

Building Competitive Advantage

4 Building Competitive Advantage

Enterprise in Ireland over the next decade will operate in a global competitive environment that will be considerably more challenging than in the past. The strengths and experience that we have built up will continue to contribute to the success of enterprise, but companies in Ireland will have to differentiate themselves from their competitors in new ways in order to create sustainable competitive advantage.

In the past, Ireland has set a standard for change and growth that is admired around the world and we can continue to do so. The biggest barrier to this is complacency: there is a real danger that enterprise in Ireland will be overtaken by more agile competitors in other countries. Overcoming this complacency and taking decisive action requires a renewed sense of national cohesion, with a commitment to execution throughout the entire enterprise community and the support systems.

As outlined in Chapter 3, in the years ahead, our ability to build sustainable enterprise in Ireland will depend critically on a unique combination of:

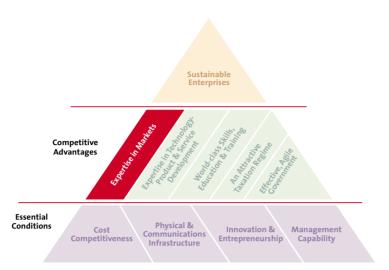
- >> Knowledge of customers and market needs
- >> The ability to develop new products and services to satisfy those needs
- A world-class education and training system that is responsive and flexible and that supplies the skills required by the changing needs of enterprise
- >> A competitive taxation regime
- >> An effective, agile government system.

The first two of these present the greatest challenge for Ireland: our track record in these areas is weak. The last three, on the other hand, have contributed significantly to the economic success of the past decade. However, in the current competitive climate, they take on a new importance and need renewed emphasis.

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4.1 Market Expertise



In recent years, enterprise policy has stressed the need for companies to engage more in research and development. This must continue as a major objective of enterprise policy in the years ahead, but it must be complemented by a new emphasis on market understanding and expertise.

In an increasingly global marketplace, enterprises based in Ireland will succeed only if they develop an in-depth understanding of their customers and their needs. They must be able to anticipate changing requirements and to identify competitive challenges in order to differentiate their product and service offerings and sustain their market position. This will require a much deeper level of engagement with the customer than the majority of companies in Ireland currently have.

The Challenge

Over the past decade, the overall value of exports from Ireland has grown very substantially. The figures, however, tend to mask two important facts:

- >> Export growth in most indigenous sectors has been negligible
- >> Exports from foreign-owned companies have been largely directed and managed from outside Ireland.

80000 Indigenous Companies Foreign Companies 70000 60000 50000 €Z 10000 30000 20000 10000 0 1990 1991 1993 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 Source: Forfás, Business Information System, (unpublished)

Irish Exports (Agency Assisted Companies) 1990-2002

Figure 4.1

In the **indigenous** sector, exports grew from ≤ 4.6 billion to ≤ 8.7 billion between 1990 and 2002. This average annual growth rate of 5.5% is in nominal terms, and when inflation is taken into account, the real growth for indigenous companies has been negligible. The poor performance of the majority of companies is partly hidden by the exceptional performance of some individual companies that demonstrate world-class capability.

Two major sectors of the indigenous enterprise base – 'Food, drink and tobacco' and 'All other manufacturing' – which together account for 68% of sales by indigenous companies,⁸² recorded little or no sales growth in real terms over the past decade. Given that economic conditions were particularly favourable, this lack of sales growth highlights a serious weakness.

Indigenous companies – again with a few exceptions – have also failed to diversify in foreign markets, and continue to rely heavily on the UK for exports, with 51.3% of exports in 2001 being to UK markets. This results in greater risk through exposure to currency fluctuations.

Exports from **foreign-owned** companies, on the other hand, have grown significantly over the past decade, and by 2002 accounted for 89% of all agency-assisted Irish exports.⁸³ However, the majority of these companies do not conduct their sales and marketing activities from Ireland. These activities are usually managed and executed elsewhere within the corporate family. The resulting lack of direct customer interaction limits their ability to innovate and to influence their future development in Ireland.

A number of challenges must be overcome if we are to address our current underperformance in marketing and customer engagement:⁸⁴

- 83 Forfás, Business Information System, 2004.
- 84 Quaestus and MDR Consulting, Marketing, Sales and Innovation Capabilities of Irish SMEs, 2004.

⁸² Forfás, Annual Business Survey of Economic Impact, 2003. These two sectors account for 68% of the €23.6 billion sales generated in 2002 by indigenous manufacturing and internationally-traded services companies supported by the development agencies.

- >> There is a scarcity of sales personnel with the right mix of industry background, experience and technical knowledge
- Irish marketing graduates are perceived by industry to lack practical business skills
- >> Only 25% of sales personnel in Irish SMEs have a formal qualification in marketing or sales, compared with 41% in such firms overseas.

The vision for enterprise in Ireland in 2015 set out in Chapter 3 describes Ireland exploiting in-depth knowledge of markets to drive international sales and to develop new, innovative products and services. If we are to realise this vision, we need to significantly enhance our export promotion and market intelligence gathering and dissemination capabilities.

4.1.1 Export Promotion and Market Intelligence

To address the need of firms – and particularly the need of SMEs – for up-to-date, relevant information about developments in geographical, sectoral and customerspecific markets, Ireland's overseas market watch function will have to be considerably strengthened. Smaller firms in particular are faced with specific challenges when entering new markets, including lack of market intelligence, distance from markets and lack of resources or skills.

Because of Ireland's small domestic market the indigenous company base finds it necessary to internationalise before it has adequately tested the market, gained a key reference customer, or built management capability across a range of functions.

The Culliton Report recommended that, in relation to the development of indigenous companies, the relevant operations of IDA,⁸⁵ An Bord Tráchtála and Eolas should be brought together.⁸⁶ This has merit in providing a single source of information and support for Irish companies - Enterprise Ireland. However, we believe that the specialist focus and marketing and technological expertise in Enterprise Ireland has been eroded over time and now needs to be re-energised.

Enterprise Ireland will require a new focus and energy and a development of existing resources to:

- >> Build greater sectoral expertise
- Focus on niche areas of greatest interest to Irish companies
- Strengthen the mechanisms for disseminating the most relevant market intelligence adapted to the needs of individual firms
- >> Enhance support mechanisms through the use of consultants and mentors with sector-specific expertise operating in the target market.

A review should be undertaken to ensure that the overseas offices are located in those markets that present most potential. Performance measurement mechanisms should also be devised that evaluate success against the key objectives of increased exports and diversification of export markets.

85 Industrial Development Authority.

86 The Agency with primary responsibility for the development of indigenous companies is now Enterprise Ireland.

Recommendation

Establish, within Enterprise Ireland, a dedicated structure, 'Export Ireland', with its own budget and strong, experienced leadership, to develop a more focused approach to export market intelligence and promotional activities. (Department of Enterprise, Trade and Employment)⁸⁷

4.1.2 The Sales and Marketing Skills Base

Higher education is not adequately meeting the needs of Irish companies in relation to sales and marketing skills. At higher level, there are 134 courses (full and parttime) with marketing and sales components. Of these, 38 have marketing and sales as a major element, while for 96 it is a minor element. These courses provided an output of 7,163 graduates at degree or post-graduate level in 2003. While this is adequate in terms of numbers, the graduates are considered to lack practical business skills. The ability to negotiate, transact business and develop customer relationships in languages other than English is also a basic requirement that must be addressed.

Recommendation

Incorporate work placements and modules that focus on the practical capabilities required by firms into marketing and sales curricula. These should also be available to students of technical disciplines. (Higher Education Institutions)

This report places a new focus on the importance of sales and marketing skills in rebalancing the capability profile of businesses in Ireland. For many firms, difficulties in sourcing suitably qualified and experienced sales and marketing staff can be an impediment to growth. Growing the national pool of sales and marketing specialists is therefore a key priority. This should be done at all levels, spanning recently qualified sales and marketing personnel, as well as drawing in from abroad professionals who are experienced in international sales and marketing.

Recommendation

Establish a five-year programme, to place, on a cost-sharing basis, 1,000 graduates and internationally experienced professionals in Irish firms to augment the stock of national sales and marketing talent. This programme should be complementary to existing programmes, such as the Export Orientation Programme.⁸⁸ (Enterprise Ireland, IDA Ireland)

Notwithstanding the considerable level of call centre activity in Ireland, which involves some customer contact, foreign-owned companies in Ireland generally lack the business functions that engage with customers on a more active basis and build deep relationships with them. By encouraging these companies to carry out activities that involve closer interaction with the customer such as market research, Internet sales, lead generation, target marketing, and product/order and sales management, Ireland's market expertise will be developed over time to match our production expertise.

88 IBEC's Export Orientation Programme offers recent graduates a one-year placement abroad with an Irish company. The cost of each placement is shared equally between the individual companies and the relevant development agency. The programme normally consists of a three-month familiarisation period in Ireland with the sponsoring company, three months formal language training abroad and six months work experience abroad with the company.

⁸⁷ The actor responsible for implementing each recommendation is shown in parentheses.

To facilitate this transition, IDA Ireland should attract the sales and marketing functions and European headquarters of both established multinationals and smaller companies at an early stage of internationalisation. This would involve targeting companies from countries where Ireland has already been successful, in particular the US, and also seeking to capitalise on potential arising from emerging non-European markets, for example, China and India. Newly internationalising foreign-owned companies seeking to penetrate European markets can either develop markets on a country-by-country basis or seek a single location that can act as a key access point – a gateway. The UK and France are well-established gateways for many larger non-European companies.⁸⁹ Although it will be a challenge to compete with such traditionally successful European locations, Ireland's recently introduced 12.5% corporation tax rate for all trading activities gives us a particular advantage when a company is choosing its first European base.

The primary concern of companies addressing the European market for the first time is to grow sales. To do this, they must ensure that their products and services are suited to European markets and that they reach their customers in an efficient and effective manner. They need to identify optimum channels to market and manage logistics and distribution (whether directly, or through outsource partners). They also need to understand the taxation and regulatory regime in each country and deal with accreditation, invoicing and customer support activities.

If we are to be successful in targeting these early-stage growth companies, IDA Ireland's offering will need to be adapted to meet the specific needs of these investing companies.

Resources within the development agencies (including their overseas networks) and expertise within Ireland's company base could be effectively leveraged to develop a compelling support product for these target companies. A small number of indigenous companies already offer comprehensive 'gateway' services to non-European corporations.

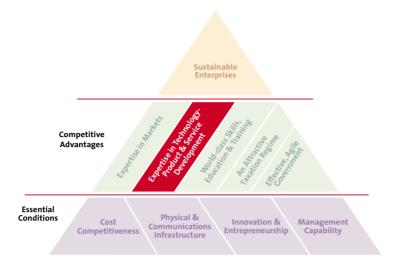
While such initiatives are unlikely to deliver high employment in the initial stages, they would provide a base from which to build a wide range of high-value activities over time.

Recommendation

Target sales and marketing and European headquarters projects from both established multinationals and smaller companies at the early stage of internationalisation. (IDA Ireland)

Based on number of projects, the UK held 49% market share for FDI into Europe in headquarter activities and 35% for sales and marketing activities in 2002; France held 9% market share for headquarter activities and 15% for sales and marketing activities in the same year. Ernst and Young International Location Advisory Services.

4.2 Expertise in Technology - Product and Service Development



The expertise in markets outlined previously, together with the application of advanced technologies and business processes, will inform the development of highvalue products and services. Enabling technologies may be acquired from abroad, or they may emerge from our own research base. As a small country, our ability to transfer and apply technologies and knowledge created elsewhere to the development of new products, services and processes is just as important as our ability to carry out world-class scientific research.

The Challenge

As outlined in Chapter 2, Ireland's total R&D investment, public and private, at 1.27% of GDP (1.39% of GNP), is considerably below the EU average of 1.93% and it will be difficult to achieve the 3% target of GDP by 2010 agreed by the EU Heads of State.

The recent increase in state investment in basic research should continue and it should be complemented by a similar programme of market-led applied research in order to fully realise its economic benefit. Both basic and applied research programmes need to be focused so that they are relevant to national needs and so that they achieve critical mass and coherence. It is also vitally important that capability and capacity is built up at firm level.

To develop the required expertise in product and service development we must:

- >> Build our own knowledge base by investing in research
- >> Build enterprise capability to develop products and services, by:
 - Ensuring the research and enterprise agendas are aligned and facilitating this by developing strategic technology platforms and encouraging increased collaboration between academia and enterprise, and
 - Applying non-technological innovation, which will become increasingly important as the economic contribution from services and the creative sectors increases
- >> Ensure policy coherence for research and innovation.

4.2.1 Building Our Own Knowledge Base

Under the National Development Plan (NDP) 2000-2006, substantial investment is being made in basic research through SFI and the HEA's PRTLI.

A small country must focus its investment, as it cannot develop world-class knowledge and skills in all disciplines and technologies. The strategic decision to focus the SFI research programme on the areas of information and communications technology and biotechnology was based on an informed view that these were the most significant areas to underpin the long term development of the Irish economy.⁹⁰

The primary benefit of investment in excellent basic research is the supply of people at PhD level. These advanced skills are of particular importance not only for the creation of new knowledge in Ireland, but also to ensure the scientific capacity to absorb new knowledge developed elsewhere. The focus of these programmes should be kept under review to ensure that they address changing needs.

Recommendation

Continue funding for the SFI and HEA research programmes on a multi-annual basis beyond the current NDP. (Department of Enterprise, Trade and Employment, Department of Education and Science)

In order to fully realise the economic benefit of this investment in basic research, it must be complemented by focused, market-led applied research that addresses the specific needs of enterprise.

4.2.2 Building Enterprise Capability

For many firms, building in-house R&D capacity is a challenge. They lack resources, not only to conduct R&D, but even to absorb new developments coming from outside.

Investment in R&D and innovation by enterprise in Ireland is relatively low. At 0.88% of GDP, Ireland's Business Expenditure on R&D (BERD) is only 73% of the EU average and 57% of the OECD average. There is a need to increase business investment in research and development. It is estimated that BERD will need to increase from €917 million in 2001 to an estimated €2,540 million in 2010⁹¹ to meet the EU 3% R&D target.

The state can play a role in assisting access to publicly funded research and in facilitating firms to build R&D capacity and capability. State intervention is justified on the basis that companies undertaking R&D are not the only ones to reap the benefits. Benefits can be realised through the enhanced capability of R&D employees whereby their experience to innovate and to imitate becomes a social benefit; technological progress made by one firm can be at least partly transmitted to other firms and be of value in improving efficiency and productivity; and when foreign firms undertake R&D in Ireland, the firm becomes more embedded in Ireland as it comes to rely on skilled R&D employees.⁹² Because of the positive spill-over effects associated with R&D, nearly all OECD governments use fiscal incentives to encourage business R&D.

⁹⁰ A Technology Foresight exercise was conducted in 1998/99 with the active participation of academia, enterprise, development agencies and other stakeholders.

⁹¹ Interdepartmental committee on Science and Technology, Building Ireland's Knowledge Economy; An Action Plan for Investment in R&D to 2010, (forthcoming).

⁹² Murphy, Walsh, Barry, UCD; The Economic Appraisal System for projects seeking support from the Industrial Development Agencies, 2001.

Although there is a wide range of existing supports available today, their value is not being fully realised because of a low level of cohesion or strategic focus.⁹³ A lack of co-ordination between the agencies inhibits the strategic use of funding and resources and this also needs to be addressed.

Supports should be designed to build the capacity of enterprise to absorb the results of publicly-funded research and to employ the highly skilled people it produces and apply them to the development of new products and services. The collaborative process of identifying and elaborating strategic technology platforms (as outlined below) will help to develop the capability of participant firms at the same time as building the knowledge base.

Mechanisms need to be developed to ensure that Irish enterprises – and particularly smaller firms – have timely access to relevant knowledge wherever it may reside. Companies need to access knowledge of emerging technologies, available expertise and facilities, competing products, changing customer requirements and developments in standards and regulations.

Recommendation

Establish, within Enterprise Ireland, a dedicated structure, 'Technology Ireland', with its own budget and strong leadership, to develop a cohesive, strategic and focused approach to market-led applied research and technological development and to leverage increased enterprise investment. (Department of Enterprise, Trade and Employment)

This will require a new focus and energy within Enterprise Ireland and a building of in-depth sectoral knowledge. Currently Enterprise Ireland is reviewing its strategies.

Technology Ireland' should facilitate the building of in-firm capability and capacity for technological and non-technological innovation by encouraging consistency and cohesion in the applied research agenda and by stimulating collaboration between enterprise and academia. Each of these areas is discussed in more detail below.

Technological Innovation

Technological innovations typically arise from scientific and technological research. To ensure a steady flow of ideas, mechanisms that foster linkages and collaboration between academia and enterprise are critical, as are mechanisms for improving enterprise's capacity to absorb and exploit technologies.

Strategic Technology Platforms

Strategic technology platforms are potentially valuable mechanisms for building consistency between the research agenda and enterprise activities. A strategic technology platform is a field of technology that draws on more basic areas of knowledge (such as mathematics, physics or computing) and which can in turn be applied to the development of a wide range of products and services. Figure 4.2 provides an example.

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Products and Services Forensics Banking Security Medical Diagnostics Consumer Electronics Medical Diagnostics Medical Diagnostics Consumer Electronics Biometrics Biometrics Strategic Technology Platform Mathematics Computing Neuroscience Physics Physiology

Figure 4.2 Strategic Technology Platforms: An Example

Basic Areas of Knowledge or Research

Strategic technology platforms are identified by a process of analysis and consultation that involves enterprise, educational and research communities, state agencies and finance providers. They offer many benefits, including generating knowledge and trained personnel for which there is absorptive capacity in enterprise and meeting the real research needs of enterprise.

Strategic technology platforms can be a basis for robust competitive advantage and can contribute substantially to ensuring the continuing relevance of research investment by:

- >> Articulating enterprise needs to the research and education communities
- Connecting different businesses together in networks or clusters of common interest
- >> Defining specific applied research projects
- >> Prioritising longer-term research needs.

The process of identifying strategic platforms fosters strong interaction and knowledge transfer between the different players in the innovation system. The building of expertise should also ensure that Ireland can link into similar initiatives being undertaken at EU level. Ireland already has experience in undertaking such an initiative, given the success of the Technology Foresight exercise conducted in 1998/1999.

Recommendation

Establish a consultative process to identify technology platforms. These platforms should be used to prioritise state expenditure on research and enterprise development. ('Technology Ireland')

Collaboration between Enterprise and Academia

Firms need to access relevant research in order to build expertise and capability in product and service development. Enterprise-academia collaboration can enable firms to access knowledge and technical know-how, both on an all-island basis and internationally. We need to develop world-class technology transfer and commercialisation mechanisms.

Mobility of researchers between industry and academia through sabbaticals and secondments should be encouraged. This would benefit both industry and academia: industry would be exposed to current best practice in research and technology, while the academics would be exposed to industry problems and marketrelated issues facing industry, as well as having the opportunity of commercialising their research results.

Internationally, public support for business sector R&D has moved strongly towards co-operative research. Enterprises that collaborate on R&D with other firms and other organisations/research providers have been shown to be the most effective innovators.

Despite many existing initiatives, collaboration between enterprise and academia has been limited in Ireland in contrast with, for example, Finland and Denmark, where co-operation and networking are well-established practices. This is due to a number of factors, in particular:

- Low levels of investment in R&D (both public and private) in the past
- >> A lack of proactive initiatives by universities and institutes
- >> The lack of capacity or resources within the enterprise base to source, integrate and exploit new ideas
- >> The lack of a framework for determining intellectual property rights.

The National Microelectronics Research Centre (NMRC), which is exceptional in this regard, demonstrates an effective model that could be replicated in other fields.

Ireland's increased investment in R&D and innovation is expected to result in an increase in intellectual property. A code of practice has been developed by the Irish Council for Science, Technology and Innovation (ICSTI) for the protection and exploitation of intellectual property arising from publicly funded research. Its objective is to ensure that intellectual property can be transferred easily from the research bodies and into enterprise, with clear rights and responsibilities on both sides. A similar code of practice for public-private funded research is currently being developed.

The institutes of technology are well placed to support enterprise through technical consulting and collaboration on close-to-market applied research projects. However, given the structural challenges of SMEs, the institutes must take a proactive, outreaching role to make this a reality. Section 4.4.1 outlines the role for educational institutes in facilitating the development of enterprise.

Recommendation

Public funding for applied research and in-firm R&D should be progressively increased to match that invested by the Department of Enterprise, Trade and Employment in basic research. This includes support for in-firm capability development, commercialisation, cluster-led academic research and innovation partnerships. (Department of Enterprise, Trade and Employment)

Non-technological Innovation

Innovative thinking can be applied to any phase of the product/service lifecycle. Technological innovation is applied typically (but not exclusively or necessarily) to the development of new products and services. Non-technological innovation, which may include for example, design, brand management, business process re-engineering, or new marketing or sales approaches, is typically applied in other phases of the lifecycle.

In Ireland, we need to recognise the importance of design in innovation and its relevance to many Irish companies. The systematic use of design can offer companies significant benefits, helping them to differentiate their products, deliver efficiencies and reduce costs. Firms in Ireland are relatively weak in the strategic use of design,⁹⁴ and it is estimated that there are fewer than 100 industrial designers working in enterprise.

Non-technological innovation is of particular relevance to service activities and these are, as we have seen, becoming more important. In services, innovation may result for example, in new financial instruments, new sales concepts and formats, organisational restructuring, or the bundling of new services with existing core products. In the years ahead, success in high value-added services will depend heavily on this kind of 'soft' or non-technological innovation.

The key drivers of innovation in services include:

- New technologies which have an enabling role, eg facilitating electronic banking, logistics tracking systems, or virtual (electronic) design environments that enable collaboration by a number of people located in different buildings or different countries
- >> Complexity: solving customer-specific problems where each problem is different and requires a different solution
- >> Mass customisation: providing a high volume of customer-specific solutions
- >> Blended offerings, that combine products and services
- >> Regulatory changes, eg financial services.

A range of factors tends to inhibit innovation in the services sector, including a lack of R&D funding and service concept development. Although the significance of services is now recognised, the importance and scope of innovation in services is relatively uncharted. Services innovation differs from product innovation in a number of respects. While high value-added and knowledge-intensive services⁹⁵ are typically very innovative, this innovation is difficult to quantify statistically, because it tends to be incremental and based on informal activities within firms. However, in Canada where services R&D is measured, it is estimated at approximately 30% of total enterprise R&D. Because of the problem-solving nature of service activities, the customer is the primary source of innovation (universities and research institutes play a lesser role than is the case with product R&D) and innovation is greatly facilitated by networks (both formal and informal).

As Ireland seeks to capitalise on opportunities in internationally-traded services over the next decade, we need to gain a better understanding of innovation in service markets and of how it can be facilitated.

4.2.3 Research and Innovation Policy Coherence

Ireland's existing support mechanisms for R&D are based on direct interventions through isolated funding measures. There is a need for greater coherence among all the relevant players, including research institutes and higher education institutions (HEIs), enterprise and state agencies, to ensure that resources are used to optimum effect.

If innovation in Ireland is to operate effectively, a continuous process of foresight, policy development, implementation and monitoring needs to be put in place. Funding schemes, priorities, objectives and targets need to be strategically aligned and clear lines of responsibility agreed between funding bodies, agencies and enterprise.

An integrated national innovation strategy should form the basis for decision-making and for focusing resources and funding on a number of niche areas where we can demonstrate world-class capability and realise economic benefit.

Recommendations

Develop an effective oversight and review mechanism that includes the appointment of a Chief Scientist, to optimise Ireland's national investment in science, technology and innovation. It should provide strategic direction to and co-ordinate national investment and should include structured evaluations of R&D expenditure. (Department of Enterprise, Trade and Employment)

Draw up a national research and innovation strategy statement. An integrated approach to policy formulation and implementation should be undertaken that involves all players (enterprise, research community, state agencies, etc) in the national innovation system. (Department of Enterprise, Trade and Employment)

4.3 Business Networks

Networks are groups of firms and other organisations that are structured – formally or informally – around common interests. For example, the participants may share information on markets, they may cooperate to address a customer need that they could not address individually, they may share interests in technology, standards or regulations, or they may act in concert to commission research or to articulate skills requirements. In the future, business networks will increasingly facilitate knowledge transfer, disseminate market knowledge, foster innovation, inform the research agenda and identify infrastructure needs specific to sectoral development. We envisage enterprise-led business networks in Ireland playing a significant role in supporting the growth of internationally-traded activities and in enhancing the growth potential of the companies involved over the decade to come.

In Chapter 3, the benefits of collaborating at a business network level were discussed. They include:

- Increased scale by aggregating complementary skills, activities, products and services
- >> Shared costs and risks, particularly in relation to major innovation
- Enhanced learning and transfer of tacit knowledge
- >> Development of market focus and critical mass in complementary resources
- >> Providing platforms for industry, academic and public sector co-operation.

There is considerable scope for increased networking between indigenous companies, foreign-owned companies, enterprise development agencies and educational and research institutions in Ireland.

Increased interaction between foreign-owned and indigenous companies would lead to a greater appreciation of their collective capability and potential for combining complementary skills to address specific market opportunities. Likewise, increased interaction between emerging and developed networks in Ireland, North and South, could broaden the depth and experience of the network.

Higher levels of interaction between companies and research institutes will enable us to realise the potential of our investment in research. Participation in networks by the educational institutions should be regarded as part of their basic mandate.

Enterprise-led Business Networks within National Enterprise Development

Three fundamental conditions should underpin enterprise-led business network initiatives in Ireland.

- State funding should be made available on the basis of defined and independently assessed competitive proposals, designed to meet clearly identified and measurable business objectives
- Participation in network initiatives should be based on the principle of co-funding

Proposals should be accepted only from groups of interested parties working in collaboration.

Business network proposals could seek to address areas of common interest within a long term strategy for national enterprise development. To do so, clarity around the following will be important:

- Definition of a staged workplan, with measurable outputs and milestones, to achieve the desired objectives
- >> Ensuring that networks have sufficient capacity and capability to be able to fulfil the role expected of them.

Networks should be complementary to the enterprise development agencies, business representative associations and similar entities and should be free to operate in whichever composition best suits their purpose, including sectoral, specialist or regional.

The Enterprise Focus of Networks

Business networks should be enterprise-led and have a clear set of agreed actionoriented objectives and functions aimed at significantly enhancing the growth potential of the companies involved, for example through:

- Articulating customer and market demands and influencing the design and delivery of state supports
- >> Sharing the principles of best practice in innovation and coordinating enterprise priorities, to influence the pre-competitive research agenda and plans for the development of skills and infrastructure
- Promoting Ireland's reputation internationally for excellence and innovation in specific sectors and working to market this with Enterprise Ireland's overseas office network
- >> Overcoming issues of scale by encouraging and facilitating alliances/partnerships
- Disseminating information on relevant market developments
- Facilitating close linkages between higher level institutions and enterprise to effect change in course structures and promote the use of international lecturers
- Providing access to advice on contract negotiation, exploitation of IP and development of new pricing structures (for example, through licensing or risk-sharing)
- >> Developing case studies, surveys and global benchmarking for the sector
- >> Developing a region to realise its full potential.

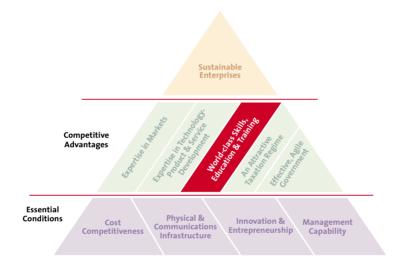
An Evolving Role for Networks

Subject to the success of a pilot phase of enterprise-led business network initiatives, a growing proportion of state supports for enterprise development could be provided through such networks to deepen expertise in areas where Ireland has or can develop sustainable competitive strength. Such a move would be subject to appropriate analysis of the benefits delivered.

Recommendation

Allocate a budget of \in 20 million per annum for five years from existing enterprise development agency resources to support the creation of enterprise-led networks to foster collaboration in defined areas of activity. All-island business networks should be supported where complementary strengths are identified. (Department of Enterprise, Trade and Employment)

4.4 Skills, Education and Training



Ireland has a strong record of commitment to education, commencing with the introduction of free post-primary education in the 1960s and continued through successive decades of targeted education policies. In a modern society, education should satisfy social, cultural and economic needs. From an enterprise perspective, the ability of the education system to respond flexibly to economic and social change is critical to the supply of appropriate skills for the effective functioning of the economy.⁹⁶

Ireland's economic development will depend to a large degree on knowledge and innovation, both of which are essential in making the transition to higher value activities that support economic growth and wealth creation. People are the enablers of such activities and the education and training system must adapt to produce the skills to drive successful enterprise.

This report focuses on the economic role of the educational system, rather than on its cultural and social roles. These roles are, however, complementary – future enterprise will place a premium on well-rounded and creative individuals, while equipping individuals with the skills that enterprise requires maximises their prospects of having fulfilling and rewarding careers, which is a major determinant of their quality of life. Also, the report's concentration on upper secondary and higher education is a reflection of the impact of these parts of the educational system on enterprise during the timescale of this report; it is not a suggestion that earlier parts of the system are less important.

Three Critical Areas of Focus

Three aspects of education and skills development are critical to the future of the enterprise sector:

- >> An adaptive and responsive higher education sector is necessary to create and exploit knowledge and to produce the number and quality of graduates necessary to support the knowledge economy. Investment in higher education and research is essential to generate the intellectual capital required to fuel an innovation-driven economy. The numbers entering higher education should be maximised. (See 4.4.1)
- Upskilling of the existing workforce and raising education levels is essential in an environment of constant change. To foster the continual acquisition of knowledge, skills and competencies, formalised approaches to lifelong learning must be introduced and corresponding delivery structures put in place. As a particular priority, policy intervention will be required to ensure the low-skilled are not left behind in the move towards a knowledge society. (See 4.4.2)
- Efforts will have to be made to expand the workforce to meet growth forecasts and an appropriate skills-based immigration strategy will be required to deal with demand for skilled workers that cannot be satisfied from within Ireland or the EU. (See 4.4.3).

4.4.1 Adaptive and Responsive Higher Education Sector

The future development of the higher education sector will require all institutions to:

- Respond to changes in the global market, demands for skills and advances in knowledge
- Be flexible and adaptive to the needs of students and enterprise
- >> Be creative and innovative in delivery methods
- >> Support high levels of participation in lifelong learning
- >> Be innovative in exploiting the commercialisation of research
- Facilitate the mobility of staff in both directions between academia and enterprise.

To enable this, changes are necessary in the way the institutions are funded, governed and managed and greater institutional autonomy will be required.

Integrated Higher Education Policies

Higher education should be underpinned by a coherent policy approach that includes the public and private sector (including the universities, institutes of technology, colleges of education and private higher education colleges etc). A cohesive policy should be agreed between education, enterprise and government to ensure that the skills necessary for enterprise success are developed in time, in sufficient quantity and to the required quality. The focus of policy in this area should be on outcomes, with quick and efficient adaptation and delivery of responses and regular monitoring and review. Universities and institutes of technology have a complementary role to play in the provision of education and it is important that this is recognised in policy formulation.

Governance of Higher Education Institutions and Related Bodies

The structures and management of higher education are no longer adequate to meet the complex demands of society in general and enterprise in particular. Governing bodies are too large to permit flexibility and responsiveness. Re-structuring, in conjunction with enterprise representation, could bring external expertise and experience to bear in areas that directly reflect the challenges facing the institutions. The role, function and interrelationships of the governance structures in the higher education institutions should also be more clearly defined in legislation, to remove any confusion between the executive and the governing roles.

Recommendation

The enterprise sector should play an increased role in the governing bodies of higher education institutions and related bodies such as the HEA. To maximise efficiency and enhance responsiveness, such bodies should be reduced in size and reflect in equal proportions the needs of enterprise, education and society. (Department of Education and Science, Higher Education Authority)

Quantity and Quality of Graduates and Post-graduates

In a knowledge-based economy, the requirement for higher education graduates and post-graduates will increase and if we are to compete effectively, the per capita proportions of graduates and post-graduates in Ireland should compare favourably with our competitor countries. The quality of Irish graduates is also becoming increasingly important for national competitiveness and, in particular, for meeting the needs of enterprise as it faces global competition. Our aim should be for Irish graduates to be among the best in the world and this will require that the quality of Irish educational awards be benchmarked internationally. The HEA should work with the Expert Group on Future Skills Needs,⁹⁷ SFI and international experts to explore and develop an approach to benchmarking the quality of graduates.

Recommendation

The proportion of graduates in Ireland should be in the top decile of OECD countries and the quality of awards from the Irish higher education sector should be benchmarked internationally. (Higher Education Authority, Expert Group on Future Skills Needs)

Financing Higher Education

The higher education institutions need to be adequately funded if we are to meet the aim to increase the quantity of graduates and to compare favourably in terms of quality.

At present, core funding for higher education in Ireland is provided predominantly from public sources (about 80%). An element of this public funding should be tied to performance and allocated on a competitive basis subject to the successful achievement of outputs. This should allow for flexibility and responsiveness to react to national strategic goals.

To augment public funding the higher education institutions should also be enabled to pursue additional funding from diverse sources including commissioned R&D, commercialisation of intellectual property and other forms of collaboration with the private sector.

Recommendation

Devise a funding framework that combines core funding with a competitively based element, allocated on the basis of performance. Actively encourage additional diverse sources of private funds. (Department of Education and Science)

Facilitating the Development of Enterprise

After education and research, educational institutions have a third role: the promotion of enterprise. The higher education institutions are already involved in many ways in supporting enterprise, but it is now important to provide more systematic support for this role.

The exploitation of knowledge and commercialisation of research must become embedded in the culture and infrastructure of the higher education system. This requires continued emphasis on new campus company start-ups, a pro-innovation culture of intellectual property protection and exploitation, programmes in entrepreneurship, consulting services, information services, new forms of graduate development programmes and greater links between higher education institutions and private enterprise. This role should be actively encouraged and incentivised.

Recommendations

Establish a competitive innovation fund for higher education institutions, to encourage them to further exploit knowledge and deliver innovative services to enterprise. Ring-fence a proportion of the fund to support the institutes of technology in fulfilling this role.

Projects should be evaluated by a panel that is representative of enterprise and expenditure from the fund should be monitored and reviewed on a regular basis. (Higher Education Authority, Department of Enterprise, Trade and Employment)

4.4.2 Upskilling the Existing Workforce and Raising Education Levels

Given the critical importance of education for our future competitiveness, ambitious targets should be set for our educational and training performance across the full spectrum of educational levels, from primary to lifelong learning. These must include:

- >> Increasing the proportion graduating from second level education and facilitating access to higher education for a wider share of the population
- Raising basic educational attainment levels and supporting a high level of participation in lifelong learning.

Second Level

A drop-out rate of almost 17% from secondary education is a disadvantage not only for the students involved but also for the economy: it limits our capacity to produce a workforce with the knowledge and skills required to drive and sustain a knowledge economy. Hence, there is need to reduce the scale of early school-leavers and ensure that all young people leaving education have acquired a recognised qualification that is relevant to the needs of the labour market.

As most education and training programmes for medium and high level skills require a Leaving Certificate as a prerequisite, those who have not attained that level of education are excluded. A wide range of training and education approaches can contribute to attainment of an equivalent level.

The apprenticeship scheme has been one of the more successful elements of the Irish education and training system in recent decades. It has produced generations of world-class crafts and trades persons who have made a major contribution to Irish economic development. Currently, some 27,000 people are undertaking apprenticeship programmes for some 25 occupations and the possibility of extending the apprenticeship model to additional occupations is currently being examined. Similarly, work-study approaches are also in use in other parts of the education/training system, most notably in the hospitality sector (Fáilte Ireland) and in parts of the formal education system.

Other work-study programmes that integrate and accredit both experiential learning in a supervised work placement and formal study need to become more widespread. Specifically, work-study programmes should be targeted at middle-skill occupations experiencing growth and not currently listed among designated crafts. In addition to bringing more equitable access to education and providing recognised qualifications, they could facilitate greater crossover in the national framework of qualifications (eg FETAC⁹⁸ and HETAC⁹⁹ awards).

Over the past decade, traineeships have been developed by FÁS as a shorter duration form of training for initial entry to a number of occupations not covered by the formal apprenticeship system. These jobs are generally in expanding parts of the services sector, including security services, financial services, personal and leisure services and childcare. Almost 1,900 people undertook occupational skills development through this route in 2003.

Recommendations

Increase the current Leaving Certificate completion rate to 90%.¹⁰⁰

Provide training for a range of occupations, for those not completing the Leaving Certificate, through new work-study programmes, relevant to the needs of the labour market. Qualifications from these programmes should be equivalent to Leaving Certificate standard. (Department of Education and Science, FÁS)

Lifelong Learning is Essential

Although the concept of lifelong learning is well established, participation by adults in education and training is still significantly underdeveloped in Ireland compared with other countries, particularly as regards entry to higher education. Greater participation in lifelong learning must be encouraged by facilitating and motivating employees to continually raise their skill level in three ways:

- >> Upskilling increasing their level of skills and qualifications
- >> Broadening acquiring skills and knowledge in new areas, particularly by combining skills from different disciplines
- Continual development renewing existing skill levels to stay abreast of technological or other developments.

Embracing lifelong learning as a strategic commitment requires combined effort in the following areas:

- A balancing of the rights and responsibilities of employers, individuals and the State
- >> A cultural and attitudinal shift on the part of learners, employers and the State, including the recognition of learning as an investment, not a cost
- >> Greater flexibility in the provision of higher education
- >> Addressing the anomaly between part-time and full-time fees
- >> Elimination of other non-financial barriers, particularly in the areas of access, transfer and progression.

Most recent evidence on education and training of the employed suggests that there are particular problems in relation to the needs of low-skilled employees. Those with lower-level educational qualifications and those working in lower-level occupations are much less likely to receive education or training.

Recommendation

Establish a national 'One Step Up' initiative, facilitated by the National Framework of Qualifications. While this initiative seeks to engage with the workforce as a whole, it should pay particular attention to the people with low levels of qualification and in low-level occupations, who are least likely to receive sufficient access to learning opportunities. (Department of Education and Science, Department of Enterprise, Trade and Employment)

Implementation Approach

An essential element of the 'One Step Up' initiative will be a single body charged with driving the process and with setting targets and milestones for monitoring progress.

Diagnostics will be an integral feature of the initiative. All firms and individuals participating will undergo an assessment of their skills development needs to identify suitable learning opportunities. The focus will be on raising skill levels rather than reskilling and on transferable rather than company-specific skills. All courses should culminate in a National Qualifications Authority of Ireland (NQAI) recognised qualification. Following a course of study, people should be encouraged to return to the diagnostic phase.

All providers of education and training should be eligible to participate in the 'One Step Up' programme, subject to compliance with the guidelines. At a minimum, it would be expected that FÁS, Vocational Education Committees, Fáilte Ireland, Teagasc, Skillnets and all public higher education institutions would participate. Others that might participate include the adult education operations of community, comprehensive and voluntary secondary schools, private educational institutions, community educators, private training organisations and professional organisations.

4.4.3 Augmenting the Skills Base

With the number of school-leavers declining and the population ageing, skills and labour market policies will have to be adjusted to ensure an adequate supply of skilled people, both in terms of quality and quantity.

Although Ireland is near full employment, continued efforts should be made to attract more people into employment. These efforts need to focus on those groups where there is scope for increased participation in working life: females, older people and the disabled. A greater commitment to policies that encourage participation, including tax incentives (particularly targeted at those on low incomes), childcare support and more flexible working arrangements, including part-time working, will be required to meet this objective.

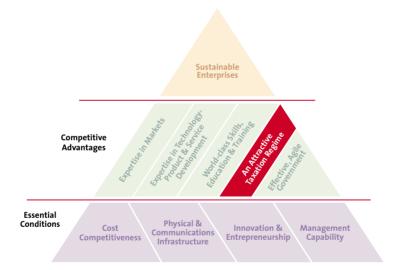
Targeted Skilled Immigration Policy

As set out in Chapter 2, approximately 420,000 new workers will be required over the period 2001-2010. As available domestic sources are diminishing, Ireland will need to attract a considerable number of highly skilled immigrants. The enlargement of the EU should allow for most of Ireland's immigration needs to be filled from within the EU. However it is likely that the demand for particular skills, for example, research skills, will not be fully satisfied by migration from within the EU. The demographic profile of most EU countries shows an even more acute shortage of young people entering the higher education system and almost all developed economies are actively seeking highly skilled immigrants. In trying to attract knowledge workers, we face intense competition from advanced economies, including other EU countries and the US. To succeed in this, Ireland will have to be seen as an attractive place to live and work, with a welcoming attitude to immigrants and a vibrant, diverse cultural life. For these reasons, there is a need for a planned, coherent immigration policy that is carefully managed and regulated and is consistent with the skills requirements of the economy.

Recommendation

Develop a strategic skills-based immigration policy in order to attract and retain the necessary highly skilled workers from outside the EU who will be required to support enterprise development. (Department of Enterprise, Trade and Employment)

4.5 Taxation



Ireland's success in attracting foreign direct investment and encouraging entrepreneurship over the past decade has been assisted by the taxation policies adopted by successive governments.

In recent years, changes in the level of taxation in Ireland have created a more enterprise-friendly environment.

The income tax regime has helped to moderate pay demands in partnership negotiations and has increased Ireland's competitiveness as a location for inward investment. The introduction of tax credits, the individualisation of tax bands and the increases in the threshold at which employees enter both the lower and higher bands of tax have incentivised greater participation in the workforce. The reduction in the capital gains tax rate from 40% to 20% in 1998 was an incentive to release funds for investment in enterprise.

Over the years changes in taxation have incentivised particular activities, such as international financial services, and more recently, holding companies, intellectual property and R&D activities.

4.5.1 Corporation Tax

Ireland's corporation tax regime has served us well in the past, not only with respect to the tax rates, but also in relation to the regime's transparency and the benefits of our double taxation treaty network. Ireland's recently introduced 12.5% corporation tax rate has opened further opportunities for development, particularly in services. That said, we now require certainty about a continuing low tax regime.

The changing nature of business activity in Ireland and increasing global competition necessitate ongoing review of the appropriateness of taxation policies.

Our low corporation tax rate has been significant, but the global trend is towards lower corporation tax rates. Ireland's competitive advantage in this regard is being eroded.

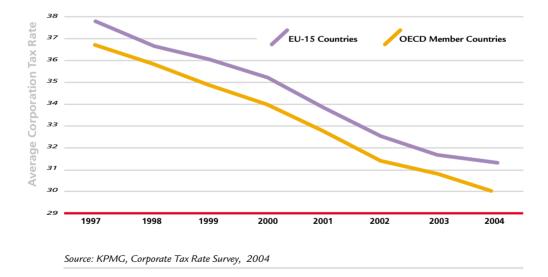


Figure 4.3 Average Corporation Tax Rate in the EU-15 and the OECD, 1997-2004

Effective Rates Differ from Headline Rates

A study published by the EU Commission¹⁰¹ in October 2001 showed that, while most EU countries have much higher headline rates than Ireland, these rates do not represent the effective marginal tax rate (EMTR) actually paid by companies. The study shows that in 10 EU countries the EMTR is less than 65% of the headline corporation tax rate. Since these data were collected Ireland's headline rate has risen to 12.5% for profits on trading income. Ireland is the only EU country in which the marginal effective rate is higher than the headline rate.

Table 4.1 Effective Marginal Tax Rate (EMTR) in Selected European Countries

Country	Corporation Tax Rate %	EMTR %
Austria	34	20.9
Denmark	32	21.9
Finland	28	19.9
Ireland	10	11.7
Luxembourg	37.45	20.7
Netherlands	35	22.6
Spain	35	22.8
Sweden	28	14.3
United Kingdom	30	24.7

Source: European Commission, Working Paper, Company Taxation in the Internal Market, 2001

Need for Certainty

Certainty about a continuing low corporation tax regime is required. In the face of other countries lowering their corporation tax rates, our fiscal policies must continue to contribute to Ireland's attractiveness as a place to work and invest by ensuring that personal and corporation tax rates remain competitive. Ireland's low corporation tax regime is far from unique within Europe.

Switzerland and five of the 10 new member states – Slovakia, Poland, Latvia, Hungary and the Czech Republic – have recently proposed or passed tax-cutting legislation. A recent report from CFO Europe¹⁰² notes that: "*If parliaments prove cooperative, the region's accession countries will boast a 17% average corporate tax rate – compared to almost 32% in the EU's present 15 member states.*" As set out in Table 4.2, Ireland continues to face stiff competition for inward investment from countries with very low tax rates such as Singapore, Puerto Rico and China.

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Table 4.2 Corporation Tax Rates in Competitor Countries

Country	Standard Rate	Preferential Rate	Qualification
Czech Republic	28%	5%	Profits from investment funds
Hungary	16%	none	
Poland	19%	none	
Switzerland	24.1%	0%	Tax holidays of up to 10 years
China	33%	15-24%	For foreign investment in the Special Economic Zone
Puerto Rico	20%	0%-7%	Manufacturing products new to the island
Singapore	24%	0%-5%	For 'pioneer industries' and those engaging in new high- value added projects

Source: KPMG, Corporate Tax Rate Survey 2004; PwC, Corporate Taxes 2003-2004, Worldwide Summaries

Recommendation

The Government should reiterate its commitment to the current corporation tax rate of 12.5% on trading profits. (Government)

4.5.2 VAT and eCommerce

eCommerce is transforming the way companies do business internationally and Ireland needs to be in a position to compete. There is, however, a significant issue – VAT on business-to-consumer (B2C) transactions.

For B2C electronic transactions, VAT is currently charged at the rate applicable in the supplier's location. Given that the rate in Ireland (21%) is one of the highest in Europe, suppliers based in Ireland are at a significant competitive disadvantage in the B2C market.

This affects indigenous companies and it also makes Ireland less attractive to foreign companies that distribute B2C services electronically, such as eMusic and electronic delivery of software. It is an area of particular concern as we envisage capitalising on the global growth in international trade in services over the coming years.

The main option for addressing this problem is to change the EU rules so that VAT on B2C electronic transactions is charged at the standard rate in the customer's location. This would mean that, regardless of where the supplier is located, the EU consumer would pay the same VAT rate; the VAT collected would be routed to that country.

The Directive that introduced the current treatment is scheduled for review in 2006.

Recommendation

The Government should recommend to the EU to have VAT on B2C electronic transactions charged at the standard rate in the customer's location. (Department of Finance)

4.5.3 Tax Credits for R&D

The 2004 Finance Act announced a 20% tax credit for incremental expenditure on R&D for the purposes of stimulating R&D investment in Ireland by both indigenous and foreign-owned companies. Many other countries already have some form of fiscal incentive, with many increasing the attractiveness of their scheme in recent years.

Recommendation

Monitor and assess the effectiveness of the planned R&D tax credit in increasing levels of R&D investment in Ireland, and make modifications to the scheme if necessary. (Department of Enterprise, Trade and Employment and Department of Finance)

4.5.4 Carbon Tax

The EU is implementing a number of measures to reduce carbon emissions in line with commitments made under the Kyoto Protocol. As part of this process, the Government announced its intention to introduce a carbon tax in January 2005.

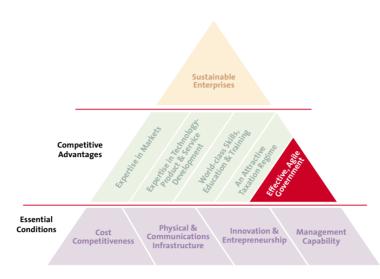
Ireland's obligations under the Kyoto Protocol will place higher costs on industry than those of our European neighbours. This is due to the gap between Ireland's targets and its actual emissions, with only the Netherlands and Finland facing more stringent targets.

The proposed carbon tax should be introduced at a low level. Following the imposition of the tax, the level of emissions abatement achieved should be analysed in the context of targets set down under the National Climate Change Strategy. If Ireland has difficulty in meeting its commitments and the costs to industry are not prohibitive, there may be scope for further tax increases. It is premature, however, to set out a programme of tax increases over four years that bears no relation to Ireland's performance in meeting its Kyoto targets.

The primary aim of the carbon tax should be to effect behavioural changes and reduce Ireland's emissions of greenhouse gases in the most economically efficient manner. Revenue raised through taxation should be used to help Ireland meet its Kyoto targets, for example, by investing in the purchase of emissions reductions or clean technologies that would help Ireland to achieve greater abatement domestically. It is important that the carbon tax be introduced across all sectors of the economy, such as transport, residential and agriculture, as well as industry, to ensure that all sectors contribute proportionately to abatement.

Recommendation

The carbon tax should be set initially at a low level and paid by all sectors of the economy and on all fuels. (Department of Finance)



4.6 Effective, Agile Government

"A country's global competitiveness has as much to do with effective government as it has with effective corporations." – Peter Drucker

The transition from a production-driven, investment-based economy to one that is market-led and knowledge-based cannot be achieved by the enterprise sector acting on its own. The Government and state agencies, the education sector and the social partners will need to be mobilised to embrace the change and absorb it into their own structures and operational processes.

This places a particular onus on Government and the public sector. To succeed, enterprise needs to work in an environment that is designed to respond to the changing global economy, as outlined in Chapter 2. Such an environment would give Ireland a unique strength. Ireland is well placed to build such an environment ahead of its competitors, given the potential for flexibility, focus and speed of response conferred by its small scale.

The Irish public system proved itself capable of such responsiveness in the past, but many believe that Ireland has lost its former ability to respond quickly and flexibly to identified needs and that there is no longer a clear focus on enterprise as a key economic driver.

As we face increasing global competition, all levels of government will need to adopt a proactive and flexible approach to the implementation of enterprise policy.

A range of reports and recommendations has already been produced aimed at addressing gaps and barriers to enterprise development. However, significant elements of these recommendations await action.

4.6.1 Policy Coherence and Integration

The whole of society ultimately depends on the enterprise sector for employment and wealth. Government policies and the way in which they are implemented have a major influence on the ability of enterprise to realise its full potential.

Specifically, the ability of enterprise in Ireland to produce knowledge-based, marketled products and services over the coming decade will depend to a significant degree on the Government and its agencies developing and implementing policies covering a broad range of activities, including enterprise; education and learning; research, development and innovation; infrastructure and environment; taxation; and regulation and competition.

It is critically important that policies in these areas be developed and implemented in a coherent, integrated way and that the policy-making process be focused, agile and responsive to ever-changing conditions. This is a requirement if enterprise policy is to respond effectively to increasing international competition.

4.6.2 Supporting Structures and Processes

We need to create structures and processes that ensure that Government departments and agencies act in mutually complementary and supportive ways. These mechanisms should enhance the ability and willingness of these important actors to co-ordinate their activities and to collaborate where appropriate, so that their policies reinforce one another and the whole becomes more than the sum of the parts.

Relevant models include the UK Prime Minister's Delivery Unit and the Finnish Economic Policy Committee chaired by its Prime Minister. Structures for improving communications between Government and business would also facilitate a shared understanding of enterprise concerns and bring innovative enterprise thinking into Government.

A mechanism at the heart of Government is required to drive the required responses and coherence – a mechanism that will ensure the commitment of all those involved and ensure that they all act in the same direction and with the same sense of urgency.

Recommendation

To create a shared vision at senior political level of the nature and importance of the enterprise agenda, institute a twice-yearly Cabinet meeting dedicated to enterprise, to debate and prioritise the cross-departmental responses required for enterprise development, commencing with the recommendations set out in this report.

These Cabinet meetings should be supported by an Expert Group on Enterprise, meeting at least quarterly and consisting of the Secretaries General from the six departments specified and approximately four senior figures from the enterprise sector. (Government) The Expert Group on Enterprise should meet at least quarterly and include the Secretaries General from the following departments:

- >> Enterprise, Trade and Employment
- >> Education and Science
- >> Finance
- >> Communications, Marine and Natural Resources
- >> Transport
- >> Agriculture and Food.

The twice-yearly Cabinet meeting should:

- >> Oversee the implementation of enterprise strategy
- >> Review progress and revise priorities as necessary
- >> Agree actions and spending required
- >> Publish an annual review of progress.

The Expert Group on Enterprise will be responsible for reviewing the enterprise agenda and performance. It will propose various actions to be undertaken and the associated expenditure to facilitate implementation.

This will ensure cohesion across Government departments in dealing with enterprise needs - for example, investment in R&D, broadband roll-out, energy and priorities for access infrastructure. This should help to overcome rigidities across the different departments, prioritise enterprise needs and ensure that refocusing of priorities can be accommodated in line with changing demands.