: MIDLANDS

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 Level¹. 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 channels². 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: Midlands 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

¹ East (Mid-East & Dublin), Border, Midlands, West, Mid-West, South-West, South-East

Refer to National Competitiveness Council's Annual Competitiveness Report 2009 (http://www.competitiveness.ie/)

- 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.

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 future³, 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.

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³ Forfás (2008) Sharing our Future, IBM (2008) Drivers of Change, Enterprise Strategy Group (2004) Ahead of the Curve

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 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 indicators⁴.

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

⁴ 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 Midlands Region Today: A Summary

This summary is intended to highlight aspects that indicate the differentiating elements for the Midlands Region based on the findings in the Regional Competitiveness Agenda: Volume I: Baseline Data and Analysis for the region.

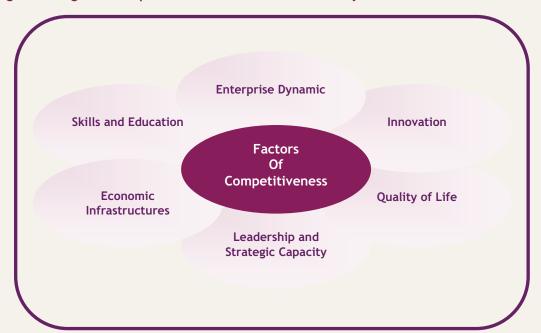


Figure 1: Regional Competitiveness - Framework for Analysis

Population and Growth

There was strong growth in population in the Midlands over the 2002-2006 period. The region ranks second of the regions to the Mid-East in terms of the rate of growth over this period. CSO estimates since 2006 indicate that the population has continued to grow strongly in the Midlands and now stands at $270,600^5$. Much of the population growth has been driven by inmigration (over 70% of population change in the region between 2002 and 2006 was due to migration) and there is evidence to suggest that there is a large number of people living in the Midlands who commute to the Greater Dublin Area (GDA) to work.

Enterprise Dynamic

The Midlands has a relatively high proportion of its workforce employed in manufacturing compared with other regions in Ireland. The key sectors are Food/Drink, Engineering (metal

⁵ CSO (2009) Population and Migration Estimates

products & equipment), LifeSciences (especially medical technologies) and ICT/Software⁶. The region experienced high growth in employment in the Construction sector over the past decade - considerably more than the average nationally. The current economic downturn, which has already had a dramatic impact on employment within the construction sector nationally, has resulted in a decline of more than a quarter in the Midlands.

While employment in services has grown in recent years much has been due to expansion in the public sector. There has been strong growth in business/financial services, though some of this growth has been reversed in more recent times in tougher trading conditions (especially where there were links to the construction sector). Tourism also has potential for further development. Overall, employment is dominated by indigenous companies.

Internationally traded activities⁷ accounts for 11% of total employment in the region, compared to 14.5% nationally, and the contribution of foreign-owned enterprises in terms of employment is just over 4%, compared with 7.4% nationally⁸. Although there has been some growth in internationally traded services, activity remains relatively low at 11% compared to 33% nationally.

GVA statistics, which are the lowest in the country, indicate that the region is lacking in higher value-add activities. GVA per capita levels in the Midlands may be impacted by a lower proportion of foreign and internationally trading companies and may also be affected due to the commuting population who live in the Midlands but whose productivity is captured outside the region.

Skills, Education & Innovation

The Midlands has the lowest level of educational attainment to third level across all regions. This may be as a result of lower demand for such qualifications in the more traditional sectors that have been prominent in the Midlands over time. A relatively high level of early school leaving also remains an issue. A regional skills audit (commissioned by the Midland Gateway Development Forum) is currently underway, and aims to highlight areas where there are particular skills shortages across a broad spectrum of firms and how these might be addressed. Other relevant initiatives are being taken at a county level with a cross-agency approach involving the CDBs, VEC & FÁS, including for example, The Offaly Third-level Outreach project.

Athlone Institute of Technology (AIT) plays an important role in improving educational attainment in the region, as well as addressing the skills needs of the current and emerging enterprise profile within the region.

The Midlands possesses some important assets in support of innovation - including AIT which has set out a research and innovation agenda and has a strong emphasis on forming strategic alliances with businesses and other HEIs in Ireland. The Midlands Innovation and Research

⁶ Refers to Agency-Supported firms only (i.e. companies that are clients of the enterprise agencies: IDA Ireland, Enterprise Ireland and Shannon Development)

⁷ Using agency supported companies as a proxy

⁸ The figure rises to 4.5% if Elan and Athlone Pharmaceuticals are included - these companies are located in the outskirts of Athlone, in Co. Roscommon which is not part of the Midlands NUTS 3 region

Centre has contributed to the relatively high rate of HPSU formation in the Midlands compared to other regions. The relatively low levels of expenditure on R&D activity within the higher education sector underlines the importance of AITs' research strategy and the need to realise the potential offered by the presence of the internationally renowned Georgia Tech Ireland research institute in Athlone, which is currently developing closer links with AIT.

Economic Infrastructures

Excellent progress has been made in terms of the development of the Major Inter-Urban routes which traverse the Midlands and other projects such as the current construction of the Tullamore by-pass, which have had the effect of not only enhancing inter-regional links with the Greater Dublin Area (GDA), westwards to Galway, and south/west to Limerick and Cork, but also improving intra-regional link-up between the gateway constituent towns and other regional centres. However there are weaknesses outstanding - such as the route from Portlaoise to Tullamore (N80) and connectivity to Longford (N55). An agreed identification of priorities in this area is critical, especially in the current fiscal circumstances.

Quality of Life

Quality of Life could be discussed from many different perspectives, not to mention the subjective nature of the concept in itself. However, from an enterprise competitiveness position there is recognition that a high quality of life that is inclusive and accommodating of diversity is a key component in regional competitiveness and is necessary to achieve the following:

- creating the conditions to foster and support innovation, creativity, and knowledge generation/transfer
- attracting and retaining skilled people, particularly internationally mobile skilled labour
- attracting knowledge intensive internationally mobile foreign direct investment, including research and innovation activities

The Midlands region has some unique assets in terms of the diverse nature and quality of its rural environment and the individual contributions of the main urban centres.

Leadership and Strategic Capacity

Throughout Ireland there are a wide range of bodies and organisations at regional, county and sub-county levels that promote local and regional development and provide support to business - the Midlands is no exception.

The NSS designated the towns of Athlone, Mullingar and Tullamore as a linked gateway to create effective critical mass and to act as a driver of regional economic development. Its future development presents a challenge for the constituent local authorities and other relevant bodies. Important advances have been made including the publication of the

Strategic Development Framework for the Midlands Gateway⁹, the formation of the Midlands Gateway Implementation Forum (MGIF), and the establishment of the Midlands Gateway Chamber.

Conclusion

The Regional Competitiveness Agendas: Volume I: Baseline Data and Analysis highlighted some characteristics concerning the Midlands region which presents specific challenges, including:

- Highest unemployment rate of all regions (currently at 10%)
- Highest proportion of total employment involved in manufacturing
- Lowest contribution to GVA nationally, and lowest per capita GVA of all regions
- Largest growth in construction employment over the period 1998 to 2007, and a 25% decline from 2007 (Q3) to 2008 (Q4)

The data serve to underline the importance of building on existing and nascent strengths within the region and adopting a focused approach to the development of enterprise potential.

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⁹ Commissioned by Westmeath and Offaly Co. Councils, and prepared by Indecon/KSA Consultants

4. Realising Future Potential: Sectoral Opportunities

This section considers how regional assets might be harnessed to further develop the existing enterprise base, and to capture future opportunities. The challenge over the next decade (faced by the entire country), is to shift growth toward export oriented sectors and activities.

The areas outlined below were highlighted during the regionally based workshop and one-to-one consultation, informed by employment trends and existing enterprise. The outline for each that follows 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. Although the focus is on identifying key assets within the region, it is also important to look beyond the regional boundaries to develop key strategic sectoral alliances. The key sectors are ¹⁰:

- Internationally Traded Services (including Software)
- LifeSciences
- Agri-Food
- Tourism & Leisure
- Engineering (including engineering as a sector and/or as a competence).

Internationally Traded Services (including Software)

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 increased investment activity in business services to manage more complex global corporate activities and structures, such as shared services, customer support & customer management, business process outsourcing, supply-chain/procurement, IT operations, human resources and finance/transaction processing.

Software Development & Services

A new environment is emerging for software companies globally in what has been called 'The New Software Economy'¹¹. This new context sees a number of key trends and structural changes that provides both opportunities and challenges for software companies, and small to medium sized companies and start-ups in particular. Some of these trends and changes include:

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

¹¹ Enterprise Ireland (2009) Best Connected - Software from Ireland - A strategy for development of the indigenous software industry 2009-2013

- Increasing end-user demand for less expensive, more efficient ways of paying for software, for example through seeking best of breed, plugcompatible solutions
- Vendors responding to these demands by embracing new delivery and pricing models, such as software as a service (SaaS), infrastructure as a service (IaaS), platform as a service (PaaS); and software on demand
- The emergence of the networked value chain a distributed business model where different value adding activities are carried out where they can be done most efficiently and costeffectively
- The emergence of new software technologies (such as Services Oriented Architecture - SOA, Open Source, Web 2.0 and Mash-ups) are continuing to drive the development of new applications and business models.

An over-riding feature of the new software economy is the shift in computing activity towards being a utility-like system, underpinned by the internet. This phenomenon is most widely referred to as 'cloud computing' - a reference to the ever-shifting cloud of data, software and devices that make up a global computer network.

The Midlands region has tended to lag behind other regions in terms of employment levels in international services (including ICT services)¹². However, recent major road infrastructure enhancements have helped to strengthen the value proposition for international services activity in the Midlands, and some significant FDI investments have been attracted to the region, for example Teleflex (shared services operation), Axa (customer support centre) and PPD (contract research organisation), joining companies such as Capmark Services (commercial mortgage administration).

The Software Research Institute at AIT specialises in applied research in the wireless domain. Current research projects are focused on: mobile applications (adaptive mobility); the long term evolution and competitiveness of 3G; IMS service conceptualisation, creation and validation; and IMS applications and quality of service (QoS) challenges.

Georgia Tech Research Institute
Ireland (GTI), is the Institute's first
applied research facility outside the
United States. Its key focus areas are
to explore the application of
interactive television (IPTV) and radio
frequency identification (RFID)
technologies across a range of
industries (including medical devices
and systems), and also the use of
technology to improve the delivery of
healthcare, and sustainable energy.

The Midlands Innovation and Research Centre (MIRC) is a campus incubation centre, providing facilities for innovative and knowledge-based enterprise, an enterprise programme for entrepreneurs and start-ups, and makes available the resources and expertise of AIT to support client companies.

¹² Internationally traded services as represented by agency supported companies accounted for 11% of agency supported employment in the Midlands compared to 33% nationally (or 19% excluding Dublin & Mid-East)

Key Assets

The Midlands is developing strong expertise in telecommunications and software development, not least through the presence of the large Ericsson software development centre in Athlone, and also through growing research and commercialisation activity within AIT's Software Research Institute and the Midlands Innovation & Research Centre. The Georgia Tech Research Institute in Athlone complements and further enhances potential capabilities in these areas.

Realising Potential

By virtue of its location (relative to Dublin in particular) and the relatively small base of international services companies in the region currently, the Midlands is an attractive proposition for internationally traded activities that include online sales, media-related activities, games development, customer support, business process outsourcing and shared services.

Ericsson, Athlone

Ericsson is the world's leading provider of telecommunications equipment and related services to mobile and fixed network operators. The Athlone R&D Unit is a strategic hub within Ericsson with global product development responsibility for Network Management Systems. Its role is to provide Operation and Maintenance Solutions including software products, platforms, applications, technical support and product maintenance. It also houses a dedicated applied research group which focuses on developing technologies and enablers for the next generation of management systems beyond 3G.

The vast majority of services employment in the Midlands today is in locally traded services. Some of the companies involved have the potential and the ambition to grow significantly and to internationalise.

Locally traded services play a major role in the regional economy and are essential to efficient business operations and quality of life. A focus on horizontal measures to enhance productivity and efficiency (including skills development and innovation) as outlined in the recent Services Strategy for Ireland is essential¹³.

Realising potential in these areas will require a specific regional focus in the following areas:

Skills: The changing nature of services in an increasingly globalised economy brings with it changing skills requirements. In all service industries, the proportion of high-skill employment has increased significantly. The challenge for the Midlands region will be to generate, attract and retain appropriately skilled people who can support the needs of the internationally traded sector and global business models into the future. The recent report of the Services Strategy Group highlighted the range of skills and skills combinations that are now in high demand from the sector:

- Generic skills (personal/inter-personal skills team-working, customer service, problem solving, planning etc.)
- Humanities and social science skills
- Science, Technology and Innovation Skills

¹³ Services Strategy Group (2008) Catching the Wave: A Services Strategy for Ireland

- Creative skills, design skills, and skills for innovation
- Hybrid technical and business skills (combining discipline-specific technical knowledge (ICT, financial services etc. with entrepreneurial skills)
- Mathematics.

In relation to software development specifically, the region will not only need to supply (develop) and attract appropriately skilled people with key competencies in relevant technologies, but also with a business acumen to negotiate the increasingly complex new software economy. El's recently launched software strategy highlights the need to build on existing competencies and strengths:

'Ireland's strength in the software sector to date has been based largely on domain expertise and technical capability. Over the next few years, with the emergence of new business models, product management capability and marketing will become more critical. Success will depend on using a creative mix of direct channels, partnerships and internet marketing, and on having the skills needed to fully develop these market channels and partners'¹⁴.

While implementation of the National Skills Strategy is crucially important in mainstreaming initiatives to drive skills development in these areas, the educational providers within the region can also develop proactive measures to support the development of the sector in the region.

Networks & HEI/Industry Links: The Midlands is growing expertise in niche areas through the Software Research Institute at AIT. Strategic collaborative alliances with partners in industry and the higher education sector within and outside of the region could see the region building on the successes already achieved in the emergence of small high technology companies with potential for growth.

Broadband: The availability of advanced broadband telecommunications services and infrastructure is critical to building a strong services sector 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 LifeSciences sector in Ireland is dynamic. It has a strong reputation for manufacturing, new companies are being formed, both public and private investment in LifeSciences research and development (R&D) has increased significantly over recent years, and many foreign companies have expanded their activities to include corporate services. The sector is operating within a fast changing global environment where aging demographics 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 LifeSciences sub-sectors and with other sectors such as engineering

¹⁴ Enterprise Ireland (2009) Best Connected - Software from Ireland (p.2)

¹⁵ Forfás (2009) Health LifeSciences in Ireland - An Enterprise Outlook

and ICT are enabling a shift towards convergent medical products and personalised healthcare¹⁶.

An increased disaggregation of value chain activities creates opportunities for smaller companies to position themselves within the global supply chain with innovative, technology intensive solutions, partnering opportunities, shared revenue deals and licensing.

Multinational companies in the sector are tending to focus on activities where they have strengths and to outsource non-core activities (such as late stage manufacturing, clinical trials processes etc.) to contract research organisations (CROs) and contract manufacturing organisations (CMOs).

As a proportion of employment within agency supported enterprises in the Midlands the LifeSciences sector accounts for just over 20% (or over 2,800 people). The sector has enjoyed significant growth in the region over the past decade (30% growth in employment between 1998 and 2008)¹⁷ and recent investments from overseas companies include KCI, Teleflex, Abiomed and PPD.

The sector is dominated by firms involved in medical devices manufacturing activities (mostly foreign owned)¹⁸, although the profile is shifting to include activities such as shared services (e.g. Teleflex) and contract research (e.g. Intertek - formerly Irish company BioClin, Isotron, and PPD). High potential start-up companies supported by Enterprise Ireland in the Midlands over the last two years have included a small number of LifeSciences companies

LifeSciences: Research Activities in Ireland

Major research initiatives in Ireland involving both industry and HEIs are directly relevant for the development of multi technology based products and services in Ireland, including:

The Biomedical Diagnostics Institute (BDI) is based in DCU and its primary research focus is on sensors and the development of next-generation biomedical diagnostic devices especially for Point of Care (POC) and self-testing applications.

Led out of NUIG, the Network of Excellence for Functional Biomaterials (NFB) has academic partners from national and international institutions is working to develop and manipulate a new generation of biomaterials which will allow the delivery of therapeutic genes and other agents to specific targeted treatment areas.

The Tyndall National Institute in UCC has a programme on Novel micro-nanotechnology for biological and medical applications.

The Technology Research for Independent Living (TRIL) Centre is a coordinated collection of research projects, based in Trinity College Dublin (TCD) and involving collaborations with University College Dublin (UCD) and National University of Ireland Galway (NUIG) and Intel. The centre focuses on the research of new technologies around independent living. Dedicated laboratories are located at Intel and in each of the universities involved.

¹⁶ Personalised healthcare involves capturing individual genetic, behavioural and environmental information to define individual prescriptions for health maintenance, disease prediction, prevention, and tailored therapy. A wider definition of personalised healthcare embraces research, diagnostics and testing, delivery mechanisms and devices and the concept of 'the appropriate treatment, in the appropriate way, to the appropriate patient at the appropriate time.'

¹⁷ Growth increases to 60% if Elan and Athlone Pharmaceuticals, located on the outskirts of Athlone in Co. Roscommon (West region) are excluded.

¹⁸ Irish owned companies in the medical technologies sector include Steripack (Clara, Co. Offaly) and Mergon International (Castlepollard, Co. Westmeath).

AIT Materials Research Institute

The MRI conducts interdisciplinary research focused on materials science and technology and delivery of contract development and testing services to industry. Its facilities are dedicated to materials synthesis; processing, manufacture, analysis and testing.

The Institute's facilities comprise of an extensive analytical laboratory, micro fabrication facilities, clean rooms, a polymer processing hall, physical and mechanical testing laboratory, surface analysis laboratory, thermal analysis and support infrastructure.

Key Assets

Growth potential for this sector in the Midlands stems from a number of assets within the region. The existing base of companies in the Midlands involved in various life sciences related activities is an excellent reference seller for attracting further overseas investment and acts as a potential stimulant to entrepreneurial activity - arising from focused HEI-industry links and provision of innovative support services and sub-supply. The life sciences sector in the Midlands (and particularly in medical devices) can be seen as part of the wider 'cluster' of activity that extends into the West and Mid-West regions (see Figure 2 below).

AIT has a long established competency in materials research, development and testing in the AIT based Materials Research Institute. The Bioscience Research Institute (BRI) at AIT is engaged in research on

biopolymers and pharmacologically active compounds and materials. It embraces strategic research areas in bioscience and chemistry with an important interface with materials. AIT has also formally instituted partnership agreements with DCU and Georgia Tech Ireland (GTI) based in Athlone.

The Midlands has attracted investment from companies involved in providing research and analytical services to the life sciences sector, which offers potential for further development of a concentration of activity in this area within the region - from both the FDI sector and Irish companies and research entities.

The Software Research Institute at AIT specialises in research in the wireless domain, which is applicable across many industry sectors including healthcare - for example remote diagnostics. GTI has dedicated research streams in IPTV and RFID and their application in the medical devices and systems context.

Mid-Med SkillNet has enabled a large number of life sciences companies in the Midlands to access a range of short-term sector specific training courses (including some delivered by overseas training providers) in a more cost-effective manner¹⁹. The Skillnet has also facilitated increased networking between firms and their employees.

AIT is a partner in the recently announced Third Level Institutional Research Agreement which has been signed by the participating third level colleges in Lionra (the BMW region's higher education network). The agreement includes NUI Galway, AIT, IT Sligo, Letterkenny IT, GMIT, and Dundalk IT. One of the key strands to be developed between the institutes is biomedical science and engineering.

¹⁹ The MidMed Skillnet while initially formed to service Midlands based companies in the life science sector has also included other companies beyond the region. This has enabled economy of scale in the delivery of certain courses through the network. Project management for the Skillnet is provided by a private project management company - ériu enterprises

The significant improvements in road access infrastructure have provided enhanced accessibility to Dublin (and airport) and delivers better accessibility to Galway, which is an important centre for the medical devices sector in Ireland and has strategically significant research institutes within NUI Galway (the National Centre for Biomedical Engineering Science and the Regenerative Medicine Institute - REMEDI).

West Companies Medtronic, Proxy Biomedical Creganna, Sigmoid Research Centres Network of Excellence for Functional Biomaterials Making the Connections Regenerative Medicine Institute Midlands Galway Medical Technologies Centre Companies Digital Enterprise Research Institute (DERI) Covidien, KCI, Abbott Research Centres Bioscience Research Institute Materials Research Institute Mid West Software Research Institute Companies Georgia Tech Institute Ireland Cook Ireland, Vistakon, Stryker Orthopaedics, onvai Zimmer, Crescent Diagnostics, Eltex Manufacturing ICT: Analog, Dell Wickli Limerick Research Centres owel Centre for Applied Biomedical Engineering Research Waterford Optical Fibres Sensors Research Centre Wireless Access Research Centre Dungarvan Microelectronics & Semiconductors Centre Composites Research Centre Centre for Biostatistics Solid State Pharmaceuticals Cluster

Figure 2: Med Tech Assets in the Midlands and Neighbouring Regions

Realising Potential

The collection of LifeSciences related assets within the Midlands indicates potential in a number of areas:

- Further growth in medical device manufacturing
- Further growth in the area of contract research and analytical services
- Increased research and ultimate commercialisation in the area of convergent medical products, applying multiple technologies such as software development (including wireless application), materials research and bioscience.

Supporting further diversification of the sector into a broader range of activities in the Midlands will require a multifaceted approach: development of appropriate skills, networks and critical infrastructure.

Skills: The trends in the life sciences sector have a direct impact on skills requirements. EGFSN research has highlighted the following areas requiring focused attention in medical devices subsector²⁰:

- Building operational excellence in production processes including automation, lean manufacturing and quality management, with a particular focus on up-skilling operators and technicians
- Driving product and technology innovation through the provision of high level engineering and scientific skills and engaging Irish clinicians in medical device innovation
- Developing and supporting entrepreneurs and intrapreneurs through specific initiatives facilitated by EI and the HEIs
- Developing specialist industry expertise and understanding for existing medical devices managers and professionals in key areas such as healthcare economics, IP, sales and marketing, finance, regulatory affairs and clinical trials management
- Addressing changes in skills needs arising from technological convergence.

Contract Research

The recently announced investment by PPD for Athlone involves the establishment of a new contract research facility which will undertake testing for clinical and commercial programmes spanning all phases of drug development, with particular emphasis on inhalation and biopharmaceutical products.

Intertek's laboratory facility at Athlone is a leading GLP (Good Laboratory Practice) certified, FDA and cGMP (Good Manufacturing Practice) compliant contract research laboratory. It provides contract bio-analysis and analytical research and development, with advanced analytical services including liquid chromatographytandem mass spectrometry (LC/MS/MS) to the local and international pharmaceutical, biopharmaceutical and medical device industries.

Networks: Continued networking and proactive engagement between industry, education providers and the enterprise agencies at regional level and through groups such as MidMed Skillnet, the Irish Medical Devices Association (IMDA) and Irish Bio Industry Association (IBIA) can bring additional focus to the needs of the life sciences sector and identify specific, perhaps regionally based, skills development initiatives where appropriate. Networks involving companies, academic researchers and clinicians in the areas of medical devices, diagnostics and ICT would further stimulate innovation. For the Midlands, this means that the key actors need to forge partnerships and networks beyond, as well as within the region.

Advanced Broadband Infrastructure/Services: The availability of advanced broadband telecommunications services and infrastructure is of particular importance as the sector transitions towards personalised healthcare where the volume of data and images will increase exponentially.

Sites/Facilities: IDA Ireland is currently assessing a number of land banks to accommodate a proposed Midlands Gateway Technology Park which will give additional scope for the development of the life sciences sector in the Midlands. For this and any future business park developments (including private sector) consideration will need to be given to

²⁰ Expert Group on Future Skills Needs (2008) Future Skills Needs of the Irish Medical Devices Sector

accommodating the future requirements of LifeSciences sector - including provision for wet labs, next generation broadband networks etc.

Agri-Food

The agriculture and food industry is Ireland's largest indigenous sector, employing circa 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).

The dynamic for the food industry has changed significantly in recent years, transitioning from being largely production-led, to now being led by market demands. Today, 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 accounts for just over one-fifth of the total employed in agency-supported (typically internationally trading) enterprises in the Midlands. It is a sector that has exhibited strong employment growth over the last decade - expanding by almost 48%. The agency supported food sector is predominantly indigenous and includes some relatively large employers such as Glanbia and Carroll Cuisine (Offaly), C&D Foods, Pat the Baker & Green Isle Foods (Longford), Dunbia (Westmeath) and Meadow Meats (Laois).

A number of indigenous start-ups have emerged in the region that are focused on niche consumer foods, typically built around locally sourced ingredients and aimed at higher value markets (for e.g. Penalto Foods, Mr. Crumb, Glenisk and Festa Foods). A plethora of smaller artisan scale producers are also emerging in the region many of whom have developed as alternative farm enterprises. The 'Offaly Delicious' artisan food network which was supported by the LEADER programme is an example of the range of high quality niche food producers in the region.

Teagasc predicts that the agri-food sector is likely to become even more important in the coming years, which could provide significant longer term opportunity for the region, given its agricultural capacity. The sector 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)²¹.

²¹ Teagasc (2008) Towards 2030 Teagasc's role in transforming Ireland's Agri-Food sector and the wider Bio-economy

Realising Potential

The food sector is facing significant challenges, with lower value producers in particular facing particular stresses. Irish food producers are also impacted by exchange rate differentials in their major UK markets. The food industry in the Midlands needs to increase its value added, diversify its markets and increase productivity to remain competitive in today's challenging economic conditions.

Actions required to stimulate the ongoing transition and development of the sector include:

- Addressing cost competitiveness: As a tight margin/high utility/high labour content business, Ireland's relative competitive positioning is particularly important²². Although cost competitiveness is a national issue firms have already taken action, through e.g. the Large Energy Users Industry Network which is supported by SEI and EI and in which many food companies participate.
- Improving productivity and business processes are essential for the food sector. The 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 need to take specific to their own company needs²³.
- The shift from a production-led to market-led model has implications for skills within the sector, and research by the EGFSN (Expert Group on Future Skills Needs) indicates the following needs:
 - Efficient supply chain management, supported by the relevant skills in procurement, international logistics, sales to address regional and/or multi-national buying centres, together with customer relationship management, inventory and working capital management etc.
 - Training on continuous improvement and lean principles at all levels including e.g., automation and PLC control diagnostics
 - The ability to identify and interpret consumer trends, research and development programme and portfolio management, design engineering, branding and packaging technologies
 - Knowledge and use of relevant technologies will also become significant in areas such as traceability and the use of RFID tags
 - Marketing and language skills will therefore become increasingly important in the context of targeting new Eurozone market opportunities.

The Department of Agriculture & Food is presently undertaking a review of the beef sector through the "Beef Forum" which will report shortly 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

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²² The Large Industry Users Energy Network (LIEN - supported by SEI and EI) seeks to find ways of optimising energy usage at the firm level and ultimately reduce costs

²³ Forfás (2009) Boost your Company's Productivity - Simple Steps

future focus is likely to be on enhancing Ireland as a premium beef exporter with high standards regarding traceability etc.

Tourism & Leisure

The Midlands region is promoted by Fáilte Ireland alongside an 'East' region which includes counties Louth, Meath, Kildare and Wicklow (but excluding Dublin). South County Offaly falls within the administrative remit of Shannon Development as part of the Shannon region.

The Fáilte Ireland Strategy for the Midlands and East aims to increase tourist numbers by 18% to 900,000 over the life of the plan from 2007 to 2010, at the same time growing tourism revenues by 12% to €505 million. While tourism is generally a low value activity, it is an important employment creator.

Indecon/KSA (2006) strategic recommendations for the Midlands tourism sector:

Place increased focus on developing and promoting the region as a high quality, short stay destination for domestic visitors.

Develop and promote special interest activities which capitalise on specific strengths of the Midlands region, particularly water-based sports

Develop hotel accommodation and conference facilities in the Gateway towns.

Implement a branding and product development strategy for the tourism sector.

Key Assets

The Midlands has a number of key assets that positions it well as an *outdoor activities* destination with a focus on the utilisation of waterways and cultural heritage, including:

- Landscape and waterways
- Heritage
- Proximity to Dublin
- Central location nationally (and relative ease of access).

In their review of the tourism and leisure sector in the Midlands, as part of the Strategic Development Framework for the Midlands, Indecon & KSA consultants concluded that the sector 'has failed to fully develop in the Midlands' but has considerable un-tapped potential²⁴. Since their analysis was undertaken, developments have occurred to boost tourism in the Midlands. Improved road access to the region from Dublin has made travel there faster, boosting its potential as a short stay destination - important in today's holiday market. Fáilte Ireland's tourism strategy has promoted a number of special interest activities particular to the Midlands, thus improving the region's brand and tourism image.

Realising Potential

The Fáilte Ireland operational plan for its 'Midlands and East' region complements the strategic recommendations of the Indecon report, and includes the following elements for the Midlands:

²⁴ Indecon Intl. Economic Consultants & Keith Simpson & Assoc.(2006: p177) Strategic Development Framework for the Midlands Gateway

- Position Ireland's central waterways as a key international tourism proposition
- Develop and promote quality heritage products and experiences
- Exploit the potential of the Region based on proximity to Dublin

Implementation of these recommendations is required if the Midlands is to realise its full potential for tourism.

Intra-regional transport connections remain weak, which could limit the movement of people around the region. Also, inter-regional connectivity linking the Mid-West (Shannon Airport) and South-West with the Midlands is hampered by the non-completion of the N18 from Athenry to Gort.

The Midlands Tourism brand, identified by Fáilte Ireland focusing on aspects of landscape and culture identifiable with the region needs to be more actively promoted. Continued development of the tourism product and attractions is required to realise the desired image through the use of networks of tourism related businesses.

Engineering

The Midlands region has a higher proportion of its workforce involved in manufacturing activities than any other region in Ireland (the State average is 14% compared to 18% in the Midlands). Unlike many regions, employment has remained relatively static overall, with a small increase occurring over the ten years to 2008.

The key manufacturing activities in terms of employment currently are: various engineering-related activities (2,638 or 23%)²⁵, food processing (2,548 or 22%), medical devices manufacturing (1,928 or 17%), and non-metallic minerals/concrete production (1,125 or 10%).

The Mid Shannon Corridor Tourism Infrastructure Investment Scheme

The Mid Shannon Corridor Tourism Infrastructure Investment Scheme was introduced in the Finance Act 2007. It is aimed at encouraging the sustainable development of new tourism infrastructure, or the refurbishment of existing tourism infrastructure, with a view to increasing the inflow of tourist visitors to the area. The scheme is managed jointly by Fáilte Ireland and Shannon Development and includes part of Westmeath and Offaly as eligible areas (the scheme concludes in May 2010).

Key Assets

The Midlands continues to have a strong base of companies involved in a range of engineering related activities. Amongst agency supported firms, the largest concentration of employment is in 'basic and fabricated metal products' with a small number of large construction related metal fabrication companies dominating an otherwise diverse array of small companies. Machinery and equipment manufacturing activities employ the next largest grouping, and again a small number of large companies are prominent amongst a range of much smaller firms. Transport equipment/automotive engineering companies make up another sub-grouping in the region, with C&F Automotive (Westmeath) the dominant employer. An expanding medical devices

Engineering related activities include the NACE categories 'basic and fabricated metal products', machinery and equipment, and 'transport equipment'

manufacturing activity has added a newer dimension to the longer established engineering competency base in the region.

Athlone Institute of Technology has developed capabilities in mechanical engineering, minerals engineering (quarry technologies), plastics/polymer technologies, and civil engineering/construction studies. The Institute is recognised nationally as a key centre for the training and education of engineers and technicians for the plastics industry, while it has also played an important role for many years in polymer/plastics research, testing and development activities through the Materials Research Institute (MRI). AIT will shortly complete the construction of a new dedicated Engineering education & research building.

The First Polymer Training Skillnet established under the auspices of Plastics Ireland, the (IBEC) representative body for the plastics industry in Ireland is based in Athlone.

AIT is a partner in an inter-university, interdisciplinary and international Centre for Graduate Education in Engineering (ICGEE). The aim of the ICGEE graduate education centre is to develop an international doctoral research and education framework with a global curriculum, world class research opportunities and an international peer network. The ICGEE will offer a wide spectrum of specialist academic courses and workshops from leading experts in Europe, the US and Asia.

Cameron Ireland Ltd

Cameron Ireland Ltd was established in Longford in 1978 to produce chokes and actuators for the North Sea oil & gas exploration market. Since its arrival to Longford in 1978, Cameron has continued to grow taking on the manufacturing of new products, extending its mandate and its markets. In 2004 a new R&D Centre was added which resulted in the development of a Chemical Injection Metering Valve which is now in production in Longford.

In 2009 a new investment was announced which will further develop Cameron Ireland Ltd. as the global centre-of-excellence for its high value products and as the lead role in procurement and engineering for the "Cameron" and "Flow Control" range globally. A new entity is also being established at the site, Cameron Systems (Ireland) Ltd., to manage non-US based intellectual property (IP) and the highly successful R&D function of Cameron Ireland.

Realising Potential

The sizeable cohort of manufacturing/engineering (mainly indigenous) companies in the region has amassed a considerable depth of engineering knowledge and competency. The companies are generally small in scale²⁶ and face particular challenges in the current economic conditions, especially those who have relied more heavily on the construction industry in recent years.

Longer term, the future path for these companies is to develop the characteristics of high value creating manufacturing firms (see Appendix 4). Key priorities are: to become more

²⁶ For example, of the companies involved in machinery and equipment activities, only five companies out of 33 employ more than 50 people and these account for over half of the total employed. Amongst the companies involved in metal fabrication, only six out of over 40 companies employ more than 50 people, and account for two-thirds of total employment overall in this sub-sector

customer orientated and seek to innovate based on customer interaction and feedback; enhance management and leadership capability within the firm; and focus on developing proprietary technology.

An existing network of engineering companies in Longford and Westmeath focuses on knowledge sharing and skills development. The network comprises about 60 companies but faces immediate funding challenges.

Building and sustaining competitive advantage requires all firms to become increasingly knowledge and skills intensive. This extends beyond the innovation and knowledge applied in a research and development context into a wide range of related activities: knowledge of products, services and markets; enhancing the effectiveness and efficiency of core production processes and business functions; Bord na Móna & Green Energy

Midlands based Bord na Móna has embarked upon a strategy of diversification beyond its traditional peat-based businesses. Key elements include a targeted 30% displacement of peat with biomass by 2016 and investment in wind energy developments - to generate over 500MW of electricity by 2020. A cutaway bog at Mount Lucas, Co. Offaly is one of three planned locations for Bord na Móna wind farms. The Offaly farm is to generate 80MW electricity with 32 wind turbines.

building strategic business models (including partnering, revenue and IP sharing, networking and eBusiness); building relationships internally and externally with research institutes, customers, standards bodies, and industry networks²⁷. Creating this knowledge intensive environment within the firm involves continued investment in skills capacity. Again, a concerted regional approach involving engineering companies and knowledge and education providers could achieve economies of scale and result in a more competitive engineering sector in the region.

The developing 'Clean tech' sector in Ireland may allow engineering/construction companies in the Midlands to exploit new business opportunities. Much of the technology supporting the development and use of renewable energies is underpinned by ICT and engineering capacity, and the Midlands has demonstrated capabilities in these fields in both industry and research.

Forfás and InterTradeIreland have completed an assessment of the opportunities for Ireland within the Energy Related Goods and Services sector, matching international trends in investment to technological advances and domestic capabilities²⁸. A number of priority areas have emerged including ICT control systems for energy efficiency, eco-construction, carbon trading and green technology investment. For these opportunities to be taken, improvements are required to the framework conditions of skills, regulation, public procurement and R&D. A High Level Group on Green Enterprise was established in May 2009 to develop an action plan on green enterprise development in Ireland and has recently reported²⁹.

The key assets identified above indicate that the Midlands can play an important role in the future of advanced manufacturing and engineering in Ireland. The applied nature of the research activities undertaken by AIT and emerging in the developing GTI operation based in Athlone will assist in the development of industry-HEI linkages within and beyond the region.

²⁷ Report of the High Level Group on Manufacturing (2008)

²⁸ Forfás and InterTradeIreland (2008) Environmental Goods and Services Sector on the Island of Ireland

²⁹ High Level Group on Green Enterprise (2009) Developing the Green Economy in Ireland

5. Realising Potential: Enhancing the Business Environment

The region has many of the building blocks in place to attract investment from foreign and indigenous firms. But as the ways of doing business are changing, so too are the needs of firms to enable them to compete effectively from Ireland on the global stage. To achieve Ireland's ambition as outlined in the Smart Economy, the business environment needs to continuously evolve to meet these 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.

Enhancing Regional Governance

A recurring theme throughout this report is the need for collaborative action in order to captialise on collective assets and competencies in key sectors with potential and to create the optimum environment for that potential to be realised (incl. the development of an urban centre of scale). Advancing initiatives of this nature requires strong regional leadership and co-operation.

The Midlands region is different from most other regions in that it has no single dominant urban centre to act as a driver of regional economic development and a focal point for regional leadership. It is the only region that envisages the development of a polycentric Gateway to build critical mass. In addition, large centres (especially Dublin) outside the region have played an increasingly important role in the economic dynamic within the Midlands and will continue to play a role.

A 'Strategic Development Framework' for the Midlands Gateway (Indecon/KSA, 2006) has been developed, and the subsequent formation of the Midlands Gateway Implementation Forum (MGIF) is key to oversee the implementation of its recommendations. As part of this Gateway initiative a logo was designed and launched for the Midland Gateway.

The MGIF has formed a small number of sub committees focused in the following areas:

- Skills Audit Sub-Committee
- Branding of the Gateway Sub-Group
- Midland Ambassador Sub-Group
- Cost Competitiveness

Midlands Gateway Implementation Forum

In the Midlands, the MGIF facilitated a co-ordinated submission to the competitively based Gateways Innovation Fund (GIF) which was introduced following the DOEHLG/Forfás Gateway investment Priorities Study (2006). Unfortunately, the GIF selection and funding process has now been deferred following recent budget cut-backs. The four key projects proposed in the Midlands submission are:

The Midlands Innovation Centre (Tullamore and Mullingar)

Athlone Town East and West Regeneration Programme

Mullingar Integrated Sports and Leisure Facility

The Grand Canal Quarter Masterplan for Tullamore

Realising Potential

There are some challenges and opportunities that need to be considered to move to a stronger regional governance model in the Midlands:

- The formation of MGIF sub-groups to advance particular actions identified in the Strategic Development Framework is an approach that could be used to focus on the development of key sectors with potential and other business environment issues identified in this report.
- The regional administrative definitions of the Midlands utilised by the key enterprise support agencies Enterprise Ireland, IDA and FÁS are not aligned. Such misalignment brings unnecessary complexity to the advancement of regional initiatives and could be addressed to enhance coherence and collaborative effort within the region.

Innovation

Realising the potential for growth and development in the sectors highlighted earlier, particularly in indigenous small firms and newly formed enterprises, will depend on the ability of firms to add value to the products and services they produce, optimise the processes they employ to create them, build new products and services based on proprietary technology, and interact intensively with existing and potential customers/users of their products/services - creating as well as stimulating demand. The capacity to innovate is at the heart of that ability.

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

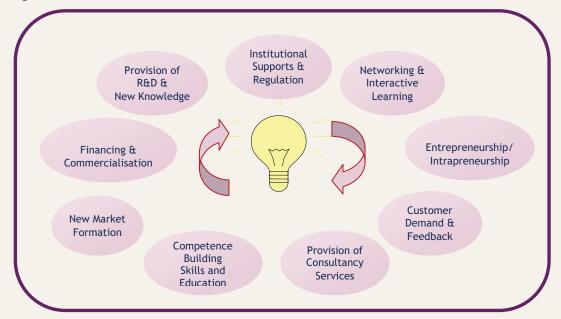


Figure 3: Activities that Stimulate Innovation

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, 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 engaging with the business community.

The entire 'innovation system' involves a number of elements, each of which is important in its own right. Successful innovation at regional levels is based on the effective interaction between the elements and engagement by firms, higher education institutions, government departments and development agencies. Activities at the regional level do not (and should not) operate in isolation, but do so within the wider national context - interactions at both national and international levels play an important role.

The Midlands possesses a number of key 'building blocks' that can make a positive contribution to innovative activity within enterprise:

- An Institute of Technology (AIT) that is focused on applied research and is proactive in terms of forging strategic alliances with partners outside of the region (for example through the Lionra research alliance initiative and the MOUs already in place with DCU and GTI³⁰
- A location that is accessible and in close proximity to key knowledge providers in other regions, such as NUI Maynooth, IT Carlow, NUI Galway and UL
- A Regional Campus Innovation Centre (the MIRC) that has supported some progressive early stage high technology and high potential start-up companies
- A (growing) base of international companies that are engaged in highly innovative activities, such as Ericsson (Athlone), Abbott (Longford), PPD (Athlone) etc.
- A number of successful networks such as the First Polymer Training Skillnet, and The Mid Med Skillnet
- Strengthening collaborative initiatives such as the Midlands Gateway Chamber and the Midlands Gateway Implementation Forum

Engagement by SMEs in particular may be limited by firms' capacity to absorb and adapt new technologies developed by others (such as HEIs), or by their understanding of the benefits of collaboration with others in a way that realises the value of complementary capabilities (rather than direct competition in the same 'space'), or even a lack of awareness of the supports currently available to them.

³⁰ AIT is the second largest recipient among Irish HEIs under EI's Innovation Partnership Programme and is in the top three knowledge providers in collaborative R&D projects completed under EI's Innovation Vouchers scheme.

Supporting Entrepreneurship

Whereas mobile investment tends to be attracted to the larger urban areas, there is potential within the region to create competitive environments to attract a concentration of new company start-ups across the region. As people face unemployment many are stimulated to develop their own businesses and consider entrepreneurship as a realistic option. The recent GEM Entrepreneurship report suggests that the Midlands has a relatively high rate of 'nascent' entrepreneurship but this is not translating into a similarly high rate of actual new firm formation and development. 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.

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 properties and attractive business and industrial parks that accommodate mixed-use businesses in a planned, strategic and discerning way that recognises the different needs of business activities (eg office, industrial, warehousing)
- 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.

'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 roll-out of national programmes in support of entrepreneurship by Enterprise Ireland has resulted in strengthening infrastructures within the region - key examples are the Community Enterprise Centres, the Midlands Innovation and Research Centre (MIRC) at AIT, and the promotion of applied research through the Applied Research Enhancement Programme. The development of the Midlands and West Enterprise Programme, a joint initiative involving EI,

AIT and GMIT, aims to promote successful business start-ups, supporting potential entrepreneurs from concept to commercialisation.

County Enterprise Boards offer a range of supports to small businesses in the region and facilitate the development of business networks in their areas, such as Women in Business networks (operating in Longford, Westmeath and Offaly) and an engineering network which has been operating effectively in Longford and Westmeath (but is currently struggling with a lack of funding).

Enhancing Productivity

The Indecon KSA analysis of the Midlands Gateway undertaken in 2006 indicated a productivity gap in the Midlands, with net output per worker in the manufacturing sector significantly lower than the national average. However, the profile of the Midlands manufacturing sector is very different than the national picture.

When comparing areas with similar sectoral profiles, the Midlands productivity performance appears much closer to the average. This would suggest that productivity in the Midlands is not lower than the national average per se, but rather that enterprise in the Midlands is typically in less high value activities than is the case nationally. Consistent increases in productivity, from new and existing enterprises, are necessary to remain competitive and to boost living standards.

Productivity improvement in the Midlands can come about in a number of ways. Principally, productivity improvements arise when a process is undertaken more efficiently or a product offering becomes more sophisticated. This can be achieved either by increasing the efficiency and sophistication of existing enterprises, and/or by attracting more efficient and sophisticated enterprises to the region.

The attraction of investment in high value activities can be brought about through the optimisation of the competitiveness factors outlined above.

Boosting the efficiency of operations currently being undertaken within the region is a vital step in ensuring the competitiveness of local industry is maintained. This can be done in a number of ways:

- Encourage firms to undertake productivity improving measures with the support of the enterprise agencies³¹
- Increase the efficiency of delivery of local services, allowing enterprises to benefit from productivity spillovers in the form of lower cost services
- Focus on sectoral needs advocate measures that will benefit target sectors (Specific infrastructures, initiatives etc
- Fostering IOT-industry linkages use IoT expertise in processes and technology for the benefit of local industry, and use local industry as a test bed for IoT learning

Forfás has published a 'Productivity Guide' (September 2009) which provides a practical information source for firms who wish to implement productivity enhancements. The Guide can be found at: http://www.forfas.ie/publication/search.jsp?ft=/publications/2009/title,4556,en.php

 Harnessing Entrepreneurship - increase local productivity through the creation of innovative enterprises.

Realising potential

A sectoral approach to promoting productivity improvements in the Midlands, focused on a small number of key initiatives, could be employed to enhance the competitiveness of industry in the short to medium term and encourage a transition to more high value added activities over the longer term.

The region has a predominance of small scale businesses, generally low value add, and limited international trading. Specific regional initiatives to encourage more customeroriented business models, to enhance management and leadership capability, and to support the development of proprietary technology and innovation are required.

The multiplicity of agencies involved in enterprise promotion may generate confusion among potential client companies. Access to information is crucial for small businesses and entrepreneurs who are seeking to develop and scale their businesses. A regional approach could be very effective in unravelling the complexity in what is a busy space (see Box). A key

Waterford City Council has developed a website to provide a 'one-stop' information portal for businesses. It is a good example of what can be done locally and incorporates an excellent 'which agency can help me' chart (see Appendix 5).

issue is lack of awareness of where potential technical knowledge and expertise of relevance to business resides.

The innovation voucher scheme has helped to highlight the competencies and expertise in the third level sector on an all-island basis but the information is not adequately highlighted (it resides in a subsection of the Enterprise Ireland website). A regional level channel for this information could be useful.

Skills and Education

Sectoral Needs

The development of the key opportunity sectors identified for the Midlands will require suitably qualified and skilled personnel. While sector-specific competencies need to be developed, increasingly as all sectors of industry become more knowledge-intensive, employees are required to apply a range of generic and transferable skills (including people-related skills such as communication, interpersonal, team-working and customer service; conceptual/thinking skills; and basic/fundamental skills such as literacy, numeracy & IT literacy)³².

A range of providers are relevant in the delivery of education and skills development at the local level. While national level policy plays a key role³³, meeting the skills needs of the region requires continued engagement in the regional context - between key agencies (such as FÁS, EI and IDA), providers in further education and higher education (VECs, Institutes of

³² Expert Group on Future Skills Needs (2007)Tomorrow's Skills: Towards a National Skills Strategy

³³ Implemented through the Department of Education and Science and Department of Enterprise, Trade & Employment

Technology) and the enterprise sector. An ability to be proactive in this area is already in evidence and is a strong base on which to build future initiatives, for example:

- AIT has established strong relationships with regionally based enterprises in terms of course development, research activities and entrepreneurship development.
- The Skillnets networks in the region such as MidMed and Polymer Training have helped in the provision of industry relevant skills development.
- The Midlands Gateway Chamber have commissioned a Skills Audit to further align skills needs of enterprise in the region with education training provision.

Upskilling

The skills development and deployment issues faced by the Midlands region mirror those which are being experienced nationally, although because of a historic skills deficit, the challenge is likely to be greater than in many other parts of the State. This skills deficit has been mitigated in recent years by the abundance of jobs in sectors which did not require high levels of education, such as construction and retail trade, and in agriculture and low-skilled manufacturing in earlier decades.

Retaining Skills

In the context of rising unemployment across a wide range of sectors and professions, it is important to retain existing skills within the region. A co-ordinated approach by key agencies such as FÁS, CEBs and EI to encourage professionals who have been made unemployed within the region to reapply their skills within the locale in an entrepreneurial fashion could be effective.

Physical Infrastructures

As companies increasingly engage in activities that involve building direct relationships with customers, international management, and building new markets, ease of access is paramount (both physical and electronic), regardless of what sector and/or activity a company is involved in.

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 and from a regional perspective the price and performance differential is a significant disincentive for companies to base outside of Dublin, and is a barrier to realising the future potential within the regions.

The development agencies contend that the future needs of enterprise require investment in Next Generation Networks and have identified specific targets in their response to consultations issued by the DCMNR:

- Access to next generation infrastructure and services in all the gateways of at least
 12Mbps uncontended, symmetric service for premises and homes by 2012;
- Access to next generation infrastructure and services in all the hubs and county towns
 of at least 12Mbps uncontended, symmetric service for premises and homes by 2015.

As is the case nationally, much of the major infrastructure is in place to deliver high speed internet to the majority of potential users in the Midlands region. However, 'last mile' connection issues continue to hamper the roll out of essential broadband access to many households and SMEs.

National efforts will have to be made to overcome these issues in the main, however, regional broadband solutions are possible in the interim; Louth County Council's usage of sewerage infrastructure to access buildings is a good example of overcoming last mile connection problems. Efforts should be made to publicise the technology that is available to the region, and low cost connection solutions promoted to the public and small industry.

Physical Access

The Midlands region is traversed by many national transport corridors (the M4, 6, 7 and 8, as well as rail lines to Sligo, Galway and Limerick/Cork from Dublin, all cross the region). Close proximity to Dublin Airport and good connections to it present a convenient entry point for international visitors and good international business connections. The position of the Midlands offers potential for good quality inter and intra-regional transport links off the back of the national transport network. The full potential of these benefits has not been realised however, as the local transport links which could connect up national transit routes for the benefit of the region have not been fully developed.

- Further work is required on the N52, N55, N4 (Mullingar to Longford) & N80 to bring these roads to the standard which is necessary for the successful development of the linked gateway of Athlone-Tullamore-Mullingar, as envisaged in the NSS, and its connectivity to other principal towns of Longford and Portlaoise. The N55 is an important link from the Midlands to the Border/Northern Ireland and the North East.
- Alongside intra regional connectivity, the N18, a key national routeway from the Midlands to the Mid and South-West (including Shannon airport) remains incomplete, with a key section of road from Athenry to Gort having been recently deferred. It is important that this link be completed in order to realise the full benefits of improvements which have taken place on other national routes servicing these regions.

Utilities

Substantial investment in the region's water and waste water infrastructure has been undertaken in recent years through the individual local authorities. Continued investment in water services under the current NDP aims to address remaining capacity shortages.

In the recent Forfás (2008) assessment of water and waste water services from an enterprise perspective a number of issues were highlighted for the Midlands, including insufficient water and waste water capacity in Athlone by 2013, and capacity deficits in waste water treatment in Tullamore and Mullingar by 2013. It is expected that planned water and waste water infrastructure projects will address these deficits.

6. Priority Actions

Many of the suggested actions below will serve to address a number of the opportunities and challenges identified in this report, and will benefit from increased proactive collaboration across the relevant actors in a structured way. There are many actions that can be taken at a regional level. Whereas others require a national response, regional actors need also to consider how they can best take advantage of national initiatives, and deliver them 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 are considered essential to support enterprise development in the Midlands:

Accelerated Development of the Gateway

The establishment of the Midlands Gateway Implementation Forum has provided a foundation for on-going collaborative action to support the development of the Midlands gateway. The deferral of the Gateway Innovation Fund has been a setback, particularly for 'developing' gateways such as the ATM, and its reinstatement is a matter of priority for progressing the linked gateway concept in the Midlands.

Enhanced Cross-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 in the Midlands can also enhance their collaborative actions to facilitate companies in this environment, and to:
 - Provide clarity on the availability of business supports, the role of each regionally based agency and key contacts
 - Taking into account the business environment requirements for entrepreneurship, undertake an assessment of relevant existing infrastructures (both physical and soft) and identify ways in which they could be further enhanced and become more cost competitive

- Develop a more proactive approach for ongoing and structured communications with the HEIs (in terms of innovation, technology transfer, skills needs etc.,) - 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 Platform programme, Competence Centres initiative and Skillnets sector specific training initiatives
- Involve overseas and indigenous company participation in trade missions and inward investment itineraries.

Sectoral Opportunities

Specific actions to achieve the potential of sectors in the region will need to be developed. There would be benefit in forming small, sectorally focused teams on a regional basis to further explore and develop specific opportunities in identified sectors. Existing initiatives should be considered by the sector teams to explore potential synergies and opportunities for knowledge sharing.

Skills Development

- Considering the severity of the down-turn in construction in the Midlands, a specific regional (or tailored national) initiative on reskilling and upskilling may be effective.
 Consideration should be given to developing innovative delivery mechanisms for reskilling people in employment.
- A regionally based collaborative initiative to encourage entrepreneurial potential within the growing cohort of unemployed, which also includes many highly skilled professionals, could be developed.

Enhancing Productivity

The region has a predominance of small scale businesses, generally low value add, and with limited international trading.

Specific regional initiatives to encourage more customer-oriented business models, to enhance management and leadership capability, and to support the development of proprietary technology and innovation could be developed, on a cross-agency basis, and in a sectorally focused way (perhaps starting with food processing and engineering). A Productivity Guide for firms has recently been published by Forfás which provides a useful practical tool for companies to identify actions they need to take specific to their own company needs³⁴.

³⁴ Forfás (2009) Boost Your Company's Productivity - Simple Steps

A collaborative approach (including HEIs, the business community and the enterprise agencies) could be taken to enhance awareness of technical knowledge and expertise residing within HEIs (regionally & nationally) of potential relevance to regionally based businesses. Enterprise Ireland has already included a section on its website containing such information, which was developed for the Innovation Voucher Scheme³⁵.

Innovation

 Encourage an innovative mindset in the region through the promotion of examples of successful innovation from across the public and private sector.

Physical Infrastructures

Broadband

High quality and pervasive broadband is a fundamental enterprise and quality of life requirement. National efforts will have to be made to overcome these issues in the main; however, regional broadband solutions are possible in the interim. Efforts should be made to publicise the technology that is available to the region, and low cost connection solutions promoted to the public and small industry.

Roads

The region is traversed by high quality major inter-urban (MIU) routes, the focus now needs to be on key intra-regional links in order to optimise the impact of the MIUs and to ensure efficient connectivity between the main regional centres in the region. Priority routes are: N80 (Tullamore to Portlaoise - enhancing connectivity between these two centres and facilitating better access to N7 & N8), the N4 (Mullingar to Longford) and the N18 (Athenry to Gort - facilitating access to the Mid-West and Shannon Airport).

Water/Wastewater

 Continue with planned investments in water and waste water infrastructure to ensure forecast deficits in key centres do not arise.

³⁵ See the listing of EI Innovation Voucher 'Knowledge Providers' at http://www.innovationvouchers.ie/knowledge_providers.aspx

Appendix I

Existing Enterprise Agencies, Initiatives and Supports³⁶

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 throughout the country. 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 across 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.

³⁶ This overview represents a selection of existing agencies, initiatives and supports and is not a complete listing

Enterprise Ireland Activity in the Midlands region

The Enterprise Ireland client base in the Midlands (in 2008) employs over 8,360 people, accounts for 7% of total employment and is dominated by firms in the sectors food, basic and fabricated metal products and the non-metallic mineral products sectors (see Figure (a) below).

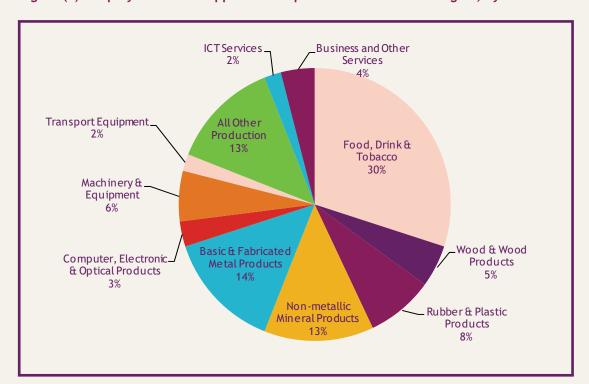


Figure (a): Employment in El supported companies in the Midlands region, by sector 2008

Source: Forfás, Annual Employment Survey, 2008

Enterprise Ireland has supported the development of ten Community Enterprise Centres across the region, with two each in Longford and Westmeath, and three each in Offaly and Laois.

The Agency has also provided funding for the development of Campus Incubation Centres at the Midlands Regional Innovation Centre in Athlone IT.

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.

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.

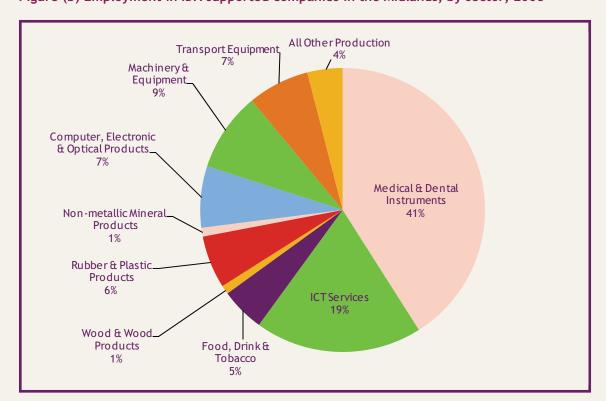


Figure (b) Employment in IDA supported companies in the Midlands, by sector, 2008

Source: Forfás, Annual Employment Survey, 2008

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 Midlands

The IDA Ireland client base in the Midlands (in 2008) employs over 4,690 people, accounts for 4% of total employment and is dominated by firms in the ICT and Medical Technologies sectors (see chart above).

A key activity for IDA in the regional context is the development of a strong value propositions 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.

IDA Ireland is currently assessing a number of land banks to accommodate a proposed Midlands Gateway Technology Park which will give additional scope for the development of the life sciences sector in the Midlands.

Recent FDI investments (over the past 3 years 2007 to 2009) in the Midlands region include:

Company	Sector/Activity	Estimated Job Numbers
Abiomed	Medical Technologies	-
PPD	Pharmaceuticals	250
Intertek	Pharmaceuticals	-
Integra Lifesciences	Medical Technologies	65
Teleflex	Shared Services	150
KCI	Medical Technologies	250
Georgia Tech Irl	Applied Research	50
Cameron Irl	Industrial Engineering	140
AXA Assistance	Customer Support	300

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 technologies³⁷.

³⁷ 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

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.

County Enterprise Boards (CEBs)

The Midlands region has four CEBs. The CEBs support the start-up & development of local business in Ireland. 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 (see above).

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 facilitating 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 an 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 for each region.

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. The following groups are active in the Midlands region: Offaly Integrated Local Development Company Ltd, Longford Community Resources, Laois Partnership, Westmeath Community Development Ltd.

FÁS

FÁS is the National Training and Employment Authority and provides training courses, apprenticeship programmes and re-skilling/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 6 employment services offices in the Midlands Region and Regional Training Centre is located in Garrycastle, Athlone.

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 the main enterprise agency developed business and technology parks in the Midlands region³⁸.

Athlone Business and Technology Park

Athlone Business & Technology Park is a fully landscaped 40 hectare (100 acre) park 128km from Dublin Airport and 134 km from Shannon Airport. Located on the River Shannon, there is direct access to the N6 National Primary Route and M4 motorway to Dublin.

The Business Park has been landscaped and designed to a high standard offering accommodation for both manufacturing and international services clients. The park has greenfield areas for future development, a fully operational Crèche facility and is within close walking distance of shops etc.

Mullingar Business and Technology Park

Mullingar Business & Technology Park is a 27 hectare (68 acre) park located adjacent to the N52 Dundalk to Limerick Route and the M4 / M6 Motorway to Dublin. The site boasts existing designs for advanced technology Buildings and high specification office facilities to suit both manufacturing and internationally traded services clients.

The services infrastructure has been developed to suit client requirements and there are greenfield sites available for future development on the park.

Portlaoise Business and Technology Park

Portlaoise Business & Technology Park is an 18-hectare (46 acre) park adjacent to the N7 National Primary Route connecting Limerick and Cork with Dublin. Portlaoise is the principal town and administrative centre of Co. Laois and is within commuting distance of Dublin.

The park has been fully landscaped and has a services infrastructure to suit the needs of both manufacturing and international services clients. The park is within walking distance of Portlaoise town and there are designs in place for high specification office and technology building as well as greenfield sites for future development.

Tullamore Business and Technology Park

Tullamore Business & Technology Park is a 31 hectare (78 acre) park offering high specification advanced technology and office building designs, along with greenfield sites for future development. The park is home to a range of multi-national clients and is maintained to a high standard.

³⁸ Parks developed and managed by IDA Ireland unless otherwise stated

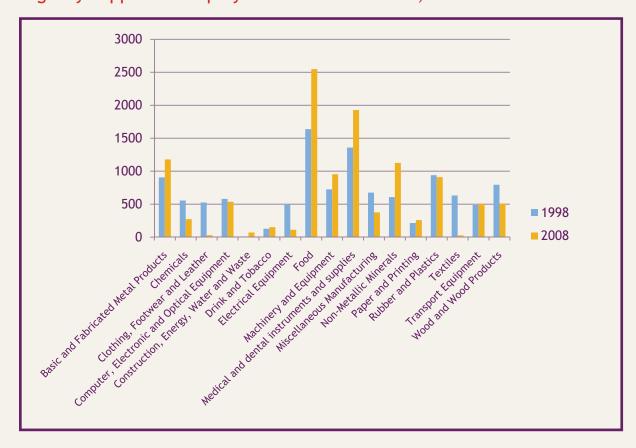
Birr Technology Centre and InnovationWorks (Shannon Development)

InnovationWorks Birr is housed in Birr Technology Centre, a modernised mill building on an attractive riverside site in the heart of Birr, Ireland's Georgian Heritage Town. An attractive mix of original features and state-of-the art business services and facilities, InnovationWorks Birr provides the ideal home for new, high-potential knowledge-based businesses, supporting them through the crucial start-up phase and early years of their development.

The InnovationWorks facility at Birr Technology Centre extends to 650 m2 of business incubation space designed to accommodate the needs of new knowledge-based enterprises. From here, growing businesses can be accommodated in 1300 m2 of business expansion space on the upper floors.

InnovationWorks Birr offers a fully serviced modern office environment that incorporates state-of-the-art telecommunications and managed conference and meeting facilities, situated within attractive surroundings and a dynamic working environment.

Appendix 3:
Agency Supported Employment in the Midlands, 1998-2008



Appendix 4

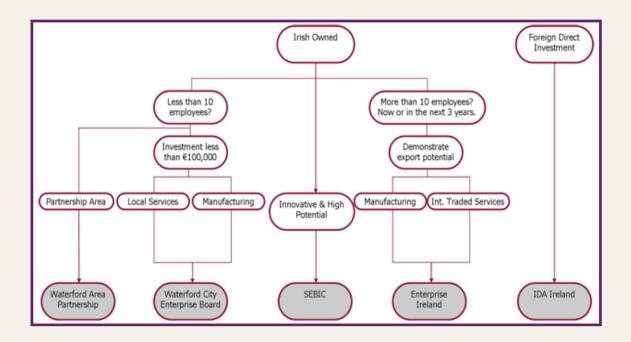
Characteristics of High Value Manufacturing Firms

- Focus on building links to customers, suppliers, competitors and research institutes. These links facilitate sharing of best practice and understanding of changing needs and trends that, in turn, influence product and market development, and process and service delivery improvements
- Monitor market trends and develop early response mechanisms to benefit from emerging opportunities
- Invest in capital equipment, automation and leading-edge technologies, together with the use of advanced production processes including e.g. Six Sigma and Lean Manufacturing
- Benchmark regularly against best practice and continuously search for ways to improve productivity, effectiveness and efficiencies
- Invest in R&D in new products and processes or at a minimum build capabilities and networks to take advantage of science and technological R&D undertaken elsewhere, and adapt/apply acquired knowledge to innovate differentiated products, processes, services and/or solutions
- Engage in opportunities presented by new business models: understand where the company 'fits' within a global supply chain, for example, by identifying niche product opportunities and partnering as appropriate
- Build strengths in the application of regulation and standards appropriate to the industry
- Engage proactively in the development of business processes, using technology and eBusiness concepts across all aspects of internal business processes through to linkages with customers, suppliers and networks
- Engage in and support continuous learning for all staff throughout the firm, and ensure continuous development of management capability relevant to the innovative organisation
- Develop a culture of agility and flexibility and demonstrate an ability to anticipate change and respond proactively
- Demonstrate openness to new ideas and communication within the firm itself, thereby encouraging innovation
- Recognise that the knowledge content of all jobs is important to the organisation's
 performance and is embedded in the firm, and understands that the knowledge
 required for all jobs will change and adapt regardless of the nature of the work
- Actively encourage and reward high performance at all levels.

Source: Report of the High level Group on Manufacturing (2008)

Appendix 5

Map of Enterprise Agencies from 'waterfordbusinessinfo.ie' website



Notes

Notes