

An abstract graphic of a blue wave, composed of multiple overlapping, flowing lines in various shades of blue, from light to dark. The wave starts from the bottom left and curves upwards and to the right, ending near the top right. The background is a solid, medium blue color.

# Catching the Wave

A Services Strategy for Ireland

**REPORT OF THE  
SERVICES STRATEGY GROUP**



# Services Strategy Group Members

**Tony Keohane (Chair)**

CEO, Tesco Ireland

**Steven Collins**

Senior Lecturer, Trinity College  
Dublin

**Breon Corcoran**

MD, Non-retail & Development,  
Paddy Power plc

**Steve Cowman**

CEO, Stirling Energy Systems

**Kieran Donoghue**

Divisional Manager,  
International Financial Services  
& Globally Traded Business,  
IDA Ireland

**Maurice Foley**

Director Pfizer International Bank  
Europe, CIT Group Finance  
(Ireland), Deputy Chair, Arts Council

**Seamus Grimes**

Professor, NUI Galway

**Barry O'Brien**

Governmental Programmes  
Executive, IBM Ireland

**Declan Purcell**

Director, Advocacy Division,  
The Competition Authority

**Shaun Quinn**

CEO, Fáilte Ireland

**Kevin Sherry**

Divisional Manager, Internationally  
Traded Services, Enterprise Ireland

**Brian Whitney**

Assistant Secretary,  
Department of Enterprise,  
Trade and Employment

**Jane Williams**

MD, The Sia Group

**Secretariat and Research (Forfás)**

Brian Cogan

Els Compennolle

Jos Evertsen

Conor Hand

Jenny O'Grady

# To The Tánaiste and Minister for Enterprise, Trade and Employment

On behalf of the Services Strategy Group, I am pleased to submit our report “Catching the Wave: A Services Strategy for Ireland”. In preparing this report, the Group held a broad consultation process and we are grateful to those who prepared written submissions or made presentations to the Group.

Over the past two decades, Ireland has succeeded in developing a very strong services sector, which makes a very significant contribution to the national economy. Notwithstanding the current slowdown in the Irish economy, experts agree that the services sector will serve as the engine of growth for the future of the Irish economy.

The importance of services to the economy, however, has not yet been fully reflected in enterprise policy. Changes in technology, business models, value chains, markets and international trade regulations, present both opportunities and challenges for service enterprises. To realise these opportunities, the Group recommends action on three fronts:

- Realising the opportunities to further grow and diversify Irish services exports;
- Encouraging internationalisation, where Irish service enterprises establish operations in overseas markets;
- Recognising the important role of Irish service enterprises that trade locally on the domestic market, and ensuring that these are efficient and productive.

The Services Strategy Group believes that a shift in thinking is needed, so that services are brought into the heart of enterprise policy. Of course, it will be up to private businesses to take advantage of the opportunities offered in services. Our report sets out how the State can pave the way by ensuring that barriers are removed and conditions optimised, and makes a number of recommendations. Implementing these will make a real difference to the future growth and health of the services sector.

As Chair of the Services Strategy Group I would like to thank all the members of the Group who have given generously of their time and expertise, and whose contributions are reflected in this report. On behalf of the Group I also wish to thank the Forfás Secretariat for their commitment, energy and professionalism throughout the process.



**Tony Keohane**

*Chair, Services Strategy Group*

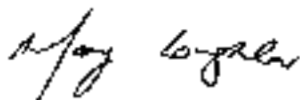
## Foreword by The Tánaiste

Ireland is one of the world's leading service exporting countries worldwide. In per capita terms, we punch well above our weight: we account for 2.7 percent of world services exports, and are currently the 10<sup>th</sup> highest exporter of services in the world.

Nonetheless, the current economic slowdown demonstrates how such accomplishments should not be taken for granted. Ireland does indeed have the potential to sustain economic growth through services. The ESRI forecasts that by 2025 services could account for over 70 percent of Irish exports and for nearly 80 percent of our GDP.

Realising this potential will crucially depend on creating the right conditions for fostering services in a globalised environment. Therefore, I welcome this report by the Services Strategy Group, "Catching the Wave: A Services Strategy for Ireland".

I would like to thank the Chair and Members of the Services Strategy Group for producing an extremely well researched and thought-provoking report that will guide the development of our Services Strategy into the future.



**Mary Coughlan, TD**

*Tánaiste and Minister for Enterprise, Trade and Employment*

# Services Drive Economic Growth

Services drive economic growth in all modern developed economies. Ireland is leading the way in this regard – where over the past number of years many reports and commentators noted the increasing importance of services and heralded the advent of a ‘service economy’, today Ireland has clearly established itself as one of the world’s leading service economies.

## ▣ Services contribute approximately 63% of value added in the economy.

Between 1997 and 2007, gross value added in Ireland nearly trebled from €60 billion to €170 billion.

Two thirds of this growth was in the services sector, where value added increased from €34 billion to €108 billion.

## ▣ The services sector employs two-thirds of the workforce.

Out of a total workforce of just over 2 million, the services sector employs 1.4 million. Between 1998 and 2007, employment in services increased by 520,000. And some 35 percent of workers in the manufacturing sector are also engaged in service-type activities.

## ▣ Services account for 43% of exports from Ireland.

Ireland is currently the 10<sup>th</sup> highest exporter of services in the world, with a 2.7 percent share of world services exports.

In per capita terms, Ireland is by far the biggest exporter of services in the world. Between 2000 and 2007, the contribution of services to total Irish exports doubled, from 21 percent to 43 percent.

## ▣ Services provide high-quality employment.

Almost 40 percent of workers in services are classified as high-skill, compared with 35 percent in the economy as a whole.

The services sector also makes a very substantial contribution to the Exchequer in terms of corporation taxes and to the Irish economy in terms of domestic expenditures. And every 100 employees in internationally trading services firms support a further 99 jobs in ancillary and downstream services in Ireland.

**Today services are the main driver of the economy, and the most likely avenue to sustainable growth, continued prosperity and improved living standards in the years ahead.**

## Services are Diverse

The term 'services' covers a wide range of occupations and activities, from derivatives trading to horse trading, from book binding to bookmaking, from software engineering to hardware retailing, from underwriting to undertaking, from hairdressing to hare coursing, from light entertainment to light installation, from waste disposal to waist reduction, from selling to sailing instruction, and from stockbroking to stocktaking.

Notwithstanding this diversity, service activities share a number of characteristics:

- ▣ They deliver **intangible** goods – information, service, advice, experience;
- ▣ Their focus is on **interacting** with people and serving customers; and
- ▣ They rely on the knowledge and skills of the **people** delivering the service.

## Services are Changing

Today, a wide variety of services are traded internationally, including finance, insurance, computer-related activities, R&D, advertising, marketing, accounting and consultancy. Between 1980 and 2006, the global value of this international trade increased by a factor of seven.

Recent technological developments, particularly in information and communications technologies, have facilitated this internationalisation, and have also made possible a whole range of new services, particularly in media-related activities. International trade has also been supported by regulatory reform and trade liberalisation. This trend is expected to accelerate in coming years, with the implementation of the EU Services Directive and parallel developments in the World Trade Organization.

Manufacturing companies are increasingly outsourcing service-related activities to service specialists: according to OECD estimates, up to 20 percent of jobs in some countries could be affected by domestic or global outsourcing.

The changing nature of services in an increasingly globalised economy presents Irish service providers with very significant opportunities. Despite the importance of the sector, accurate and up-to-date metrics of service activities are not readily available.

The Central Statistics Office is already undertaking work in this regard. However, services are inherently difficult to measure and significant challenges remain to be addressed.

### **Recommendation 1:**

**Improve coverage and quality of services statistics, to better inform public policy in the service economy.**

**Action: Central Statistics Office**

# The Three Dimensions of Services

If we are to exploit the opportunities presented by the changing nature of services, Ireland must develop a strategic, global and forward-looking policy framework that will enable the country to realise the full potential of the services sector, while continuing to foster the important contribution of manufacturing. Enterprise policies that are shaped mainly by the needs of manufacturing are no longer sufficient.

From the point-of-view of enterprise policy, three distinct categories of service activities can be identified:

- ▣ Services that are traded internationally by **exporting** to the country of destination. Such services currently account for 43 percent of Irish exports, and this is expected to increase to 50 percent within the next two years;
- ▣ Services that are traded internationally by establishing a **commercial presence** in the country of destination (outward direct investment, or ODI). The World Trade Organization estimates that 50 percent of international trade in services is by way of ODI, compared with 35 percent by direct export; and
- ▣ Services that are traded only **locally**. It is increasingly recognised that local services are a powerful source of wealth creation and employment in their own right, as well as providing essential underpinning for internationally trading businesses, and for social and cultural development.

Each of these categories presents different kinds of opportunity for Irish enterprise, each has different needs, each makes a different contribution to the economy, and the role of the State in fostering its development is different in each case.



## Responding to the Needs

Government and the State agencies will have to respond to the needs in each category of services in creative and practical ways. The enterprise development agencies, however, currently operate within a legislative, regulatory and policy environment that constrains their activities in this regard. For example:

- The Industrial Development (Services Industries) Order 2003 limits the service industries that are eligible for assistance under the Industrial Development Acts to a specific list.
- The Enterprise Ireland Policy Statement, 1998, issued by the Department of Enterprise, Trade & Employment, restricts Enterprise Ireland from providing support to locally traded services companies, even where such support could deliver significant value to the economy.

### **Recommendation 2:**

**Review and where necessary amend ministerial orders and policy statements to facilitate the development agencies in fostering the growth of services.**

***Action: Department of Enterprise, Trade & Employment***

## Exploiting Opportunities in Services Exports

Ireland's export performance in services is largely based on two sectors – financial services/insurance and ICT – which together account for 60 percent of Ireland's services exports. While it is of critical importance to continue to support these sectors, and to foster their development and growth into the future, there are significant opportunities outside these sectors – opportunities that are becoming more real with the liberalisation of export markets. For example, it is estimated that implementation of the EU Services Directive could increase EU trade in commercial services by as much as 30 percent.

The challenge of expanding Ireland's services export base is not trivial, but it is essential to the future of the Irish economy. Based on the work of the Enterprise Strategy Group and on its own commissioned research, the Services Strategy Group identified a number of sectors and activities with significant potential for export growth, as shown on the next page. The development agencies are already investigating opportunities in a number of these areas.

More work is needed in order to match these opportunities against existing strengths in the Irish enterprise sector, and to identify more precisely the areas of greatest potential, both for indigenous industry and for foreign direct investment.

### **Recommendation 3:**

**Carry out in-depth sectoral analysis to identify areas with most potential for services exports. Repeat such analysis at regular intervals to ensure that Ireland maintains the ability to adapt to emerging trends.**

***Action: Enterprise Ireland and IDA Ireland***

## Sectors with Potential for Diversifying Ireland's Services Export Base

- Education Services
- Healthcare Services
- Creative Services (Entertainment and Media)
- Maritime Services
- Aviation Services
- Tourism
- Transport
- Construction Related Services (Engineering, Environmental and Architectural)
- Agricultural and Bloodstock Services
- Professional and Consultancy Services
- Financial Services
- Computer Services and Software
- Business Services

## Activities with Potential for Diversifying Ireland's Services Export Base

- Franchising
- International Sales and Marketing
- Electronic Commerce
- European Headquarters
- Shared and Outsourced Business Processes
- Supply Chain Management
- Electronic Data Management

## Internationalising Irish Services Firms

The increasing globalisation of markets has manifested itself in Ireland in recent years with the arrival of large retailers, professional services firms, financial services institutions, restaurants, hotels, and other service providers whose ownership and headquarters are in other countries. Likewise, a number of Irish companies have established operations in other countries, in areas as diverse as sandwich bars and software.

Firms engaged in this kind of overseas direct investment tend to:

- Increase their domestic employment levels;
- Increase the proportion of high-skilled employees in their domestic operations; and
- Experience increased productivity.

There is a major opportunity for Irish companies to expand their operations abroad in this way. This opportunity will be realised only by a relatively small number of firms – ones that are already operating at a reasonable scale in Ireland, and that have the resources either to acquire business operations in a foreign market or to establish a foreign operation from scratch. This is a significant challenge, as Irish services companies are, for the most part, very small. However, if we seize the opportunity, benefits will accrue both to the individual firm and to the economy as a whole, in terms of increased innovation, productivity growth, repatriated profits, highly skilled, highly paid employment in headquarters operations, specialist sub-supply opportunities, and management development.

In view of these benefits, measures should be taken to identify companies trading locally in Ireland that have the potential and the ambition to grow significantly and establish operations for trading in overseas markets.

### **Recommendation 4:**

**Explicitly consider opportunities for Irish services companies establishing abroad as part of Enterprise Ireland's longer term strategy, in tandem with opportunities for exporting.**

**Action: Enterprise Ireland and Department of Enterprise, Trade & Employment**

## Areas of Opportunity for Irish Companies to Establish Commercial Presence Abroad

- Real estate activities
- Business services
- Recreational services
- Utilities
- Health & Welfare services
- Professional and Consultancy Services
- Retail and Wholesale
- Restaurants / Bars / Catering
- Personal services
- Educational services

State intervention in relation to these opportunities should be limited to 'soft' supports, such as:

- Management capability development, specifically dealing with running a growth-oriented business;
- Access to professional mentors with sectoral knowledge in domestic and international markets;
- Access to innovation supports;
- Access to Enterprise Ireland's overseas network; and
- Introductions to private/public venture capital funds.



## Fostering Efficient Locally Traded Services

Without domestic services, it is not possible to live in an area and not possible to run a business of any kind. People choose where to live and work based on the availability in the locality of personal services, entertainment, restaurants, shops, education, travel and cultural services of all kinds. Businesses locate where there is a full range of business-to-business and infrastructural services – and where there is a ready supply of labour. In both cases, the quality of those services is an issue, as is the price.

Over the past ten years, inflation in the price of Irish services has exceeded that of other European countries by almost 25 percent, and Ireland is now second only to Denmark in terms of cost. This has a significant effect on standards of living, on international competitiveness, and on the attractiveness of Ireland for foreign investment.

The locally traded services sector thus plays a major role in the economy – a role that can be pivotal in determining the performance of the economy. The State must recognise this role, identify the needs of this sector, and put in place measures to address those needs. Intervention should not be at the level of the firm, but rather by way of horizontal measures to ensure productivity and efficiency, such as those designed to enhance skills, increase innovation and improve productivity, as outlined on the following pages.

Enterprise Ireland and the City and County Enterprise Boards should ensure that the needs of the locally trading service sector are reflected in their policies and programmes.

## The Services Strategy Framework

Locally Traded  
Services

Commercial  
Presence Abroad

Services  
Exports

How do we boost  
**Productivity**

How do we upgrade our  
**Human Capital**

How can we encourage  
**Innovation**



## Skills for Services

While employment in the services sector includes some low-paid, low-skill occupations, services consistently provide more high-skill jobs than other sectors. In all service industries – even personal services – the proportion of high-skill employment has increased significantly over the past twenty years, and the proportion of low-skill employment has declined. Productivity gains in services are obtained principally by investing in human capital – that is, by training and education.

The variety of skills that the services sector requires is particularly broad, and we need to ensure that the demand for skills is met right across that spectrum. In this regard, the implementation of the National Skills Strategy is of crucial importance – and this places demands on individuals, employers, representative bodies, educational institutions, training organisations, and State agencies.

We also need to review the ways in which we can attract and retain talent on a global basis, by bringing immigration policies and practices into line with economic and enterprise policies.



Services, of their nature, demand certain types of skills:

- **Generic skills:** Employees in service businesses need a range of personal and interpersonal skills, such as literacy, numeracy, communication, team-working, customer-service, information processing, problem-solving, and planning and organising. Employers should accommodate the learning needs of employees by enabling them to learn on the job, and by facilitating their participation in off-site education and training.
- **Humanities and social science skills:** Graduates in these disciplines are equipped with a range of knowledge, skills and wider competences that are particularly valued by many service sectors.
- **Science, technology and innovation skills:** Within the EU25, some 53.6 million people with third-level S&T qualifications are employed in services. In Ireland in 2004, 476,000 people with S&T qualifications were employed in services (compared with just 88,000 in manufacturing).
- **Creative skills, design skills, and skills for innovation:** These skills are essential for success in business, and in services business in particular. They can be applied to products or services, to business processes and to management styles.
- **Hybrid technical and business skills:** Individuals who can combine discipline-specific technical knowledge with entrepreneurial skills and an ability to think creatively will be in increasing demand in the future.

## **Recommendation 5:**

**Provide integrated inter-disciplinary education for service activities along the lines of the Services Science, Management and Engineering programmes offered in the US and the UK.**

*Action: Higher education institutions*

- **Mathematics:** Some of the largest service sectors have one requirement in common: mathematics. It is thus of some concern that the proportion of candidates taking higher-level mathematics in the Leaving Certificate has declined sharply, from 25 percent in 2001 to 17 percent in 2007.

## **Recommendation 6:**

**Develop and introduce a system of bonus college entry points for higher-level Leaving Certificate mathematics. Enhance the professionalism of mathematics teaching by creating a Masters degree, a part-time Higher Diploma, and a four-year honours degree programme in Mathematical Education.**

*Action: Department of Education & Science*

## Innovation in Services

Innovation is the creative process of exploiting new ideas for commercial advantage, typically by doing or making something new, or by doing or making something in a new way. It has become a major focus of industrial policy in recent years, but, while measures have been put in place to stimulate innovation in manufacturing industry, less attention has been paid to innovation in services. The *Strategy for Science, Technology and Innovation (SSTI)* is one of the main planks in current innovation policy and is largely focused on product innovation. It needs to be further developed to reflect the importance of services in the economy.

Innovation policy currently concentrates on technological innovation, whereas innovation in services is very often non-technological and can take a variety of forms, including:

- New business models/concepts;
- New customer/delivery interfaces; and
- New service-product offerings.

While many Irish services firms are to some extent innovative, they are constrained from more actively pursuing innovation strategies by a shortage of funds, the high costs associated with innovation, and a lack of suitably qualified personnel.

Services require an innovation policy that is finely attuned to their distinct needs, and that takes into account both the technological and non-technological components of services R&D and innovation. The policy initiatives that are required include horizontal measures affecting general business supports, intellectual property, regulation, trade policy, taxation and so on, and sector-specific vertical supports for services innovation, such as improving access of services firms to fiscal support programmes, stimulating non-technological innovation in the services sector, encouraging hybrid technology–service innovation, and so on.

Demand-side policies, such as public procurement policies, export promotion and R&D tax credits, also have considerable potential for promoting innovation, as have measures to increase customer awareness of and demand for innovative products and services.

Service companies currently find that support measures are not well suited or readily accessible to them. The response must be to develop policies and supports for services, and to make existing measures more accessible to services.

## **Recommendation 7:**

Extend Ireland's national innovation policies and strategies to encompass innovation in services and continue the progress made in implementing the Strategy for Science, Technology and Innovation 2006-2013 (SSTI).

*Action: Department of Enterprise, Trade & Employment*

## **Recommendation 8:**

Identify, develop and put in place dedicated business support measures to promote R&D and innovation capability in services companies and to facilitate the development of services by manufacturing enterprises. The TEKES SERVE programme (Finland) should be considered as a model.

*Action: Enterprise Ireland, IDA Ireland*

## **Recommendation 9:**

Provide structured supports to develop an institutional capacity for R&D in services:

- ▣ Promote research of relevance to the service industries through the explicit involvement of services companies in Centres for Science, Engineering & Technology (CSETs) and Strategic Research Clusters (SRCs) across the domains of ICT, Biotechnology and Energy.

*Action: Science Foundation Ireland*

- ▣ Facilitate the establishment of industry-led Competence Centres for Services to stimulate research in services and collaboration between services companies and the research community.

*Action: Enterprise Ireland and IDA Ireland*

## **Recommendation 10:**

Expand the national R&D Tax Credit scheme to include services R&D and innovation by:

- ▣ Redefining R&D for the purpose of tax credits so that it encompasses services R&D; and
- ▣ Developing an R&D tax credits mechanism for services that is based on international good practice.

*Action: Department of Enterprise, Trade & Employment, Department of Finance*

## **Recommendation 11:**

Use public procurement to stimulate services innovation in line with the guidelines set out in the EU's *Public Procurement Good Practice Guide*.

*Action: Department of Enterprise, Trade & Employment, Department of Finance*

## Productivity in Services

In recent years, Ireland's economic progress has been driven on the one hand by increases in the numbers employed, and on the other by growth in the productivity of those at work. As Ireland's demographic profile has changed and labour force participation rates have significantly increased, continued progress depends increasingly on productivity growth. This applies not only to the internationally trading sectors, where success in the face of global competition demands that Irish businesses match or exceed the performance of their competitors, but also to locally traded services, whose performance have a huge impact on the cost base of the whole enterprise sector, and on overall living standards.

While the State has a limited role to play at the level of the firm, there are a number of environmental issues that impact very directly on the performance and potential performance of all services companies, and over which the State has considerable influence.

**The use of Information and Communications Technologies (ICT) by service companies:** Effective use of ICT will allow service companies to reduce costs and improve the quality of their services. Further, many existing services and many emerging ones are structured around transactions and information flows that can be carried electronically over networks: the markets for such services are global, as is the competition for them. Their survival and growth depend on access to a highly efficient and reliable communications system. Firms must be encouraged to adopt e-business practices and to integrate appropriate ICT into all their business processes. Employers and Government should act to stimulate the uptake of broadband and sophisticated ICT applications by services companies.

**Next Generation Networks:** A number of important service areas, including healthcare, education, entertainment and government, are being transformed by the capability of delivering them (or significant elements of them) electronically over networks. Similarly, major business functions, such as R&D, design, production, delivery and support, can be performed remotely and delivered online. Competing in this arena demands access to a very fast, very reliable networking infrastructure. The next generation of applications will require broadband speeds of between 50Mb/s and 1Gb/s (compared with the 200kb/s to 3Mbps commonly – but not universally – available in Ireland today). Without State involvement, such broadband services are unlikely to be made widely available in time to take advantage of the commercial opportunities they present. A partnership approach should be adopted between the public and private sectors to address this challenge.

**e-Government:** Government should further develop the quality and availability of online services in areas such as procurement and payments. This would have positive effects at three levels: it would encourage greater use of ICT in private enterprise, thereby contributing to increased productivity and adoption of international best practice; it would demonstrate some of the possibilities of e-business; and it would improve productivity and efficiency in the public sector itself.

**Competition:** In general, competition stimulates enterprise efficiency. Important elements of the locally traded sector, however, are relatively sheltered from international competition, which contributes to their low levels of productivity. Public policy, insofar as it can affect this situation, must aim to remove barriers to competition. Current laws, rules and customs should be reviewed, and ones that restrict competition should be repealed. The Competition Authority has recommended reform in a number of areas, but implementation of its recommendations tends to be slow.

## **Recommendation 12:**

**Ensure that the Competition Authority is adequately empowered and resourced to enable it to fulfil its mandate. Introduce a process whereby the Government responds formally to recommendations from the Competition Authority.**

*Action: Department of Enterprise, Trade & Employment*

The Single European Market has already exposed Irish services industries to more competition from overseas. The Services Directive will push this trend further, opening up Irish markets to competition from overseas, and opening up foreign markets to Irish service providers. Ireland should embrace this initiative – and other prospective developments in the markets for financial services, telecommunications and electricity – as a way of boosting competition and productivity. Government and the enterprise development agencies should identify specific opportunities arising from the Services Directive at sectoral level, and communicate these clearly to businesses.

**Benchmarking:** Particularly in the locally traded sector, it can be difficult for business owners and managers to know what international best practice is in their business, and how they compare with similar firms elsewhere.

## **Recommendation 13:**

**Introduce a voucher scheme to encourage locally trading service firms to benchmark their performance against national and international best practice in order to enhance their productivity.**

*Action: Department of Enterprise, Trade & Employment*

## Making it Happen

In this document, the Services Strategy Group has identified three areas for action:

- Further growing and diversifying Ireland's services exports;
- Increasing the commercial presence of Irish services firms in overseas markets;
- Fostering the efficiency of services firms trading locally.

The Group has made a number of recommendations in this regard.

Implementation of these recommendations will establish services as a major element in enterprise strategy and help business enterprises to identify and exploit new opportunities.

Mechanisms should now be put in place to advance these recommendations and to monitor their implementation. The Group recommends that the Department of Enterprise, Trade and Employment should take responsibility for overseeing this process. In particular, the Group recommends that:

1. The Department should coordinate a formal response to its recommendations, and publish this by the end of 2008. This response should explicitly state the actions that will be taken in response to the recommendations, by whom and when.
2. Towards the end of 2009, the Department should review progress and publish an implementation report, to be sent to Cabinet for noting.

The Services Strategy Group firmly believes that action on its recommendations will make a difference – a difference that will aid Ireland to sustain economic progress and build on our success to date in the services sector.



A copy of the Background Report to this document with supporting research and analysis is available at [www.forfas.ie](http://www.forfas.ie)  
To request a hard copy contact [info@forfas.ie](mailto:info@forfas.ie) or phone (01) 607 3243



**Forfás**

Wilton Park House  
Wilton Place  
Dublin 2  
Ireland

Tel: +353 (0)1 6073000  
Fax: +353 (0)1 6073030  
Email: [info@forfas.ie](mailto:info@forfas.ie)