









# Forfás Annual Report 2004







# Forfás is the national policy and advisory board for enterprise, trade, science, technology and innovation

#### To the Minister for Enterprise, Trade and Employment

Pursuant to the Industrial Development Act, 1993, Forfás herewith presents its report and accounts for the year ended 31 December 2004.

#### Don Aire Fiontar, Trádála agus Fostaíochta

De bhun an Achta um Fhorbairt Tionscail, 1993, tá a thurascáil agus a chuntais don bhlian dar chríoch 31 Nollaig, 2004, a dtíolacadh anseo ag Forfás.

Martin Cronin

March Cromi

Chief Executive

Eoin O'Driscoll

Chairman

# **Forfás,** its Sister Agencies and Advisory Councils

IRISH OWNED ENTERPRISE







Forfás provides research & administrative support



NWARD INVESTMENT



#### **ADVISORY COUNCILS**





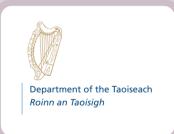






The NCC reports to the Taoiseach on Key Competitiveness Issues

The EGFSN also reports to the Minister for Education and Science





Cabinet Committee on Science, Technology & Innovation

#### **Functions**

Forfás is the national policy and advisory board for enterprise, trade, science, technology and innovation. It is the body in which the State's legal power for industrial promotion and technological development have been vested. It is also the body through which powers are delegated to Enterprise Ireland for the promotion of indigenous industry and to IDA Ireland for the promotion of inward investment. Science Foundation Ireland was established as a third agency of Forfás in July 2003. The broad functions of Forfás are to:

- advise the Minister on matters relating to the development of industry in the State;
- advise on the development and co-ordination of policy for Enterprise Ireland, IDA Ireland, Science Foundation Ireland and such other bodies (established or under statute) as the Minister may by order designate;
- encourage the development of industry, technology, marketing and human resources in the State;
- encourage the establishment and development in the State of industrial undertakings from outside the State; and
- advise and co-ordinate Enterprise Ireland, IDA
   Ireland and Science Foundation Ireland in relation to their functions.

#### **Feidhmeanna**

Is é Forfás an bord comhairleach agus polasaí náisiúnta do fhiontar, thráchtáil, eolaíocht, theicneolaíocht agus nuálaíocht. Is é an comhlacht ina bhfuil cumhacht dlíthiúil an Stáit dílsithe i leith tionscail a chur chun cinn agus forbairt teicneolaíochta. Is é an comhlacht freisin trína thiomnaítear cumhachtaí go Enterprise Ireland chun tionscal dúchais a chur chun cinn agus do IDA Ireland chun infheistíocht isteach a chur chun cinn. Bunaíodh Science Foundation Ireland mar thríú gníomhaireacht de Forfás in Iúil 2003. Is iad na feidhmeanna leathana de Forfás ná chun:

- comhairle a thabhairt don Aire ó thaobh cúrsaí a bhaineann le forbairt tionscail sa Stát:
- comhairle a thabhairt maidir leis an bhforbairt agus an gcomhordú de pholasaí do Enterprise Ireland, IDA Ireland, Science Foundation Ireland agus d'aon chomhlacht eile dá leithéid (bunaithe nó faoi reacht) mar a d'fhéadfadh an tAire a thiomnú de réir ordaithe:
- an fhorbairt de thionscal, theicneolaíocht, mhargaíocht agus acmhainní daonna a spreagadh sa Stát:
- an bunú agus an fhorbairt sa Stát de ghnóthais tionsclaíochta a spreagadh ó áiteanna lasmuigh den Stát; agus
- Enterprise Ireland, IDA Ireland agus Science Foundation Ireland a chomhairliú agus a chomhordú maidir lena bhfeidhmeanna.

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#### **Forfás Board Members**





















- **Martin Cronin** Chief Executive, Forfás
- Sean Dorgan Chief Executive, IDA Ireland
- Sean Gorman<sup>1</sup> Secretary General, Department of Enterprise, Trade and Employment
- Dr William Harris Director General, Science Foundation Ireland
- Prof. Michael Hillery Emeritus Professor of Engineering, University of Limerick
- Rosheen McGuckian<sup>2</sup> Chief Executive Officer, GE Money











- 8 **Rody Molloy** Director General, FÁS
- William Murphy Partner, Tynan Dillon and Company
- Feargal O'Rourke Partner, Taxation, PricewaterhouseCoopers
- Frank Ryan Chief Executive, **Enterprise Ireland**
- **Dr Don Thornhill** Chairman, **National Competitiveness Council**
- Jane Williams Managing Director, The Sia Group
- 14 Michael O'Leary Secretary to the Board

Peter Cassells - resigned in April 2004 Paul Haran - retired in October 2004 Toni Wall - retired in December 2004

- 1 Sean Gorman appointed in November 2004 2 Rosheen McGuckian - appointed in April 2005

#### Forfás Audit Committee

- 9 William Murphy, Chairman
- **Eoin O'Driscoll**
- Prof. Michael Hillery
- 13 Jane Williams
- Michael O'Leary Secretary to the Committee

#### **Chairman's Statement**



To remain at the forefront of international trade and competitiveness, Ireland must display a singular commitment to promoting a favourable environment for business.

As we reach the mid-point of the decade, Ireland is firmly established as a high-performance economy. With historically low levels of unemployment, rising living standards and forecasts of sustained economic expansion, a general sense of optimism pervades.

Ireland today boasts a vibrant economy, a young, technologically-aware workforce and established links to the global business environment through a successful multinational community and a developing indigenous sector.

We must not be complacent. Fundamental changes in the nature of global enterprise offer significant new opportunities but also present formidable competitive challenges. To remain at the forefront of international trade and competitiveness, Ireland must display a singular commitment to promoting a favourable environment for business, and to focusing investment on building and reinforcing areas of competitive advantage.

To this end, I welcome the announcement by the Minister for Enterprise, Trade and Employment in February 2005 of an *Enterprise Action Plan*, outlining actions and timelines to give effect to recommendations from the Enterprise Strategy Group report *Ahead of the Curve*, which was published in July 2004 and to which Forfás provided research and secretariat support.

# Enterprise – At the Heart of Economic Policy-Making

The Enterprise Strategy Group (ESG), which I was privileged to chair, presented an analysis of Ireland's competitive position which recognised a series of key strengths in the economy, while pointing to critical areas for action. An overarching emphasis was placed on maintaining enterprise issues at the heart of public policy and on sustaining the strong dialogue between the State, industry and social partners, which has enabled Ireland to respond to global challenges with such success.

In its assessment of today's competitive environment, the ESG report called for a re-balancing of the capability profile of enterprise in Ireland. This country has traditionally excelled in manufacturing and operations, particularly in servicing the needs of the multinational sector, but this has often been without developing relationships with customers and participating in the conception and design of the products made here.

A rapidly growing number of developing economies now compete for manufacturing activities, and Ireland has correspondingly witnessed a decline in the most cost sensitive parts of its production sector. To maintain relevance in a swiftly changing competitive landscape, our capabilities require revision.

The ESG report indicates that future prosperity in mature economies will derive from the development and exploitation of ideas and knowledge in pursuit of new high-value products and services. Having a sufficient understanding of customer requirements will be essential to channel this knowledge in ways which respond to market demands. In other words, future economic growth will be driven by understanding the needs of the customer and by using technology and knowledge to satisfy them.

Ireland should therefore strengthen its knowledge base, by building capability in research and development, and enhance its relationships with customers, by focusing on marketing and sales capabilities and activities.

Reinforcing the vibrant manufacturing and internationally-traded communities with these complementary capabilities could offer Ireland the opportunity to embed itself throughout global supply chains and to become an enduring well of value-creation in international business.

To maintain relevance in a swiftly changing competitive landscape, our capabilities require revision.

Alongside these targeted interventions to strengthen specific areas of competitive advantage for Ireland, the ESG report also pointed to the ongoing requirement to focus on progress in education, infrastructure, costs and entrepreneurship as essential general conditions for a competitive business environment in the 21st century.

Work remains to be done to give effect to many of those recommendations endorsed by Government. The announcement that the Minister for Enterprise, Trade and Employment will report twice yearly to Cabinet on the implementation of the ESG report is welcome. Similarly encouraging is confirmation that he will meet with an Expert Group comprising four senior figures from the enterprise sector and relevant Department Secretaries General, and his report will reflect the views of that Group. The effective operation of this body will be crucial if the stated aims of the ESG report are to be achieved. Also encouraging is Enterprise Ireland's response to the Enterprise Action Plan, outlined in its Transforming Irish Industry - Enterprise Ireland's Strategy 2005 - 2007, which is another significant step towards delivery of the recommendations of the ESG report.

#### **Knowledge - Our Most Important Resource**

In the knowledge age, the effectiveness of enterprise policy is closely intertwined with national approaches to science and technology development. The creation of Science Foundation Ireland and the considerable funding made available to the Irish research agenda through the most recent National Development Plan are both strong examples of the State's commitment to establishing Ireland as a sustainable knowledge economy. Forfás, through its research and administrative support to the Irish Council for Science, Technology & Innovation (ICSTI), was active throughout 2004 in informing the national debate in this regard.

Significant progress was made during 2004 in putting in place the new structures to secure a coherent strategy for our national science and technology investment. The appointment of the Chief Science Adviser to the Government, the decision to establish an Inter-Departmental Committee and a Cabinet Committee on Science, Technology & Innovation, as well as the appointment of the Advisory Council on Science, Technology & Innovation (as a successor to ICSTI), will help us to achieve policy coherence and greater impacts from the State's investment.

Also significant is the agreement of a national research & development action plan to 2010, *Building Ireland's Knowledge Economy*, outlining measures to involve both the State and the private sector in addressing issues of skills development, the supply of researchers, the general environment for research & development including within businesses, and arrangements to facilitate industry/academic collaboration. To this end, 2004 saw the publication by ICSTI of a *Code of Practice for Managing Intellectual Property from Publicly Funded Research*.

Further enterprise policy advisory work has taken place to promote the easy flow of new ideas from science to enterprise and to further develop the absorptive capacity of Irish SMEs. It is the translation of home grown science into products, innovation in services and our capacity to absorb knowledge created at home and elsewhere that will define Ireland's success as a leading knowledge economy.

#### **Maintaining Competitive Foundations**

The economic context for last year's work by Forfás was, by most measures, highly reassuring. Economic growth accelerated, foreign direct investment picked up, unemployment remained low and the public finances remained strong. In this economic environment, it may seem untimely to raise concerns about Ireland's future competitiveness. Yet the work of the National Competitiveness Council (NCC), to which Forfás provides research and administrative support, highlighted some key concerns which need to be addressed to ensure that Ireland remains competitive.

The analysis in last year's Annual Competitiveness Report (ACR) by the NCC, as well as in its earlier Statement on Prices and Costs, confirms the widely-held belief that costs in Ireland are increasing faster than in other developed countries. Together with the decline in the value of the dollar against the euro, this has impacted Ireland's cost competitiveness against other advanced and developing economies, and presents a growing threat to the sustainability of many businesses in Ireland. The fall in the cost of insurance in 2004 demonstrated how determined Government actions can improve cost competitiveness for businesses. Similar determination, applied across a range of other sectors, including energy, waste and transport will be important. The Competitiveness Challenge 2004 report by the NCC presented some well-considered recommendations on how this can be achieved.



#### **Acknowledgements**

During 2004, Forfás received significant support from the Taoiseach, Mr Bertie Ahern, T.D., from the Tánaiste, Ms Mary Harney, T.D., Mr Micheál Martin, T.D., Minister for Enterprise, Trade and Employment, and from other Government Ministers and Departments. I would like to acknowledge this support and the substantial actions taken by the Government to ensure the development of Ireland's enterprise sector.

The development agencies, Enterprise Ireland, FÁS, IDA Ireland, Shannon Development and Údarás na Gaeltachta all contributed significantly in their respective areas in supporting enterprise based in Ireland and also strongly supported and added to the work of Forfás during the year. Other organisations which supported Forfás and contributed to the success of the development agencies included Science Foundation Ireland, the third-level education sector, employer bodies and business organisations, trade unions and the media.

2004 saw a number of retirements from and new members joining the Forfás Board. I would particularly like to express thanks and appreciation to Mr Peter Cassells who stepped down as Chairman of Forfás after more than four years as Chairman and a previous six years as a Board Member. Peter demonstrated a unique understanding of the wide range of issues dealt with by Forfás and provided excellent leadership.

I would also like to thank Mr Paul Haran and Ms Toni Wall who also retired from the Board during the year. I am pleased to welcome new Board Members, Mr Seán Gorman and Ms Rosheen McGuckian.

I also want to thank many other organisations with which Forfás worked closely during the year, in particular the members of the following groups:

- ☐ The Expert Group on Future Skills Needs, chaired by Ms. Anne Heraty;
- □ The Irish Council for Science, Technology and Innovation (ICSTI), chaired by Dr. Edward M. Walsh. A new Advisory Council on Science, Technology & Innovation was established in May 2005 which will continue the work of ICSTI. I would like to thank Dr Walsh who has been at the forefront of the development of Ireland's science policy and has made a lasting national contribution. I would also like to extend thanks to all the members of ICSTI whose ground-building work has been instrumental in the development of Ireland's science base. I wish Mary Cryan, Chair, and the new Advisory Council on Science, Technology & Innovation well in their furtherance of this work;

- The Irish National Accreditation Board (INAB), chaired by Dr. Máire Walsh;
- The National Competitiveness Council (NCC), chaired by Mr. William Burgess. William served seven years as a member and two years as Chairman of the NCC and retired at the end of 2004 after delivering the Group's 7th Annual Competitiveness Report and Challenge documents. In his role as Chairman, William has been instrumental in identifying competitiveness issues facing the Irish economy and in the development of recommendations designed to protect and enhance Ireland's position. Dr Don Thornhill has been appointed to succeed William and I wish him well in this role in 2005; and
- □ The Chief Science Adviser to Government, Dr Barry McSweeney took up office on 1st September 2004. The Office of the Chief Science Adviser (CSA) to Government is independent, reporting to a Cabinet Committee on Science, Technology and Innovation. Forfás provides technical and research support to the CSA and I look forward to continuing this strong relationship with his Office and wish him well in this new role.

Finally, I want to thank Martin Cronin, the Chief Executive, his management team and the staff of Forfás for their continued energy and dedication throughout 2004, a challenging year in both the volume and breadth of work which was undertaken and delivered.

My experiences of Forfás, both through the Enterprise Strategy Group and as Chairman, give me confidence that this strong team will pursue its work with energy and professionalism in 2005.

Eoin O'Driscoll

*Chairman* June 2005

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### **Chief Executive's Report**



In 2004 globalisation, technological advancement and international competition continued to be fundamental influences on enterprise development at the national level.

#### A Snapshot of 2004

Building on a robust performance in 2003, the Irish economy continued to grow through 2004, helped by the recovery of economic activity globally and particularly in the USA. In real terms, Gross National Product (GNP) and Gross Domestic Product (GDP) expanded by 5.5 per cent and 4.9 per cent respectively. Current forecasts are for sustained healthy economic growth in 2005.

During 2004, aggregate Irish employment levels increased by over 65,000 to 1.89 million. By the final quarter, unemployment had fallen from 4.6 per cent to 4.3 per cent, with the construction and private-services sectors spearheading this trend. The sustained boom in residential building translated into a rise of almost 10 per cent in construction employment, while employment in private-services experienced its fastest increase since 2000, expanding by 3.8 per cent in 2004, led by growth in financial and support services jobs.

Ireland also enjoyed ongoing productivity improvements in 2004, particularly in manufacturing industries, resulting from new high-value-added activities and reinvestment in existing operations. Service sector productivity improvements remain a challenge.

Benchmarked against performance a decade ago, employment and exports stand at high levels, with employment in agency-supported companies in 2004 at 127 per cent of 1995 levels and exports by agency-supported companies in 2003 at 215 per cent of 1995 levels, in real terms.

#### **Structural Changes in the Enterprise Base**

Looking beyond the headline figures for 2004 economic performance, there is evidence of continuing structural change in the profile of enterprise in Ireland.

Employment in manufacturing agency-supported companies in this area fell back, reflecting on-going restructuring. Full-time permanent employment in manufacturing firms fell for the fourth successive year in 2004, with job losses concentrated in traditional manufacturing sectors such as textiles, clothing and paper and printing. In contrast, modern sectors with a strong export base such as chemicals and medical devices enjoyed net increases in employment. A small increase in employment in the electronics sector marked a welcome turnaround after three difficult years.

The internationally-traded services sector continued to expand in 2004, and internationally-traded services companies supported by the agencies recorded a net gain in employment. The increase was accounted for by financial services businesses, and firms in other areas of international services, such as consulting, software and other computer-related services.

The proportion of total employment in agency-supported companies in regions outside Dublin rose slightly from 68.2 per cent to 68.7 per cent. There were net gains in the West, South-West and Midlands and small net declines in Dublin, the Mid-East, South-East and Mid-West.

#### A Growing Knowledge Economy

Expenditure on in-house R&D per person employed in agency-supported companies grew on average by 5.9 per cent per annum between 2000 and 2003. Business expenditure on R&D (BERD) grew by 9.0 per cent in 2003 to total €1.1 billion. Foreign-owned companies now account for 72 per cent of total BERD in Ireland. The most important sector of the economy for business R&D spending continued to be the "software and other computer related" sector, accounting for 35 per cent of the total.

Looking beyond the headline figures for 2004 economic performance, there is evidence of continuing structural change in the profile of enterprise in Ireland.

#### **Global Challenges – Local Responses**

The strong recent performance of the Irish economy should not cloud recognition of the intensifying competitive challenges. The growth of China, India and other low cost economies as significant competitors for mobile international trade and investment continues apace. Commodity prices, especially in energy, have maintained a steadily upward trend, recently reaching highs last experienced in the early 1980s and manufacturing activities are ceding ground to services as a driver of economic growth in developed economies. In addition, for enterprise in the eurozone, the depreciation of the dollar has heightened cost competitiveness concerns in international trade.

Globalisation, technological advancement and international competition now exert fundamental influences on enterprise development at the national level. Our relative labour costs have risen. The technological sophistication and commercial awareness now required to design and deliver internationally competitive high value added products and services is placing ever greater demands on our national infrastructure - educational, physical and technological. Firms in Ireland are likely to face medium term competitive challenges more comprehensive and unremitting than at any point in our recent economic history.

In our small open economy, enterprise, science and technology policies must continue to evolve and must take account of the changing dynamic of global trade.

#### Forfás 2004

Forfás responded proactively to the challenges of 2004. We undertook research and analysis into delivering the conditions required for a competitive business environment; into identifying and supporting dynamic and sustainable enterprise sectors; and into building Ireland's science, technology and innovation capacity to meet the needs of an evolving modern economy.

The volume and breadth of work undertaken required a high level of flexibility and responsiveness from staff in contributing to the delivery of, among other things, three key strategic reports:

- ☐ The Enterprise Strategy Group Report,
- □ Ireland's R&D Action Plan, and
- □ The Consumer Strategy Group Report.

The full range of work undertaken is outlined in the main body of this report. It included topics such as the sales, marketing and innovation capabilities of Irish exporting SMEs, innovation networks and a National Code of Practice for Managing Intellectual Property from Publicly Funded Research.

Internal processes were also an area of focus during 2004, with considerable investment in both knowledge systems and people development to ensure continued development in an increasingly complex enterprise environment.

#### 2005 priorities

In 2005, Forfás is committed to working in partnership with the Department of Enterprise, Trade and Employment, the development agencies, industry and other relevant bodies to co-ordinate State support for Irish-based enterprises competing in global markets including:

- □ Supporting the new science and technology structures and the implementation of the Inter-Departmental Committee on Science, Technology and Innovation Action Plan "Building Ireland's Knowledge Economy The Irish Action Plan for Increasing Research and Development to 2010";
- Providing research support to the National Competitiveness Council (NCC) in highlighting the significant challenges for Ireland in maintaining national competitiveness, with a particular focus on improving the regulatory environment for industry and highlighting appropriate responses for Ireland;
- Progressing a Gateways Study in conjunction with the Department of the Environment, Heritage and Local Government, identifying the infrastructure requirements of these key locations to underpin regionally balanced enterprise growth and development;
- Working with the Expert Group on Future Skills Needs to ensure that Ireland's workforce evolves to mirror our changing skills requirements through the implementation of "One Step Up", a policy of supporting life-long skills development in the context of the evolving needs of enterprise;



- □ Co-operating with relevant groups and organisations to support implementation of the key recommendations of the Enterprise Strategy Group, including a pilot enterprise-led business network initiative and the use of employee financial participation as a mechanism for driving productivity and a range of other initiatives;
- Expanding significantly the activities of the Discover Science and Engineering Awareness Programme, which promotes increased public interest in science and encourages young people to consider science as a career;
- Developing a detailed study of productivity in enterprise in Ireland, with a view to pinpointing key areas for policy intervention; and
- Undertaking an investigation of services innovation as a central component of enterprise development in advanced economies.

A new era of economic development brings with it different enterprise opportunity and challenge and fresh and demanding requirements for change. In this context, Forfás delivered a considerable volume of work to a high standard in 2004. I would like to express my sincere thanks to all staff for their consistent professionalism, integrity and enthusiasm. I look forward to working with them to further deliver on our commitment to support national enterprise development in 2005.

Morda Comi

Martin Cronin Chief Executive June 2005



Statistical Overview

Table 1	
Direct Expenditure of Agency-Supported Firms in the Irish Econo	my

		IRISH-OWNED FIRMS		FOREIGN-OWNED FIRMS		ALL FIRMS		
		2002	2003	2002	2003	2002	2003	CHANGE
Sales	€м	23,521	23,984	77,573	78,182	101,094	102,166	1.1%
Payroll Costs	€м	4,579	4,719	6,075	6,002	10,655	10,722	0.6%
Irish Raw Materials	€м	8,808	8,792	6,163	5,491	14,971	14,283	-4.6%
Services bought in Ireland	€м	2,977	3,069	5,889	6,663	8,867	9,732	9.8%
Direct Expenditure in the Economy	€м	16,365	16,582	18,127	18,156	34,492	34,737	0.7%
Direct Expenditure as % Sales	%	69.6	69.1	23.4	23.2	34.1	34.0	-0.1

Source: Annual Business Survey of Economic Impact, co-ordinated by Forfás and administered by the Survey Unit, ESRI

# Expenditure by Agency-Supported Firms in the Irish Economy

Data relating to the direct expenditure of agency-supported companies in 2003 were compiled by Forfás and the agencies concerned (IDA Ireland, Enterprise Ireland, Shannon Development and Údarás na Gaeltachta) during 2004. These data measure the contribution made by agency-supported companies to the Irish economy by way of their direct expenditure on payroll costs, Irish raw materials and services purchased in Ireland.

The data indicate that the overall output of firms in manufacturing and internationally-traded services and their expenditure in the economy increased marginally in 2003.

The overall sales of manufacturing and internationally-traded services companies increased by 1.1 per cent in 2003 (in nominal terms) while direct expenditure in the economy (on payroll costs, raw materials and services) increased by 0.7 per cent (in nominal terms). These growth rates are in marked contrast to the double-digit growth rates witnessed in the late 1990s.

Direct expenditure by agency-supported firms in the economy totalled €34.7 billion in 2003, made up of payroll costs (€10.7 billion), Irish raw materials (€14.2 billion) and expenditure on Irish services (€9.7 billion). Irish-owned companies accounted for €16.5 billion of this direct expenditure with raw material inputs accounting for the largest share – this is driven largely by the food and drink sector which purchases most of its raw material inputs domestically. Foreign-owned companies spent €18.2 billion directly in the economy and this is spread quite evenly across the three categories of payroll costs, raw materials purchases and services purchased in Ireland.

#### **Corporation Tax Payments**

In addition to their expenditure in the economy, manufacturing and internationally-traded services companies provide a significant direct return to the Exchequer by way of corporation tax payments.

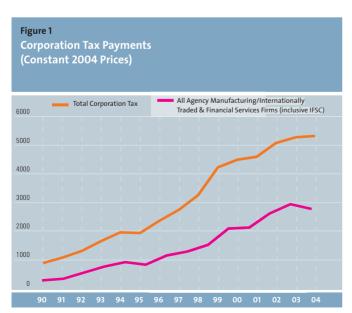
The most recent data in respect of the corporation tax payments of agency-supported companies in manufacturing and internationally-traded services relate to 2003. The total corporation tax yield from all sources was €5.2 billion in 2003, an increase of 3.8 per cent in real terms on the previous year. Agency-supported firms in manufacturing and internationally-traded services accounted for €2.7 billion (52 per cent) of the total corporation tax paid in the economy.

Four sectors account for the vast bulk of the €2.7 billion corporation tax payments referred to above: chemicals and pharmaceuticals (34 per cent); international financial services (23 per cent); ICT - hardware and software (21 per cent) and the food and drink sector (11 per cent).

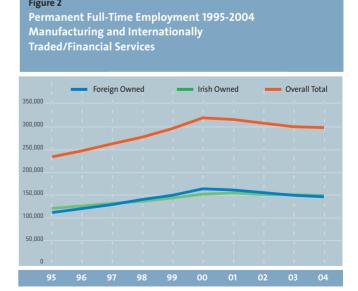
#### **Employment in Agency-Supported Companies**

Total full-time employment in companies under the remit of Enterprise Ireland, IDA Ireland, Shannon Development and Údarás na Gaeltachta amounted to 298,000 in 2004, a decrease of 1,000 on the previous year. **Figure 2** shows that the rate of job losses slowed between 2003 and 2004 as compared with the previous three years (2000 to 2003) when an average of 6,000 jobs were lost each year. Despite some job losses in recent years, there are 64,000 more people employed in manufacturing and internationally-traded services today than in 1995.

Employment in manufacturing and internationally-traded services was equally divided between Irish-owned firms and foreign-owned firms in 2004. Employment in Irish-owned manufacturing and internationally-traded services has increased from 121,000 in 1995 to 149,000 in 2004, having peaked in 2001 at 154,000. Employment in foreign-owned manufacturing and internationally-traded services has increased from 114,000 in 1995 to 149,000 in 2004, having peaked in 2000 at 165,000.



Source: Exchequer Returns for 2003, Department of Finance. Annual Business Survey of Economic Impact, co-ordinated by Forfás and administered by the Survey Unit, ESRI



Source: Forfás - Annual Employment Survey



Approximately 25,000 jobs were created in manufacturing and internationally-traded services in 2004 but these job gains were offset by job losses of 26,000 during the same period. The ten-year trend presented in **Figure 3** highlights the marked difference in the number of jobs being created and lost in the years up to 2000 and the situation since then. There are interesting sectoral dynamics underpinning these aggregate trends:

- □ Among Irish-owned firms, the "textiles, clothing and footwear" sector has witnessed a continuous decrease in employment from 12,000 in 1995 to 4,000 in 2004. The indigenous internationally-traded services sector, on the other hand, has witnessed a continuous increase in employment from 7,000 in 1995 to 25,000 in 2004 with most of the increase in employment concentrated in the late 1990s;
- □ Among foreign-owned firms, the "textiles, clothing and leather sector" witnessed a continuous decrease in employment from 9,000 in 1995 to just over 1,000 in 2004. Internationally-traded services witnessed a continuous increase in employment from 13,000 in 1995 to 41,000 in 2000 with slight increases in subsequent years. The foreign-owned electronics sector has experienced more mixed fortunes with employment increasing from 24,000 in 1995 to almost 40,000 in 2000 only to reverse back to its 1995 employment level in subsequent years.

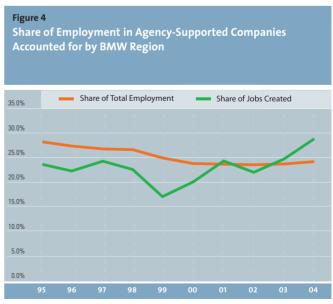
#### **Regional Distribution of Employment**

Figure 4 presents an overview of the share of employment in manufacturing and internationally-traded services accounted for by the Border, Midlands and West (BMW) region. The BMW region has been accounting for an increasing share of new jobs created in manufacturing and internationally-traded services in recent years. In 2004, more than 7,000 new jobs were created in the BMW region and this equates to 28.6 per cent of jobs created in agency-supported firms throughout the country, the highest it has been in the ten year period examined and considerably higher than the 17.0 per cent share it held in 1999.

At the same time, however, jobs are being lost in both the BMW region and in the rest of the country. In aggregate terms, the share of total employment accounted for by the BMW region has remained static since 2000 at 24.0 per cent.



Source: Forfás - Annual Employment Survey



Source: Forfás - Annual Employment Survey

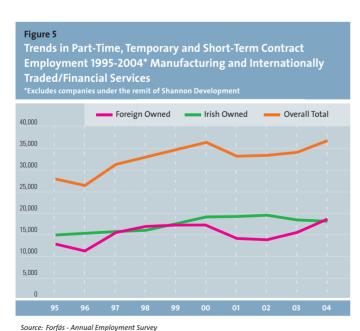
# Part-Time, Temporary and Short-Term Contract Employment

In addition to the 298,000 persons employed full-time in manufacturing and internationally traded services, 37,000 persons were also employed in part-time, temporary and short-term contract positions in 2004. Employment in this category has grown over the last decade and now accounts for almost 12 per cent of all jobs in agency-assisted companies. Taking the two categories of employment together (permanent full-time and temporary/part-time), there are now 335,000 persons employed in agency-assisted companies, up from 262,000 in 1995 (Figure 5).

# Research and Development in the Business Sector (BERD)

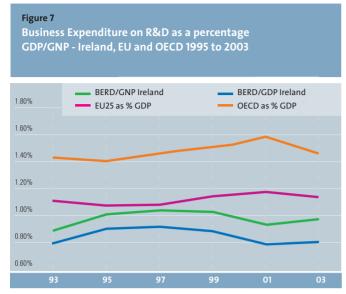
**Figure 6** presents details on the aggregate level of business spending on research and development from 1993 to 2003 in both current and constant prices. Between 2001 and 2003 BERD rose by 19.5 per cent in current terms, outpacing the 15.0 per cent increase recorded in the previous two year period. This acceleration in growth of BERD between 2001 and 2003 was an impressive performance given the heightened global economic risks in that period and also given the sector specific shock which occurred in ICT industries at that time. In constant terms BERD growth quickened to 10.3 per cent between 2001 and 2003.

Despite some job losses in recent years, there are 64,000 more people employed in manufacturing and internationally-traded services today than in 1995.





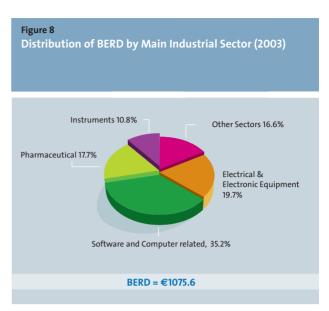
Source: Forfás - Business Expenditure on Research & Development (BERD) 2003/2004



Source: Forfás - Business Expenditure on Research & Development (BERD) 2003/2004

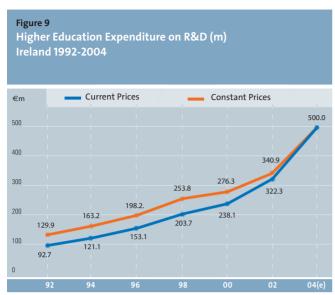
Figure 7 plots the level of BERD in Ireland relative to economic activity, and compares this with European and OECD average BERD performance. Strong increases in BERD between 2001 and 2003 pushed up the ratio of BERD to Gross National Product (GNP) to 0.97 per cent from the 0.93 per cent ratio recorded in 2001. BERD relative to economic activity in Ireland remained below the averages for the EU25 and OECD estimated at 1.13 per cent and 1.45 per cent respectively, though the performance gap narrowed further in the period. In contrast with the strengthening Irish BERD performance between 2001 and 2003 there is emerging evidence of an overall fall in global BERD activity.

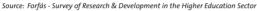
The software/computer sector was responsible for 35.2 per cent of total BERD in 2003 (Figure 8). This was followed by the electrical/electronics sector (19.7 per cent); pharmaceuticals (17.7 per cent) and instruments (10.8 per cent). The relative importance of the electrical/electronic equipment sector to overall BERD fell from 26 per cent in 1993 to 19.7 per cent in 2003. In contrast, there has been a very substantial growth in the relative share of BERD attributable to the software & computer related sector - from 15 per cent in 1993 to a current level of 35.2 per cent. The relative role of food drink and tobacco has also fallen back quite substantially accounting for 12 per cent of total expenditure in the early 1990s compared with only 4 per cent in 2003.



Source: Forfás - Business Expenditure on Research & Development (BERD) 2003/2004

State spending on science and technology activities increased to €2.06 billion in 2004, a rise of 9.6 per cent from 2003





# Figure 10 Higher Education Expenditure on R&D (% economic activity) 1992-2004 (e) HERD % GNP (IrI) HERD % GDP (EU25) HERD % GDP (OECD) 0.45 0.40 0.35 0.30 0.25 92 94 96 98 00 02 04

Source: Forfás - Survey of Research & Development in the Higher Education Sector

# Research and Development in the Higher Education Sector (HERD)

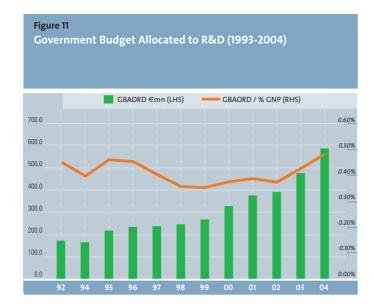
Figure 9 plots expenditure on R&D performed across the higher education sector between 1992 and 2004. In 2002 expenditure increased by 35 per cent to €322 million from €238 million in 2000. While 2004 figures are not yet available for HERD³, projections from the *Science Budget Survey 2004* indicate that expenditure is expected to reach approximately €500 million. This figure includes additional R&D funding from Science Foundation Ireland and from the Programme for Research in Third Level Institutions.

In relative terms R&D spending in the higher education sector was 0.31 per cent of GNP in 2002 (**Figure 10**). This is expected to rise to 0.41 per cent of GNP in 2004 based on a projected increase in HERD of approximately €500 million. As a result the gap between R&D spending in the higher education sector in Ireland and the EU and OECD averages will narrow further. 2004 figures for the EU and OECD respectively are estimated at 0.43 per cent and 0.45 per cent of GDP. Globally, the leading nations for performance of R&D in the higher education sector are Sweden (0.85 per cent of GDP), Finland (0.7 per cent) and Canada (0.65 per cent)

# Government Funding of Science and Technology

In 2004 State spending on science and technology (S&T) activities increased to €2.06 billion from €1.88 billion the previous year, a rise of 9.6 per cent. Most of this increase resulted from higher Exchequer funding for S&T of 10.3 per cent. Within the total science and technology budget expenditure on research and development is an important component. The Government Budget Appropriation or Outlays on R&D (GBAORD) is an internationally recognised indicator allowing measurement and international comparison of progress on R&D spending by governments.

Figure 11 shows that Irish Government Budget Outlays on R&D rose to €591 million in 2004. This is an increase of 23 per cent over the previous year's figure, due to additional R&D funding from Science Foundation Ireland, the Higher Education Authority and other government departments. The GBAORD/GNP ratio rose to 0.48 per cent of GNP in 2004, a significant increase on the 1999 figure of 0.35 per cent.



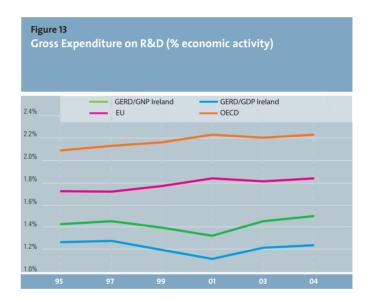


# Gross Expenditure on Research and Development (GERD)

Gross expenditure on R&D (GERD) is the indicator of overall R&D performance across an economy. It includes R&D performed in the private sector (BERD), in the public sector (GoveRD) and in the higher education sector (HERD). Total R&D expenditure in the Irish economy in 2004 (Figure 12) is estimated to have risen to €1.79 billion, an increase of 10.3 per cent from the GERD total recorded in 2003.

In relative terms, the ratio of Gross R&D spending to overall economic activity is now estimated to be around 1.5 per cent of GNP, compared to the 1.32 per cent ratio measured in 2001 and 1.40 per cent ratio in 1994.

Figure 13 plots relative Gross R&D intensities for Ireland (GNP and GDP measures), and compares them with the EU25 and OECD averages. Progress has been made in narrowing the GERD gap between Ireland and the EU and OECD averages between 2001 and 2004.





Forfás: Contributing to
Policies that Underpin
Enterprise and Technological
Development in Ireland for
the Benefit of All

1



Continuing development of dynamic and sustainable enterprise sectors and technology as Ireland embraces the knowledge economy

7



**Enhancing Ireland's competitive position** 

2



Building Ireland's science, technology & innovation capacity to meet the needs of an evolving modern economy

Continuing development of dynamic and sustainable enterprise sectors and technology as Ireland embraces the knowledge economy



To remain successful in a globalising economy Ireland must build distinctive competencies in businesses and technologies where we currently are or can become significant players. Forfás worked on a range of issues during 2004 aimed at building and maintaining vibrant enterprise sectors which lead to our ongoing development as a knowledge economy.

#### **Enterprise Strategy Group**

Forfás devoted considerable resources to assisting the Enterprise Strategy Group in completing its report *Ahead of the Curve: Ireland's place in the Global Economy* during 2004.



The Enterprise Strategy
Group (ESG) was
established by the Tánaiste
and then Minister for
Enterprise, Trade and
Employment, Ms Mary
Harney, T.D. to develop a
medium-term Enterprise
Strategy for Ireland. Forfás
was appointed as
executive to this Group
which held its first
meeting in September

The Group published its findings on 7 July 2004 - Ahead of the Curve: Ireland's Place in the Global Economy. This report presents a new strategic vision for the long-term success of enterprise and details a number of recommendations to underpin its achievement in the decade to come. In particular, the Report highlights:

■ The importance of building on Ireland's traditional strengths in manufacturing and operations to develop world-class capabilities and expertise in marketing and technology, to secure Ireland's position as a location for high value-added business activities;

- ☐ The value of a stable and predictable taxation regime underpinned by an effective and agile State system in maintaining Ireland's position as a desirable place to do business:
- ☐ The key role of world class skills, education and training as the bedrock for the future economic success of the country; and
- The growing importance of the services sector in Ireland's development as an economy.

#### **Expertise in Markets**

The report outlines specific actions required to develop Ireland's capabilities in sales and marketing. These include initiatives to develop and augment sales and marketing skills, to develop a more focused approach to export intelligence and promotional activities and to target overseas companies at the early stage of internationalisation for sales and marketing activities.

## Expertise in Technology/Product and Service Development

The report recommends that Ireland develops a strategic, cohesive and focused approach to market-led applied research and technological development, and calls for an increase in public funding for in-firm R&D and applied research.

#### **Enterprise-Led Networks**

Ahead of the Curve acknowledges the valuable role that industry itself plays in sectoral, regional and company development, particularly through increased cooperation and collaboration. The Report recommends that support be provided to stimulate enterprise-led networks which commit to drive this process.



Pictured at the launch of the Enterprise Strategy Group's Report are Mr Eoin O'Driscoll, Chairman of the Enterprise Strategy Group and Ms Mary Harney, T.D., Tánaiste and then Minister for Enterprise, Trade and Employment.



#### **World Class Skills, Education and Training**

A focus on encouraging greater participation in continuous learning is required, together with ensuring that the quality of our graduates rank in the top decile of OECD countries.

#### **Response to the ESG Report**

The Enterprise Strategy Group Report was widely publicised at the time of its launch and an Inter-Departmental Group was established to consider the recommendations and prepare an implementation strategy.

The Inter-Departmental Group presented its conclusions to Cabinet and an *Enterprise Action Plan* was launched in February by Minister for Enterprise, Trade and Employment Mr Micheál Martin, T.D..

The broad thrust of the Report was welcomed and the issues identified for priority attention were those that the Government considers critical to future economic growth. The Action Plan and timetable outlined the intention to implement most of the recommendations in the ESG Report, and alternative mechanisms to achieve the objectives of the remaining recommendations.

Initiatives planned and underway to progress implementation of the key recommendations endorsed by the Government include:

#### **Expert Group to Advise on ESG Implementation**

An Expert Group is being established to advise on implementing the ESG recommendations. The Minister for Enterprise, Trade and Employment will meet with the Expert Group - comprising four senior figures representative of the enterprise sector and relevant Secretaries General - and will report to Government on the implementation of the recommendations of the ESG Report twice a year.

#### **Expertise in Markets**

□ The internationalisation of Irish companies is considered of critical importance. Enterprise Ireland has announced a new strategy, *Transforming Irish Industry*, which includes a new Overseas and Marketing Support Division to provide a more focused service to its client companies in overseas markets.

# Expertise in Technology/Product and Service Development

- □ A joint working group involving SFI, Enterprise Ireland, IDA Ireland and Forfás was established by the Department of Enterprise, Trade and Employment to assess the most effective approach to build the technology base of enterprise in Ireland. The group is developing a strategic implementation plan to ensure that the Department's very substantial investment in research, technology and innovation is best leveraged to meet the targets set out in the National R&D Action Plan; and
- A new Cabinet Committee and an Inter-Departmental Committee on Research & Development have been established to provide and oversee a detailed road-map towards the achievement of a 2.5 per cent of GNP spend on R&D in line with the Lisbon target.

#### **World Class Skills, Education and Training**

- □ The Government endorsed a 'One Step Up' initiative to promote lifelong learning and provided funding of €27 million in the Budget 2005 to FÁS for in-company training in 2005;
- □ FÁS and Enterprise Ireland will work together to expand and develop the existing FÁS Graduate Programme; and
- □ The Department of Education and Science is consulting the Universities and Institutes of Technology to support the incorporation of sales and marketing techniques into course content.

#### **Enterprise-Led Networks**

Enterprise Ireland, in conjunction with stakeholders, is implementing a pilot programme to encourage the establishment and development of enterprise-led business networks.

#### Development of Strategies for High-Value Manufacturing Sectors and Internationally-Traded Services

As part of the ESG review, Forfás supported a number of industry expert groups that considered specific opportunities for Ireland to take advantage of global trends across a wide range of high-value manufacturing sectors and internationally-traded services. The output from each group was included on a CD ROM accompanying Ahead of the Curve: Ireland's Place in the Global Economy.

High-value manufacturing sectors reviewed included pharmaceuticals and biotechnology, medical technologies, information and communications technologies, food and drink, engineering and high-value consumer goods. An overarching theme identified the need for companies to continuously innovate to improve productivity and increasingly engage in applied research for both products and processes. They should increasingly engage in a range of activities that facilitate closer involvement with the customer, such as technical support, order management, and product management. Each sectoral report identified high-value subsectors or activities that offer high potential, together with key actions required to drive further development of the sector in Ireland.

Over the next decade, internationally-traded services and activities will become increasingly important for indigenous and foreign-owned operations in Ireland. Growth in the sector will be driven by reduced barriers to trade, advances in communications technology and Ireland's corporation tax regime. Ireland already has a strong track record in winning foreign direct investment in service activities and a growing number of indigenous firms are trading internationally, providing a solid platform for future growth.

More than 80 industry participants considered a wide range of service activities to assess the potential for growth and increased international trade. Specific opportunities were identified in a number of sectors including education services, financial services, healthcare services, the creative industries and tourism; and across a number of service activities including European headquarters, intellectual property, sales and marketing, franchising and shared and outsourced business processes.

# Innovation in Services Sectors in Ireland

During 2004 Forfás conducted a scoping study to develop a framework for the examination of service innovation in Ireland and the identification of possible approaches to the sector's innovation needs.

The service sector has a dominant role in developed economies, accounting for about two thirds of employment and GDP. Moreover, services are the only sector of the European and North American economies that are generating employment.

The service sector also dominates the Irish economy and accounts for approximately 60 per cent of GDP and employment. During the 1990s, the rate of employment in services grew by 45 per cent. Despite the growth of the services sector in Ireland, it was only in the 1990s that its value in terms of enhancing national competitiveness was fully recognised.

Forfás' scoping study on innovation in the services sector found that there is a need to develop more detailed and timely information and understanding on innovation in services industries in Ireland and set out a framework to pursue this. This study framework should provide valuable information to support and contribute to the development of an effective policy supporting service sector activity in Ireland.



#### **Wireless Communications**

In April 2004 Forfás published a strategy that outlines the potential for Ireland to further develop wireless communications as a sustainable internationally-traded industry sector.

The Wireless Communications: An Area of Opportunity for Ireland Report recommended a series of key actions that need to be taken to drive the development of the sector and capitalise on opportunities. It recommended that Ireland focus and builds on its core strengths in operations systems support (OSS), security, billing and transaction management by complementing these competencies with certification and hosting activities.

By exploiting expertise in OSS Ireland could create a European hub for the emerging mobile application hosting industry. The development of the industry would be further stimulated by the establishment of a wireless sector network to catalyse a higher level of interaction between the many players in the Irish wireless sector.

The study also outlined a number of recommendations to improve industry-academia research collaboration and to liberalise spectrum management in Ireland to stimulate the trial and deployment of new wireless technologies.

During the year, Forfás has worked closely with an implementation group, comprising representatives from industry, academia, ComReg and the development agencies, to give effect to the Report's recommendations. There have been favourable developments, particularly in:

- Spectrum liberalisation and trial licences that should stimulate the development of innovative wireless technologies, products and services in Ireland;
- Progressing potential for the development of an industry-led wireless network; and
- In identifying specific opportunities for collaborative enterprise-led research.

#### Nanotechnology

The Irish Council for Science, Technology and Innovation (ICSTI), to which Forfás provides research and administrative support, launched its *Statement on Nanotechnology* in July 2004. This Statement assesses Ireland's current capabilities in the field of nanotechnology, maps out specific areas of opportunity for the Irish economy and presents a sustainable vision and broad strategy for the promotion, development and commercialisation of nanotechnology in Ireland.

Nanotechnology is emerging worldwide as a key enabling technology that will impact significantly on many sectors of the Irish economy. Nanomaterials and devices present enterprises with opportunities to enhance their competitiveness by developing new and improved products and processes and in improving the performance or reducing the cost of existing products and processes.

It is estimated that the potential value of nanotechnology enabled products and processes exported by Irish enterprises will exceed €13 billion by 2010, which is more than 10 per cent of the value of current exports.

The Statement emphasises that opportunities exist for companies of all sizes, Irish-owned and multi-national, within a range of sectors and in particular, recommends that nanotechnology research clusters are established to serve the nanotechnology needs of the ICT and healthcare sectors.

Key priorities include the need for:

- Enterprise Ireland to continue to support high potential start-ups and to encourage the use of nanotechnology to improve the performance and reduce the cost of products and processes marketed by established indigenous companies;
- Public funding for nanotechnology to be coordinated by the funding agencies to optimise the opportunity to build excellence in Irish research; and
- Regulatory agencies work together to update existing regulatory frameworks to ensure public confidence in the use of nanomaterials.

Pictured at the launch of the National Code of Practice for Managing Intellectual Property from Publicly Funded Research are Ms Mary Harney, T.D., Tánaiste and then Minister for Enterprise, Trade and Employment; Dr Edward M. Walsh, Chairman, Irish Council for Science, Technology & Innovation and Dr Ena Prosser, Chair of the Taskforce that prepared the Code.



# Positioning Ireland for Success in Biotechnology

ICSTI established a Task Force on Positioning Ireland for Success in Biotechnology. The objective of the Task Force was to review the biotechnology investments and initiatives currently underway in Ireland and to identify niches and priorities for investment.

In striving to build a dynamic, knowledge-based economy Ireland has identified biotechnology as a key area which is likely to underpin future technological development. Significant increases in research and development (R&D) investment in recent years mean that Irish biotechnology will benefit from combined funding of more than €1 billion to date from Science Foundation Ireland, the Higher Education Authority, Enterprise Ireland, the Health Research Board, Teagasc, the European Commission and others. In parallel with growth in research infrastructure and research excellence, the business sector for which biotechnology is relevant is highly diverse with a core of large multinational companies (representing more than €3.5 billion in foreign direct investment and providing substantial levels of employment), and an increasing trend in the formation of indigenous companies.

It was against this background that the Task Force was established, focusing primarily on the bridging of high technology disciplines with traditional Irish industries, natural resources and values as a means to leverage Ireland's uniqueness and build on existing strengths.

The Task Force selected priority areas (diagnostics, medical devices, pharmaceutical-biopharmaceutical, manufacturing support service industries, marine resources, agriculture-food, animal health) for a cluster based approach to future development. Its report is expected in mid 2005.

# Ireland's Attractiveness for Mobile R&D Investment

In conjunction with IDA Ireland, Forfás conducted an assessment of Ireland's current relative attractiveness for enterprise R&D and identified policy requirements for Ireland to capture a larger share of mobile R&D.

Attracting overseas R&D investment is key to building Ireland's future competitiveness and to underpinning our transition to a knowledge economy. Sixty-five per cent of business expenditure on R&D in Ireland originated in multinational corporations (MNCs), but much of this expenditure is associated with a small number of companies, and overall R&D intensity is low by international standards. Competition for multinational R&D investment is increasingly intense as the R&D activities of MNCs become more mobile. In the period 2000 to 2002 Ireland attracted an estimated eight per cent of greenfield R&D investments in Europe (main sources were the US, Japan and the UK) – a good performance, but not yet matching our success in attracting FDI in areas such as shared services and customer contact centres.

The overall recommendations were that in order to win high quality R&D investment Ireland needs to:

- Develop as a cluster for R&D in key sectors (e.g. critical mass is already evolving in pharmaceuticals, medical devices and ICT and provides Ireland with an immediate opportunity);
- Market Ireland as a location for R&D through a major sales and marketing drive. The capabilities and research strengths of the universities need to be highlighted and examples of companies successfully engaging in R&D need to be showcased;
- Ensure a balanced approach to attracting additional R&D investment, strengthening the focus on R&D from the existing base as well as continuing to attract greenfield R&D investments; and
- □ Further adapt incentives to the R&D needs of companies.



#### Tax and Fiscal Environment

#### **VAT on E-Business**

In July 2004, Forfás, in conjunction with IDA Ireland and Enterprise Ireland, commissioned a study to assess ways of addressing a VAT disadvantage faced by Irish firms engaging in 'business to consumer' (B2C) electronically supplied services.

This study looked at those services which a business supplies on-line to a private individual within the EU. Private individuals generally cannot recover VAT, therefore if one supplier is legally obliged to charge a higher VAT rate than another this affects the pricing of the services and can result in a distortion of competition.

VAT on services in the EU is covered by the Sixth VAT Directive. Unlike physical goods, this imposes VAT at the rate applicable in the place of supply to customers throughout the EU. This means that a consumer in one Member State buying electronically supplied services from a firm located in another Member State is liable to the VAT rate prevailing in that other state.

At 21 per cent, Ireland has one of the highest standard rates of VAT among Member States. There are concerns therefore about the impact this may have on the emergence of a robust B2C electronically supplied services sector in this country in the following areas:

- B2C digital content, e.g. music and film downloads, games, eLearning;
- □ B2C digital distribution of software;
- B2C ePublishing, e.g. online access to published content, imagery;
- B2C online databases, e.g. automated dating services;
- B2C online gambling and gaming, e.g. online poker, betting; and
- Agency services where commission is paid by consumer, e.g. hotel agent.

This study concluded that in the main, an alternative approach to this issue to address the problem faced by this sector could only be realised through the proposed review of the directive. This review should call for a change in the rules relating to B2C electronically supplied services to ensure that VAT is charged at the rate applicable in the country of the consumer.

The findings and conclusions of this report have been presented to the Department of Enterprise, Trade and Employment for consideration, in the context of the scheduled review of the European Directive concerning the VAT treatment of electronically supplied services in 2006.

#### **Capital Duty**

In its Budget 2005 submission, Forfás petitioned for the abolition of Capital Duty.

Capital duty was introduced in Ireland in 1973 to comply with the EU Directive on the harmonisation of indirect taxation of companies and limited partnerships.

A subsequent EU Directive allowed for the abolition of Capital Duty by Member States as they saw fit. The UK, Germany, France, Denmark and Hungary have abolished Capital Duty.

The Basel II Rules on Banking Supervision, approved in June 2004, require banks and financial institutions to set up an internal rating system by which to assess credit risk. Capital Duty results in an extra cost to raising finance through share capital. It is considered a barrier to companies wishing to improve their capitalisation in order to access preferential credit rates, in accordance with Basel II provisions.

In addition, Capital Duty was thought to be a possible disincentive for companies to establish holding companies in Ireland, with Capital Duty levied on the issue of share capital distorting Ireland's competitiveness as a holding company location.

In his Budget 2005 speech, the Minister for Finance, Mr Brian Cowan, T.D. announced a reduction of Capital Duty to 0.5 per cent. 2

#### Policies to enhance Ireland's competitive position



The pursuit of sustainable economic growth, better public services and the development of the knowledge economy must be underpinned by an enterprise base that is internationally competitive. Advising on policies to support Ireland's overall competitiveness was a high priority for Forfás throughout 2004.

# Annual Competitiveness Report and Competitiveness Challenge

The National Competitiveness Council (NCC) published its seventh *Annual Competitiveness Report* (ACR) and *Competitiveness Challenge* in October 2004. Forfás provides research and secretariat support to the National Competitiveness Council

Against a basket of 16 countries Ireland came:

#### **Principal strengths**

- □ 1st out of 16 countries for rate of standard corporation tax;
- □ 1st out of 9 countries for housing completions per annum as a percentage of total housing stock;
- □ 2nd out of 16 for exports of commercial services as a of percentage GDP;
- □ 1st out of 13 countries for the number of science and engineering graduates (% of population aged 20-29);
- □ 1st out of 9 countries for high tech investment as a percentage of total private equity investment; and
- □ 4th out of 16 countries for total entrepreneurial activity.

#### **Principal weaknesses**

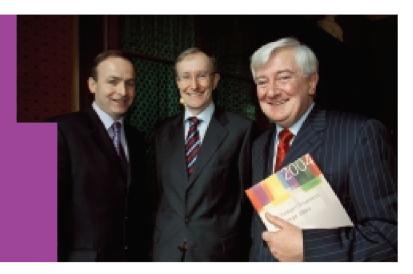
- ☐ 13th out of 16 for intensity of local competition (ranking of 1 = most competitive);
- □ 15th out of 16 countries for distribution infrastructure;
- □ 11th out of 12 countries for infrastructural stock; and
- 9th out of 16 countries for administrative burden for start-ups.

The Council noted that one of the traditional strengths of the Irish business environment in the past has been the light administrative burden faced by small businesses and entrepreneurs, compared with other countries. While the Council acknowledged that most regulations are implemented for valid public policy reasons, it expressed concern that Ireland had fallen in the rankings. On the impact of the administrative burden for start-up companies, Ireland has fallen to 9th out of 16 countries benchmarked in 2004 from being ranked 6th out of 16 in the same indicator in the Annual Competitiveness Report 2003. This deterioration reflects increasing concern at the costs of compliance with European Union and national regulations across a wide spectrum.

The Competitiveness Challenge 2004, the Council's policy document, was launched alongside the ACR in October 2004. In the Competitiveness Challenge the Council made 44 specific recommendations, based on the evidence provided by the ACR, to advise Government in developing policies to maintain and further improve Ireland's competitive position. The recommendations centered around three broad themes:

- □ Developing Ireland as a Knowledge-Based Economy
- □ Improving the Regulatory Environment for Industry
- □ Improving Ireland's Cost Competitiveness

Pictured at the launch of the National
Competitiveness Council's Annual
Competitiveness Report and
Competitiveness Challenge are
Mr Micheál Martin, T.D., Minister for
Enterprise, Trade and Employment;
Mr Martin Cronin, Chief Executive,
Forfás and Mr William Burgess, Chairman,
The National Competitiveness Council.



#### **Developing Ireland as a Knowledge-Based Economy**

The Council proposed the roll-out of targeted pre-primary intervention programmes, to increase educational participation in areas of social and economic disadvantage.

Other recommendations included:

- □ Further sustaining public investment in science and technology beyond the end of the current National Development Plan (2000-2006);
- □ Improving knowledge transfer between universities and industry; and
- ☐ Ensuring an adequate supply of qualified scientists and engineers.

#### Improving the Regulatory Environment for Industry

The Council concluded that a number of actions need to be taken to improve the regulatory environment for industry. It advised that information requests from government agencies to companies should be consolidated through the use of technology. The Council also recommended that government departments should devote greater resources to Regulatory Impact Analysis (RIA) to test the impact new regulations have on competitiveness. More specifically, the Council recommended that the Government should instruct the Company Law Review Group to review the Company Law Amendment Act 2001 and the Companies (Auditing and Accounting) Act 2003 as the Council believes the legislation is creating barriers for start-up companies.

#### **Improving Ireland's Cost Competitiveness**

Based on the analysis the Council made recommendations including:

- ☐ That the Competition Authority be given the power to levy fines on firms that violate competition law;
- ☐ That better regulation is needed to put downward pressure on prices; and
- ☐ That the Government should work to reduce inflation and wage demands by avoiding large increases in excise duties, VAT and administered prices.

#### Statement on Prices and Costs

The Council published its *Statement on Prices and Costs* in September 2004.

To assist the Council in its deliberations, a report on Ireland's Price and Wage Competitiveness was commissioned. This compared Irish consumer prices and business costs against a basket of countries and concluded that Ireland's costs were out of line with other advanced economies. The statement concluded that:

- □ Ireland's consumer price inflation rate has exceeded the eurozone and EU15 average for the past seven years;
- □ In the five years to January 2004, 68 per cent of inflation occurred in the non-traded sectors and decisions by Government and its agencies and regulators added 7.9 per cent to the total inflation rate; and
- □ A typical industrial electricity user pays 40 per cent higher electricity costs in Ireland than in the UK.

# Implementation of NCC Recommendations

The Department of Enterprise Trade and Employment have put in place a mechanism for monitoring the extent to which NCC recommendations are implemented by Government. The Government has undertaken many policy actions that are in line with the recommendations in the Council's Statements and in the Competitiveness Challenge 2004. The Government has:

- □ Increased the resources of the Competition Authority;
- □ Continued to keep direct taxes low;
- ☐ Has not, in the main, increased indirect taxes; and
- □ Referred Section 45 of the Companies (Auditing and Accounting) Act 2003, referring to Directors Compliance Statements to the Company Law Review Group (CLRG).

#### Responding to EU Regulations

#### **Chemicals Sector**

During 2004 Forfás worked closely with the Department of Enterprise, Trade and Employment and the Department of Environment, Heritage and Local Government to undertake a regulatory impact assessment of the proposed REACH regulation on key sectors in the Irish economy and to inform Ireland's national negotiation position on REACH.

REACH (Registration, Evaluation and Authorisation of Chemicals) is a proposed European Commission regulation with the objective of improving legislation for dealing with chemicals in the European Union. Consultants were appointed by Forfás to undertake the study which assessed the potential impact on key sectors including chemicals, pharmaceuticals, and chemicals importers; and downstream users including ICT, food/drink/tobacco, print and publishing and medical technologies.

The study acknowledges the potential benefits in terms of health and environment likely to result from the implementation of REACH. According to the study the chemicals sector, ICT sector and SMEs are likely to be impacted to the greatest extent, with lesser implications for the medical technologies sector and pharmaceutical sector (whose products are already covered by existing legislation). The study was published in April 2005.

Forfás continues to work with an Inter-Departmental Committee that was established to examine the implications of the proposed REACH regulation for Ireland. This Committee is co-chaired by the Department of Enterprise, Trade and Employment and the Department of Environment, Heritage and Local Government and includes representation from other Departments and Agencies (Departments of Health and Children, Finance and Agriculture; HSA; EPA; Enterprise Ireland; and the Food Safety Authority of Ireland). The Inter-Departmental Group advises on the national position which should be adopted at the EU negotiations. The Group is consulting with industry and other stakeholders and is working to ensure that the final regulation is workable and achieves its aims of protecting human health and the environment, while enhancing the competitiveness of industry.

#### Climate Change

Forfás is a member of the National Allocation Advisory Group (NAAG), which contributed to the development of the National Allocation Plan (NAP).

The *Irish National Allocation Plan 2005-2007*, which distributes CO<sub>2</sub> allowances to energy intensive firms involved in the European Emissions Trading Scheme, was approved by the European Commission in July, 2004. The Emissions Trading Scheme took effect in January, 2005.

Forfás is a member of the National Allocation Advisory Group (NAAG), which contributed to the development of the National Allocation Plan (NAP). Forfás established an Industry Liaison Group, to collate the views of industry on this important topic.

A second National Allocation Plan will be drawn up over the next twelve months to cover the period from 2008-2012, and Forfás will work with IDA Ireland and Enterprise Ireland to represent the enterprise perspective.



#### Infrastructure

Forfás plays an active role in advising Government on infrastructures needed to provide a competitive and supportive environment for indigenous companies and to attract foreign direct investment.

#### **Delivery of Broadband**

Forfas published a *Broadband Telecommunications Benchmarking Study* in November 2004.

This study benchmarks Ireland's performance against 21 other advanced economies. The study acknowledges substantial progress in 2004 in terms of increased broadband connections, reductions in the cost of basic DSL services and the launch of the Metropolitan Area Networks. Despite such developments, Ireland continues to lag competitor countries in terms of overall broadband take-up and the provision of more advanced innovative services. The lack of real growth in competing technologies and the lack of competition and innovation within the DSL market are the key reasons for Ireland's position. It will be necessary to continue to promote the development of competition and innovation within the broadband market, as well as promoting awareness and demand for broadband content and applications.

#### Energy

Forfás works closely with the Department of Enterprise, Trade and Employment, the Department of Communications, Marine and Natural Resources and the development agencies to highlight the growing impact of energy issues on competitiveness and the long-term economic development of the country

During 2004, Forfás undertook a review of electricity prices in Ireland and identified that published industrial tariffs have increased to such an extent since 2000 that Ireland now ranks as the third most expensive county in the EU (after Italy and Cyprus). Published Irish industrial tariffs are 26 per cent higher than EU-25 average. The cost of energy can form a significant percentage of an industry's overall costs. Underinvestment and a rapid increase in energy demand have led to concern over the capacity of the electricity sector to accommodate this growth at a competitive cost and to cater for further economic expansion.

In January 2005, the Department of Communications, Marine and Natural Resources announced its intention to undertake a review of energy policy over the coming six to nine months. Forfás welcomes this announcement and will work with the Department and other departments in its development.

Key industry priorities include the need:

- □ To ensure adequate investment in generation and regional transmission and distribution infrastructure;
- □ To develop competition and choice in the market which will lead to greater efficiency and competitive pricing; and
- □ For greater certainty in security of supply and pricing.

#### Regional Development

#### **Regional Planning Guidelines**

Forfás and the development agencies contributed to the development of the *Regional Planning Guidelines*, ensuring that the needs of enterprise were reflected.

The National Spatial Strategy (NSS), published in 2002, sets out a 20 year plan for greater regional balance. During 2004, each Regional Authority published Regional Planning Guidelines, designed to provide a broad framework to inform the implementation of the NSS at regional and local level. As key drivers of regional growth, the designated Gateways need to develop the critical mass to attract foreign direct investment and provide a competitive base from which indigenous companies can evolve and grow.

#### **Gateways Study**

In response to the recommendations of the ESG report, Forfás and the Department of Environment, Heritage and Local Government commenced in 2004, a joint study to identify how the development of gateways can be stimulated.

The ESG Report, Ahead of the Curve, published in July 2004 highlights the critical role that infrastructure plays in enabling regional development. Regions will attract enterprise only if they have the infrastructure and facilities that allow them to compete for trade and investment. The report recommends a prioritised investment in NSS designated gateways and hubs, the key drivers for regional development. It is anticipated that the report should be completed by September 2005 and submitted to the Inter-Departmental Committee on the NSS for consideration.

# Skills and Training

From an enterprise perspective, the ability of the education system to respond flexibly to economic and social change is critical to the functioning of the economy. The Expert Group on Future Skills Needs was established by Government in 1997 to advise Government on skills and labour supply issues, sectoral skills needs and training for business and education. The membership is composed of business, education and employee representatives. Government departments and State agencies act in an advisory role to the Group. Forfás provides research and administration support to the Group.

In January 2004 the National Training Advisory Committee (NTAC) was merged with the Expert Group and the Group's mandate was expanded to incorporate overall strategy for enterprise training; identification of best practice; prioritisation of the training needs of the enterprise sector and relevant aspects of the National Training Fund.

The Minister for Enterprise, Trade and Employment identified the following priority areas for the future work of the EGFSN in 2004:

- ☐ Implementation of recommendations proposed in previous EGFSN Reports;
- ☐ Research on skills and competencies being acquired by graduates participating in particular courses of education;
- □ Input into skills-based immigration policy; and
- □ Review of existing projections of sectoral skill needs.

During 2004, the Group undertook studies examining the future skills needs of several important sectors. The published reports made recommendations in the following areas:

- □ Innovation, marketing and sales capabilities
- □ Supply and demand for researchers; and
- □ Training for those at work.

## Innovate Market Sell - A Review of the Sales, Marketing and Innovation Capabilities of Irish Exporting SMEs

Innovate Market Sell was prepared for Forfás, Enterprise Ireland, Bord Bia and the Expert Group on Future Skills Needs and published in November 2004. The report focused on the critical importance of innovation, marketing and sales capabilities for the future success of Irish exporting small and mediumsized enterprises (SMEs).

The Report advocates greater provision of sector-specific programmes by training providers. It also calls for higher education institutions to align their marketing and sales curricula more closely with the needs of SMEs, to make modules in sales and marketing available to students of technical disciplines and to make industry placements an integral part of all business, marketing and sales degree programmes. The Report also calls for the expansion of Enterprise Ireland's Innovation Management Programme to include basic skills training in innovation process management for both technical and marketing staff, specifically tailored to SME needs.



Pictured at the launch of the Innovate Market Sell Report were Mr Martin Cronin, Chief Executive, Forfás and Mr Michael Ahern T.D., Minister for Trade and Commerce.



## Statement on Implementation of Recommendations

Following the appointment of a new Chairperson, Ms Anne Heraty, in January 2004, the EGFSN reviewed progress made on all of its recommendations to date.

Overall the review found significant progress had been made in many areas. Among the particular achievements were:

- □ Substantial increases in third-level and training course places;
- Promotion of careers in science, technology and engineering;
- □ Concrete strategies to attract foreign researchers; and
- □ Establishment of a comprehensive national training/trainers database (hosted by FÁS).

The review highlighted the moderate progress in implementing recommendations in the 2002 Report of the Task Force on Lifelong Learning and also expressed concern at low levels of literacy.

During 2004 the Expert Group on Future Skills Needs also provided input to several important review processes including:

- Your Education System Review by the Department of Education and Science;
- □ OECD Review of Higher Education in Ireland; and
- □ Forum on the Workplace of the Future.

## Trade

### **Draft Directive on Services in the Internal Market**

During 2004 Forfás conducted a study, on behalf of the Department of Enterprise, Trade and Employment of the potential impact of the draft Directive on Services in the Internal Market.

The Commission proposal for a Directive on Services in the Internal Market is part of the economic reform process under the Lisbon Agenda. It aims to provide the legal framework necessary to eliminate obstacles to the freedom of establishment for service providers and the free movement of services between Member States – two fundamental rights guaranteed by the European Union.

There are three main provisions in the draft Directive:

- □ The development of a sophisticated system of e-government, by which all procedures relating to services provision should be completed electronically by 2009
- Better regulation of the internal market, which will review Member State regulations to ensure that services provision is not impeded by labour and capital rules in a given Member State; and
- Mutual Recognition of Standards, by which service providers will continue to be regulated by their own Member States, even if operating in other Member States. There is continued uncertainty about the future of the Services Directive.

The Forfás study estimates a significant benefit to the Irish economy, as previously sheltered sectors become exposed to foreign competition. The 2004 Enterprise Strategy Group Report pointed to specific growth potential in sectors and service activities such as education, intellectual property, sales and marketing, construction and healthcare services due to reduction of barriers through WTO and EU developments. A study by the Netherlands Bureau for Economic Policy Analysis further estimates that the Directive could enable a 15-35 per cent increase in trade and FDI in services. Accordingly, Ireland is generally supportive of the Directive principles given the projected economic benefits.

## **Trade and Investment Report 2004**

Forfás tracked the evolving environment for global trade and investment through its *Trade and Investment Report* which was published in April 2005.

The Report showed that world merchandise trade grew by 4.5 per cent in 2003, its most rapid rate of increase since 2000, largely due to the performance of Asian markets. Despite this, the volume of Irish merchandise exports contracted in 2003 by 3.7 per cent. Irish services exports increased by 11 per cent over 2002, a slight deceleration in the rate of growth observed in recent years. The trade deficit in services is now at its lowest since 1999.

The Report further showed that international flows of foreign direct investment (FDI) contracted for the third consecutive year in 2003 to stand at \$560 billion. Inflows to Ireland decreased to €23.8 billion from €30.8 billion in 2002, mainly due to a fall off in recorded flows to the International Financial Services Centre.

## **Consumer Strategy Group**

Forfás provided research and administrative support to the Consumer Strategy Group, which published its Report in May 2005.

Good consumers make good businesses. Confident, sophisticated and well informed consumers have the potential to drive business performance and are an essential part of innovation-driven economies.

In March 2004 the Tánaiste and then Minister for Enterprise, Trade and Employment established the Consumer Strategy Group to advise and make



recommendations for the development of a national consumer policy strategy. Forfás has provided the research and administrative support to the Group

The report of the Consumer Strategy Group was published in May 2005. It found that Irish consumers were disdvantaged and that Ireland lacked a strong consumer

voice. Ireland was seen to lag behind other countries in recognising the important role that empowered and confident consumers could play in economic and social development

Existing enforcement activities carried out by the Office of the Director of Consumer Affairs needed to be supplemented by activities in the area of research, advocacy, information, and education and awareness. The key recommendations of the report included:

- The establishment of a National Consumer Agency;
   and
- □ The abolition of the Groceries Order.

Other key recommendations were made in relation to the sale of beverages, pharmaceuticals, the current limits in the small claims court, regulatory change and the provision of a strong consumer voice in the areas of transport, planning and public utilities. At Government level, it was recommended that all decisions should be consumer-proofed. With regard to business and the consumer, the promotion of codes of practice and the establishment of private sectoral complaints boards were also recommended.



Pictured at the launch of Make Consumers Count: A New Direction for Irish Consumers – the Report of the Consumer Strategy Group were Mr Micheál Martin, T.D., Minister for Enterprise, Trade and Employment and Ms Ann Fitzgerald, Chairperson, the Consumer Strategy Group.



The Minister for Enterprise, Trade and Employment, Mr Micheál Martin T.D. has announced the establishment of a new statutory National Consumer Agency with an expanded remit to promote and protect consumer interests. An Interim Board of the new National Consumer Agency will be chaired by Ann Fitzgerald, CEO of the Irish Association of Investment Managers, who also chaired the Consumer Strategy Group.

The Interim Board will immediately begin planning for the final structure and operations of the new National Consumer Agency and will carry out some initial work in the area of consumer awareness, advocacy and education.

The Minister also announced:

- ☐ The establishment of a high level Inter-Departmental Committee to examine all of the CSG's recommendations and report back to Government with a detailed implementation plan within three months;
- ☐ A public consultation process on the future of the Groceries Order is to be completed by end July; and
- A review of all existing consumer protection legislation the purpose of which is to modernise and codify the body of law in this area, as recommended by the CSG in its Report, so as to ensure that the law reflects the needs of the modern consumer.

Confident,
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3

# Building Ireland's Science, Technology & Innovation capacity to meet the needs of an evolving modern economy



Building research and development capacity to support the development of high-value products and services will be an essential component of Ireland's competitive advantage going forward. Our ability to translate this capability into real economic and social benefit for Ireland is a significant challenge.

# Ireland's National R&D Action Plan

Forfás supported an Inter-Departmental Group in the development of *Ireland's National R&D Action Plan* – *Building Ireland's Knowledge Economy.* The plan set out targets aimed at increasing Ireland's R&D to 2.5 per cent of GNP by 2010 from 1.4 per cent, with two-thirds of the increase to come from the enterprise sector.

In early 2003, the Tánaiste and then Minister for Enterprise, Trade and Employment Ms Mary Harney, T.D., announced the establishment of a high level Inter-Departmental Steering Group to assess the implications of the key European Research Area policy initiatives and to prepare an Irish Action Plan. The Plan was presented to the Tánaiste in August 2004 and endorsed by Government.

The Action Plan sets out a vision of the contribution that research and development can make to Ireland's development as a knowledge-based economy: "Ireland by 2010 will be internationally renowned for the excellence of its research and will be at the forefront in generating and using new knowledge for economic and social progress, within an innovation driven culture."

It calls for a step change in R&D performance, particularly in the enterprise sector, in order to sustain employment and competitiveness in an increasingly global knowledge-based economy. The Action Plan proposes the following targets for Ireland to be achieved by 2010:

- Business investment in R&D should increase from €917 million in 2001 (0.9 per cent GNP) to €2.5 billion in 2010 or 1.7 per cent GNP;
- the number of indigenous companies with minimum scale R&D activity (in excess of €100,000) should double, from 525 in 2001 to 1,050 in 2010;
- the number of indigenous enterprises performing significant R&D (in excess of €2 million) should increase from 26 in 2001 to 100 by 2010;
- the number of foreign affiliates with minimum scale R&D activity (in excess of €100,000) should double, from 239 in 2001 to at least 520 by 2010;
- the number of foreign affiliates performing significant levels of R&D (in excess of €2 million) should increase from 47 in 2001 to 150 by 2010; and
- R&D performance in the higher education and public sectors should increase from €422 million in 2001 (0.4% GNP) to €1.1 billion in 2010 (0.8 per cent GNP).

It recommends a range of actions to support achievement of the targets as follows:

- Develop a national pro-innovation culture supportive of invention, risk-taking and entrepreneurship;
- Re-orient the enterprise support budget to R&D and develop a new and less bureaucratic approach to R&D support that encourages a systematic and continuous approach to R&D within enterprises;
- Strongly support the development of strategic research competencies (technology platforms) based on enterprise needs;
- Develop the seed capital markets for early stage ventures;



- Develop a national plan to increase the performance, productivity and efficiency of research in the higher education and the public sectors;
- Sustain Ireland's commitment to building our international reputation for research excellence;
- Make Ireland a highly attractive environment for high quality researchers and research careers; and
- Develop the research commercialisation expertise necessary to ensure effective and rapid exploitation of research in higher education and public research sectors by enterprise.

The Department of Enterprise, Trade and Employment established an Inter-Agency Science, Technology and Innovation Policy Forum in August 2004 to develop a coordinated response to the recommendations in a number of recent policy reports and evaluations on the Irish research and innovation system, including the Action Plan. Forfás is a member of this Forum which is providing input to the work of the Inter-Departmental Committee on Science, Technology & Innovation. The Inter-Departmental Committee which supports the Cabinet Committee on Science, Technology & Innovation, is to present a Strategic Implementation Plan to Government in mid 2005.

# A Model to Predict the Supply and Demand for Researchers and Research Personnel

A study, published in September 2004, on the future supply and demand for researchers and research personnel in Ireland was undertaken by the EGFSN and Forfás to assist in the preparation of the Report to the Inter-Departmental Committee on Science, Technology and Innovation, Building Ireland's Knowledge Economy - The Irish Action Plan for Increasing Research and Development to 2010.

The study projects that, based on current trends, Ireland may experience a shortfall of at least 3,600 researchers over the period to 2010 unless steps are taken to increase domestic supply. The main areas where shortages of researchers are projected to emerge are in ICT and biotechnology/ pharmaceutical related disciplines. The report calls for a balancing of future supply with demand to ensure that Ireland can build further on its investment in R&D and take full advantage of the opportunities that our improving R&D base provides. A skills shortage in this area would limit our ability to take advantage of growth in critical research activity in these sectors.

# Promoting Excellence in European Research

During 2004, Forfás worked closely with the Department of Enterprise, Trade and Employment on how best to promote the excellence of basic research in Europe.

- Ireland's Presidency research priorities included a commitment to progress discussions on the needs of promoting the quality of basic research for economic and social development in Europe. In this regard, Forfás and the Department of Enterprise, Trade and Employment, under the auspices of the Irish Presidency of the EU, and in collaboration with the European Commission, hosted a high-level symposium entitled Europe's Search for Excellence in Basic Research in Dublin Castle with a view to bringing greater clarity to the issues relating to basic research in Europe and to identify possible areas of consensus.
- In response to the European Commission's
  Communication on the topic of Basic Research in January
  2004, ICSTI produced two Statements on the matter. The
  Council considered that the debate on the quality of
  research in Europe came at an appropriate time when
  initial concepts for a Seventh Framework Programme
  (2006-2010) are being developed and new financial
  perspectives are being negotiated. It supported the view
  that additional resources be made available in the EU
  Framework Programmes to build excellence in basic
  research at a European level.

## Irish Participation in FP6

Forfás, at the request of the Office of Science and Technology (OST), provides policy advice and monitors Irish participation in the EU Framework Programmes.

The Sixth Framework Programme (FP6) for Research and Technological Development and Demonstration is the European Union's main instrument for the funding of research in Europe. The total funding available for research is €19.5 billion over the period 2002 to 2006. Of this, in the region of €2.1 billion is intended for SME funding. Initial indications for Ireland in FP6 are that its participation is above FP5, reaching €110 million for the first two years of the programme. Ireland's third level institutions and larger enterprises were performing well in FP6, but SMEs were not.



Pictured at the launch of Ireland's National R&D Action Plan – Building Ireland's Knowledge Economy are (standing) L-R Dr Leonora Bishop, Member, the Irish Council for Science, Technology & Innovation; Mr Ned Costello, Assistant Secretary, Office of Science & Technology, Department of Enterprise, Trade and Employment; Mr Martin Cronin, Chief Executive, Forfás; Mr Seamus Bannon, Manager, Innovation Department, Forfás, Mr Declan Hughes, Manager, S&T Policy Department, Forfás, (sitting) L-R Dr Conor O'Carroll, Conference of Heads of Irish Universities; Ms Mary Harney, T.D., Tánaiste and then Minister for Enterprise, Trade and Employment and Mr Dan Maher, ACT Venture Capital.

In January 2004, the Department of Enterprise, Trade and Employment requested Forfás to examine the issue of participation (i.e. involvement in proposals) and performance (i.e. success in securing funding) of SMEs in the Sixth Framework Programme (FP6).

Arising from the study, recommendations were made at both national and EU levels. Nationally it was recommended that a more targeted approach be used in marketing FP6 to SMEs most likely to benefit from participation.

# EU Proposals for Seventh Framework Programme for Research 2007-2013

In June 2004, at the request of the Department of Enterprise, Trade and Employment, Forfás initiated a national consultation process on the European Commission proposals for the Seventh Framework Programme for Research 2007-2013. This included requests for submissions and workshops with industry and academic researchers and a national response was prepared for the EU Competitiveness Council discussions in July and November 2004.

Ireland is supportive of proposals to give greater priority to funding for research and development, as long as the EU research budget is spent in a way that complements national initiatives.

The Framework Programme should continue to be around existing initiatives to:

- Foster trans-national collaborative research in thematic areas;
- Make Europe more attractive as a place for researchers to work and develop their careers (including measures to facilitate the mobility of researchers across Europe); and

■ Introduce measures to build the research capacity of European SMEs and to reduce bureaucracy and simplify administrative and operational procedures.

## Women in Science, Engineering and Technology

Forfás, on behalf of the Office of Science and Technology at the Department of Enterprise, Trade and Employment, prepared a national report in 2004 on *Women in Science, Engineering and Technology (SET)* in Ireland to track developments in policy measures, studies, data collection, initiatives, workshops, conferences etc relevant to the attraction and retention of women in SET in Ireland.

Ireland currently has 10,200 researchers in industry and in the higher education and public research sectors. It is projected that Ireland will require approximately an additional 8,000 researchers over the period to 2010 in order to achieve its targets for growth in research and development activity.

It is imperative that Ireland maximises availability of its human resources to ensure the continual supply of graduates with science, engineering and technology skills. Key to this is optimising the number of women choosing to study science and technology subjects and opting for careers in SET and also progressing and retaining proportionate numbers of women in SET careers.

A range of initiatives are currently underway to increase female participation in engineering and to increase the representation of women in research careers. In particular the Science Foundation Ireland Budget for 2005 included a designated €1 million to address the issues of women in SET research and the Foundation is currently developing programmes for women at every level of research careers.



## Irish Council for Science, Technology and Innovation

Forfás provided research and administrative support to the Irish Council for Science, Technology and Innovation which advised the Government and the Board of Forfás on the strategic direction of science, technology and innovation (STI) policy.

In June 2004 the Government made a number of decisions in relation to new structural arrangements for STI in Ireland as recommended in the *ICSTI Commission Report* (2002) including:

- A Cabinet Committee on Science, Technology and Innovation – which met for the first time in February 2005;
- ☐ The appointment of the Chief Science Adviser, Dr Barry McSweeney who took up this post in September 2004;
- An Inter-Departmental Committee of Senior Officials which held its first meeting in December 2004;
- Research Funders Group, comprising heads of research funding agencies and senior officials from Government Departments, held its first meeting in April 2005. It is Chaired by the Chief Science Adviser and supported by Forfás; and
- A new Advisory Council on Science, Technology & Innovation to be established to bring together stakeholders from industry and academia to consider medium and long term science policy issues for Ireland. This new Council was established in May 2005.

During 2004 ICSTI completed work in the following priority areas and published accompanying Statements:

## National Code of Practice for Managing Intellectual Property from Publicly Funded Research

An ICSTI Sub-Group developed and published a National Code of Practice for Managing Intellectual Property from Publicly Funded Research.

Optimum commercialisation of the results of publicly funded research is key to driving Ireland's future prosperity and international competitiveness. In April 2004, the Tánaiste and then Minister for Enterprise, Trade and Employment, Ms. Mary Harney, T.D., launched the National Code of Practice for Managing Intellectual Property (IP) from Publicly Funded Research. The aim of this Code is to build on existing expertise and to harmonise intellectual property management systems across public research organisations. The Code applies to intellectual property generated from research that is funded entirely from public sources.

The Code of Practice provides a framework for commercialisation of public investment in Irish research and development (R&D) through setting out guidelines on:

- IP management strategy in public research organisations;
- The role and responsibility of the technology transfer office:
- Procedures for the identification of intellectual property rights (IPR);
- □ The education of researchers;
- Evaluation, protection and disclosure of IP;
- Ownership;
- Commercialisation;
- Sharing of the benefits;
- Ensuring continuing access to IP and research materials for ongoing research; managing conflicts of interest; and
- Monitoring and evaluating public research organisation performance.

## National Code of Practice for Managing Intellectual Property from Public/Private Collaborative Research

During 2004 ICSTI worked towards the development of guidelines to promote industry-academia research collaboration.

At the launch of the National Code of Practice, the Tánaiste and then Minister for Enterprise, Trade and Employment, Ms Mary Harney, T.D., requested the Council to embark on new work to develop guidelines for managing intellectual property from public-private, co-funded research in consultation with industry, research funding bodies, public research organisations and the financial community.

## **State Expenditure Priorities for 2005**

In its Statement, *State Expenditure Priorities for 2005*, ICSTI stressed the need for a long term plan for public funding of research.

During the early part of 2004, ICSTI prepared advice to Government as input into the Estimates and Budget process for 2005. This Statement, published in July stressed that the research community which has developed three to five year research strategies on the basis of the National Development Plan (2000 – 2006), should be given the opportunity to make plans for the period after 2006. An environment which facilitates a longer term outlook should be developed to provide stability to the research system and strengthen Ireland's competitiveness as a location for world class science and engineering.

### Sustainable Development

The Council's Statement on *Sustainable Development*, published in August, considers the implications for Irish public policy of sustainable development as a national and international goal.

In the light of the increasing interest in sustainable development as an overarching concept in economic, environmental and social policies, ICSTI sought to identify constraints and opportunities and make recommendations to enable science and technology to contribute more fully to sustainable growth. The examination of case studies in renewable energy, cleaner production, and agriculture and forestry, allowed the Council to identify necessary actions and to make recommendations on R&D needs and the operational implementation of improvements.

## Strategic Technology Platforms

As a follow up to the ICSTI Technology Foresight exercise of 1998/1999, the Council examined processes to identify *Strategic Technology Platforms* for Ireland in an effort to guide future investment in science and technology.

The Council reviewed the concept and purpose of Strategic Technology Platforms internationally. It also examined the scope and content of the existing activities in the research base, in industry and in natural resources in Ireland, as an aid to defining and developing technology platforms. It also has initiated the mapping out of a process methodology for identifying and prioritising such platforms. The Council submitted its findings and key recommendations, in this context, to the Enterprise Strategy Group.

The Statement was submitted to Minister Micheál Martin in December 2004.

## Measuring and Evaluating Research

Evaluation is a key tool in the development of policy advice and Forfás continues to examine the priority support measures for research and development in support of economic development.

The major evaluation currently underway is an interim review of Science Foundation Ireland (SFI). SFI was set up in 2001 to manage the investment by the Department of Enterprise, Trade and Employment of €646 million between 2001-2006 in order to establish a strong research capability in Ireland in biotechnology and in information and communications technologies. A small independent international expert panel has been convened by Forfás to undertake the review which will be completed by mid-2005.

In 2004, Forfás also undertook three other important evaluations. Two related to industrial innovation support measures operated by Enterprise Ireland – financial supports for R&D in enterprises and promotion of increased linkages between industry and researchers in higher education institutions. The other was a review of the operation and impact of the European Union's Fifth Framework Programme in Ireland.



## Innovation

The importance of firm-level innovation is increasingly recognised as being essential to a competitive knowledge based economy.

Forfás undertook a wide-spread consultation exercise on behalf of the Department of Enterprise, Trade and Employment to develop the national input to the EU Action Plan for Innovation.

## **Technology Absorptive Capacity in SMEs**

Forfás published a study in early 2005 assessing the capacity of SMEs to identify, absorb and utilise knowledge from within and outside the company. The report highlights the need for the purposeful management of innovation.

The study conducted by Forfás set out to examine the capacity of Irish SMEs to absorb and use knowledge from inside and outside the firm. The unique contribution of this study was its definition of absorptive capacity in terms of a number of its components that can be identified, benchmarked and incorporated into policy instruments to help improve company performance.

The study found that the absorption of external knowledge is an area requiring strengthening in many firms. The employment of qualified senior executives by indigenous companies, complemented by measures that modernise and professionalise company management should make it possible to better understand and translate external knowledge into business opportunities.

#### **NCC Statement on Innovation**

In February 2004 the National Competitiveness Council published a submission to the Enterprise Strategy Group entitled, *Competitiveness through Innovation*.

In the submission the Council concluded that support for industry from Government should increasingly be organised around 'clusters' and 'networks' of related business activities. The statement included a comprehensive list of recommendations to advance a culture of innovation in Ireland. In particular, the Council called for a greater coherence in public investments in research and technological development focused on a number of niche sectors of strategic economic significance.

#### **Innovation Policy in Europe**

Forfás, on behalf of the Department of Trade Enterprise and Employment (DETE), undertook a national consultation and submitted a national position to the European Commission as input to an 'Action Plan for Innovation in Europe'.

The Lisbon European Council of March 2000 set the objective of making Europe the most competitive and dynamic knowledge-based economy in the world. Early in 2004, the EU Commission held an open consultation and invited stakeholders in the European Union to contribute to the debate. Forfás represents the DETE on the Commission's Innovation Policy Forum, providing a national input to European innovation policy developments.

## **Foresight for Innovation**

Under the Irish Presidency of the EU, Forfás hosted a Conference, "Foresight for innovation – Thinking and Debating the Future; Shaping and Aligning Policies" Dublin, 14-15 June 2004

The Foresight Conference focused on the role that futures studies could play in shaping innovation and in aligning related policies. Both of these topics have been recognised as critical elements in continuing growth and development for the European Union and its Member States. In March 2000, through its Lisbon Strategy, the EU set itself an ambitious target, to become by 2010 'the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion'.

Progress towards this target has as yet been slow and much of the policy-making efforts of the European Commission have been directed towards devising new initiatives and approaches to advancing achievement of the Lisbon Strategy. This conference was a further effort to explore ways of meeting the targets.

The conference covered a very wide range of topics in three workshops:

- Sustainable Spatial Development;
- □ Foresight for a Learning Society; and
- □ Entrepreneurial and Innovative Economy.

However, the concept of the learning society was pervasive in the discussions of all three and there was a convergence towards the need to develop learning as the key skill and competence in all aspects of economic and social development for the foreseeable future. Furthermore, there was a strong degree of agreement that foresight should become an integral element of our preparation for the future and that the necessary widening of access to knowledge should be facilitated and promoted to gain maximum value from these processes.

#### Science Awareness

Forfás, on behalf of the Office of Science and Technology in the Department of Enterprise, Trade and Employment, manages the integrated national science awareness programme Discover Science and Engineering (DSE).

DSE brings together a number of pre-existing science awareness activities and was established in response to a recommendation of the Task Force on Physical Sciences.

The objectives of the programme are to:

- Raise the general level of awareness of the physical sciences:
- Promote a greater understanding of science across society;
- Raise the level of student uptake of the physical sciences at second and third level; and
- Promote a positive attitude towards careers in science, engineering and technology.

The major initiatives of DSE are:

#### **Discover Science Week**

This is one of the key pillars in the Discover Science & Engineering annual programme. DSE provides co-ordination for all nationwide events, arranges media coverage and organises some flagship events for Discover Science Week Ireland – the national science week. During 2004 the number of Science Week Ireland activities grew to more than 350 events from 250 the previous year. Events are organised voluntarily by colleges, schools, libraries, scientific organisations and businesses. The rationale for a national science week is to have a diverse, regionally spread, interesting and entertaining focal point for science promotion in order to maximise public interest and attention.





Pictured at the launch of Science Week Ireland are Mr Martin Cronin, Chief Executive, Forfás; Mr Micheál Martin, T.D., Minister for Enterprise, Trade and Employment and Mr Leo Enright, Chairman, Discover Science & Engineering.

## **Discover Primary Science**

This initiative, developed and piloted in 2002 began life as 'Primary Science Clubs', which were set up in over 140 primary schools throughout Ireland. Designed to introduce students to science in a fun and interactive way, the clubs have also supported teachers in delivering the new Social, Environmental and Scientific Education (SESE) curriculum.

In 2004, the Primary Science Clubs project has been rebranded as Discover Primary Science and is expanding its reach even further. 550 primary schools throughout Ireland

have already signed up to
participate in Discover Primary
Science for the 2004/2005
academic year and training
days have taken place in
over 40 host centres
nationwide to ensure
teachers are wellequipped to bring
science to life in the
classroom. The
objective is that this
programme element
will be available to all
primary schools by the

end of 2008.

#### **Television**

SCOPE, a science entertainment programme, aired its second series on RTÉ 2 from October 2004 to March 2005. The programme adopts a fast moving and interesting approach to a wide variety of science and engineering concepts and principles and also features many young professionals describing their interesting jobs – all science or engineering graduates. The programme uses teenage interests (music, sport, fashion) to look at the science and engineering behind everyday things. Working together, The Department of Enterprise, Trade and Employment, RTÉ, IDA Ireland, Enterprise Ireland, InterTradeIreland, Science Foundation Ireland and FÁS provided the support necessary to make SCOPE a success.

### **Exploration Station – Irish Children's Museum**

The merging of awareness activities into the integrated Discover Science and Engineering Programme demonstrates commitment at a political level to science and engineering and acknowledges the essential contribution that graduates from the science and engineering disciplines make to the Irish economy. The Programme for Government includes a commitment to support the development of an interactive science centre aimed at enhancing knowledge and interest in science. The development of 'Exploration Station' an interactive learning centre with a predominantly science and technology focus was announced by the Tanáiste in December 2003. Expected to open its doors in 2006, the centre will be custom designed to stimulate interest and excitement in the world of science/engineering and technology and will be located in the new OPW Heuston Gate Development in Kilmainham in Dublin.

# The Irish National Accreditation Board (INAB)



**Dr Máire C. Walsh** Chairperson

The Irish National Accreditation Board (INAB) is Ireland's national body within a European network of accreditation bodies with responsibility for accreditation in accordance with the harmonised EN 45000 series of European standards and the relevant International Organisation for Standardisation (ISO) standards and guides.

INAB, as the national body for the accreditation of certification bodies, laboratories and inspection bodies, is a signatory to the multilateral agreements (MLAs) for Europe through the European co-operation for Accreditation (EA) and worldwide through the International Laboratory Accreditation Cooperation (ILAC) and the International Accreditation Forum (IAF). INAB plays a key role in guaranteeing the access of Irish products to both the EU and worldwide markets. INAB's membership of these international agreements ensures that accredited certificates and test results produced in Ireland are acceptable worldwide and as a result greatly reduce technical barriers to international trade.

INAB is also the national statutory monitoring authority for the OECD Good laboratory Practice (GLP) Scheme under S.I. No.4 of 1991 as amended by S.I. 294 of 1999.

#### Greenhouse Gas emissions allowance trading scheme

In 2004 INAB in co-operation with the Environmental Protection Agency (EPA) undertook the development and pilot phase implementation of a new national accreditation scheme for the verification of the greenhouse gas emission allowance trading scheme set out in Directive 2003/87/EC of the European Parliament and of the Council. This Directive takes into account the commitments of the Kyoto Protocol and the new accreditation scheme supporting the implementation of the Directive will be fully operational in 2005.

#### **Multilateral Agreements**

INAB became a signatory to the multilateral agreements of the International Accreditation Forum for accreditation of environmental management systems and product certification bodies in October 2004. INAB also achieved recognition in 2004 by the British Retail Consortium (BRC) for accreditation to the BRC Global Standard on Food. INAB's acceptance into these multilateral agreements facilitates the marketing of Irish food products worldwide.

#### **Medical Laboratory Accreditation**

In 2004 INAB extended its laboratory accreditation programme to medical laboratories and awarded two laboratories accreditation to ISO 15189, the new international standard for medical laboratories. INAB is currently processing further applications for accreditation to ISO 15189.

## **INAB** Functions

There are six distinct functions of INAB, each operating to specific European and international standards and/or regulations.

#### **Laboratory Accreditation**

Laboratory accreditation granted by the INAB provides a formal recognition of the competence of the laboratory to perform specific tests.

During 2004 INAB awarded accreditation to 9 laboratories and is currently maintaining 93 laboratory accreditations. There were 18 applications in hand at year end. During the year INAB carried out 126 on-site inspections on accredited/applicant laboratories within the Laboratory Accreditation Programme.

#### **Accreditation of Certification Bodies**

The INAB accredits certification bodies operating product certification, quality system certification and certification of personnel. It also accredits certification bodies for environmental management systems (EMS) certification to standards such as the EN ISO 14000 series and EMAS – the EU Eco Management and Audit Scheme and Information Security Management Systems (ISMS).



At the end of 2004 INAB maintained one certification body as a certification service provider (CSP) for the eCommerce accreditation scheme in support of the EU Directive on eCommerce. In 2004 INAB also maintained three certification bodies for Quality Management Certification, three certification bodies accreditation was maintained for Product Certification and one certification body's accreditation was maintained for Environmental Management Certification. These certification bodies have, in turn, certified more than 2,000 organisations to the ISO 9000 series of standards and more than 150 organisations to ISO 14001 under INAB accreditation.

#### **Accreditation of Attestors and Attestation Bodies**

Attestation is the examination of the conditions under which tenders are sought for large contracts offered by the water, energy, transport or telecommunications sectors (utilities). The accreditation criteria are in accordance with the European Standard EN 45503 and INAB regulations.

#### **Accreditation of Inspection Bodies**

INAB accredits bodies whose work may include the examination of materials, products, installations, plant, processes, work procedures, or services and the determination of their conformity with requirements and the subsequent reporting of results of these activities. At the end of 2004 INAB had maintained three inspection bodies accreditation and had two applications in hand.

#### **Good Laboratory Practice**

The INAB is the national monitoring authority for the inspection and verification of Good Laboratory Practice (GLP) under S.I. No.4 of 1991 European Communities (GLP) Regulations. At the end of 2004 five test facilities held GLP Compliance Statements under this programme.

#### **National Competent Body for EMAS**

INAB is the designated competent body in Ireland for the registration of sites participating in environmental management accreditation systems (EMAS). During 2004 INAB maintained eight organisations registered to EMAS which had their environmental management systems verified by accredited EMAS verifies in accordance with the Eco Management and Audit Scheme set out in Regulation (EC) No. 761/2001 of the European Parliament and the Council.

#### **INAB Board Members 2003-2004**

#### Dr Máire C. Walsh, Chair

State Chemist, State Laboratory

#### Mr Tom Beegan

CEO, Health and Safety Authority

#### Mr Donal Connell

Former Vice President, 3Com

#### Mr Paul Kelly

Director, Building Materials Federation, IBEC

#### **Dr Fiona Kenny**

Consultant Microbiologist, Sligo General Hospital

#### Mr Iain Maclean

Former Director, Environmental Protection Agency (EPA)

#### Mr Michael Maloney

Director of Horticulture, Bord Bia

#### Mr Pat O'Mahony

CEO. The Irish Medicines Board

## Ms Joanie Burns<sup>4</sup>

Department of the Environment, Heritage & Local Government

#### Mr. Richard Howell<sup>4</sup>

Agriculture Inspector, Department of Agriculture & Food

#### Dr John O'Brien<sup>4</sup>

Chief Executive, Food Safety Authority of Ireland (FSAI)

#### Mr David Moore<sup>5</sup>

Inspector, Environment Division
Department of the Environment & Local Government

#### **Dr Tom Teehan<sup>5</sup>**

Chief Inspector, Department of Agriculture & Food

#### Mr Tom Dempsey (ex-Officio)

Chief Executive, INAB

<sup>4</sup> Appointed September 2004

# **Statutory Obligations**

#### **Board Members**

In accordance with Department of Finance Guidelines for State Agencies, Forfás Board Members register their interests in other undertakings with the Secretary on their appointment and during their tenure in office.

# Ethics in Public Office Act, 1995 and Standards in Public Offices Act, 2001

In accordance with the provisions of the Ethics in Public Office Act, 1995 and Standards in Public Offices Act 2001, Forfás Board Members furnish statements of interests each year to the Secretary and copies have been provided to the Commission Secretary, Standards in Public Office Commission.

In addition, Forfas staff members holding designated positions have complied with both Acts.

#### Freedom of Information (FOI)

With effect from January 2001, Forfás is covered by the provisions of the Freedom of Information (FOI) Acts. These Acts established three new statutory rights:

- a legal right for each person to access information held by public bodies;
- a legal right for each person to have official information held by a public body relating to him/herself amended where it is incomplete, incorrect or misleading; and
- a legal right to obtain reasons for decisions affecting oneself taken by a public body.

Since 2001 Forfás has responded to a number of FOI requests.

#### **Equality**

Forfás is committed to a policy of equal opportunities and adopts a positive approach to equality in the organisation. Forfás operates a number of schemes, providing staff with options in relation to meeting their career and personal needs, such as job-sharing, study leave, educational programmes and career breaks.

A policy on Protection of Dignity at Work was developed in 2003.

#### Worker Participation (State Enterprises) Act, 1988

Sub-Board consultative structures have been put in place by Forfás to support the organisation's communications and consultative structure. The Joint Participation Forum, which meets monthly, is welcomed as a positive process by both management and staff.

#### Safety, Health and Welfare Act, 1989

In accordance with the Safety, Health and Welfare Act (1989), Forfás has prepared a safety statement that encompasses all the aspects affecting staff and visitor welfare. This was updated in early 2005.

#### **Clients' Charter**

Forfás updated its Clients' Charter in 2004 (originally published in 2000) setting out its commitment to a high quality of service to clients and to the general public. This Charter includes a procedure for dealing with complaints. In 2004 no complaints were received.

#### **Energy Efficiency**

In each area relevant to energy usage and services to its buildings, Forfás endeavours to employ the most energy efficient and environmentally friendly means available.



**Prompt Payment of Accounts Act 1997** as amended by the European Communities (Late Payment in Commercial Transactions) Regulations 2002.

The Prompt Payment of Accounts Act 1997 (the Act), which came into operation on 2 January 1998, was amended by the European Communities (Late Payment in Commercial Transactions) Regulations 2002.

The payment practices of Forfás, as required by the Act, are reported on below for the year ended 31 December 2004.

- (a) It is the policy of Forfás to ensure that all invoices are paid promptly. Specific procedures are in place that enable it to track all invoices and ensure that payments are made before the due date. Invoices are registered daily and cheques are issued as required to ensure timely payments.
- (b) The system of internal control incorporates such controls and procedures as are considered necessary to ensure compliance with the Act. The organisation's system of internal control includes accounting and computer controls designed to ensure the identification of invoices and contracts for payment within the prescribed payment dates defined by the Act. These controls are designed to provide reasonable, and not absolute, assurance against material non-compliance with the Act. The Accounts Department produces a report that identifies unpaid outstanding invoices and this report is reviewed regularly.

Management is satisfied that Forfás complied with the provisions of the Act in all material respects.

There have been no material developments since 1 January 2005.

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Forfás Management Structure and Advisory Councils





















## **Enterprise Policy and Corporate Services Division**

- Brian Cogan Executive Director
- Marie Bourke Tax, Finance & Enterprise Surveys Department
- **Martin Craig** Accounts Department
- **Maria Ginnity** Enterprise Policy & Communications Department
- **Eamonn Kearney** Systems Department
- Michael O'Leary 7 Human Resources Department
- Ignatius Rossi Facilities Department



## Competitiveness **Division**

- **Andrew McDowell** Competitiveness Division
- 10 Adrian Devitt National Competitiveness Department
- Eoin Gahan Regulation, Consumer Policy & Infrastructure Department
- Martin Shanahan Expert Group on Future Skills Needs













Secretary's Office

18 Michael O'Leary
Secretary



Irish National Accreditation Board

19 Tom Dempsey
Manager
Irish National
Accreditation Board

# Science, Technology & Innovation Policy and Science Awareness Division

13 Helena Acheson Science, Technology & Innovation and Science Awareness Division

14 Seamus Bannon
National & EU Innovation Policy and
STI Surveys Department

15 Peter Brabazon

Discover Science and Engineering

Awareness Programme

**16 Michael Fitzgibbon** *Evaluations Department* 

17 Declan Hughes National & EU Science and Technology Policy Department



**Ms Mary Cryan** Chairperson



# Advisory Council on Science, Technology & Innovation

The Advisory Council on Science, Technology & Innovation has taken over the responsibilities of the former Irish Council for Science Technology and Innovation (ICSTI)

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Ms Mary Cryan		Cryan Associates
Members		
Dr Leonora Bishop	Consultant	
Dr Dolores Cahill	Director, Centre for Human Proteomics	Royal College of Surgeons in Ireland
Mr Ian Cahill	Director, National Institute of Technology Management	NovaUCD; Chairman, LM Ericsson Ltd.
Mr Martin Cronin	Chief Executive	Forfás
Prof. Donald Fitzmaurice	Prof. of Nanochemistry	National University of Ireland, Dublin
Prof. Tom McCarthy	Chief Executive	Irish Management Institute
Prof. Anita R. Maguire	Prof. of Organic Chemistry	National University of Ireland, Cork
Prof. Timothy O'Brien	Director, Gene Therapy Programme	Regenerative Medicine Institute (REMEDI), National Centre for Biomedical Engineering Science and Prof. of Medicine and Consultant Endocrinologist, NUI Galway
Dr Siobhán O'Sullivan	Scientific Director	Irish Council for Bioethics
Dr Ena Prosser	Partner	Fountain Healthcare Partners
Dr Reg Shaw	Managing Director	Wyeth Ireland

**Dr. Edward M. Walsh** Chairman



# Irish Council for Science Technology and Innovation

Chairman		
Dr Edward M. Walsh	President Emeritus	University of Limerick
Members		
Dr Leonora Bishop	Consultant	Chiroxia Ltd.
Ms Mary Burke <sup>6</sup>	Managing Director	BioClin Research Laboratories
Mr Ian Cahill	Director	National Institute of Technology Management, NovaUCD; Chairman, LM Ericsson Ltd.
Ms Marion Coy	Director	Galway-Mayo Institute of Technology
Mr Martin Cronin	Chief Executive	Forfás
Ms Mary Cryan		Cryan Associates
Dr Ann Cullinane	Head of Virology Unit	Irish Equine Foundation Ltd.
Prof. Donald Fitzmaurice	Prof. of Nanochemistry	National University of Ireland, Dublin
Dr Peter Heffernan	Chief Executive	Marine Institute
Mr Paul Holden	Managing Director	Rédacteurs Ltd.
Dr Mike Hopkins	Physicist Scientist	Plasma Research Laboratory Dublin City University
Dr Brendan Hughes	Director of Drug Development	Wyeth Medica Ireland
Prof. Tom McCarthy	Chief Executive	Irish Management Institute
Prof. Anita R. Maguire	Department of Chemistry	National University of Ireland, Cork
Dr David Melody	Formerly Vice President for R&D	Loctite (Ireland) Ltd.
Dr Pierre Meulien	Chief Executive	Dublin Molecular Medicine Centre
Dr Pat Morgan	Dean, Faculty of Science	National University of Ireland, Galway
Dr Mike Peirce	Chairman	Mentec Ltd.
Dr Ena Prosser	Partner	Fountain Healthcare Partners
Prof. William J Reville	Biochemistry Department	National University of Ireland, Cork
Prof. James A. Slevin	Science Secretary	Royal Irish Academy
Dr Don Thornhill	Former Chairman	Higher Education Authority
Dr Ena Walsh	Head of Operations and Business Development, Centre for Human Proteomics	Royal College of Surgeons in Ireland

Ms Sharon Bannerton resigned during 2004 Ms Catherine Caulfield resigned during 2004 Ms Angela Kennedy resigned during 2004 Dr Pádraig Kirk retired during 2004 Ms Ann Murphy retired during 2004



Ms. Anne Heraty
Chairperson



# **Expert Group on Future Skills Needs**

Chairperson		
Ms Anne Heraty	Chairperson	CPL Resources plc
Members		
Mr Senan Cooke	Training & Communications Manager	Waterford Crystal
Mr Jack Golden	Director of Human Resources	Cement Roadstone Holdings/IEI
Ms Una Halligan	Government & Public Affairs Manager	Hewlett Packard/IBEC
Mr David Lowe <sup>7</sup>	Business Development Director	Goodbody Stockbrokers
Mr Joe McCarthy	Director	Arkaon
Dr Sean McDonagh	Former Director	Skills Initiative Unit
Dr Brendan Murphy <sup>8</sup>	Director	Cork Institute of Technology
Ms Aileen O'Donoghue	Director, Financial Services Ireland Association	IBEC
Mr Peter Rigney	Industrial Officer	Irish Congress of Trade Unions
Ms Linda Tanham	Divisional Organiser	Mandate

### **Advisers**

Adviscis		
Mr David Barry	Principal Officer	Department of Enterprise, Trade and Employment
Ms Ruth Carmody <sup>9</sup>	Principal Officer	Department of Education & Science
Mr Brian Cogan	Executive Director	Enterprise Division, Forfás
Mr Fergal Costello	Head of Policy & Planning	Higher Education Authority
Mr Roger Fox	Director of Planning, Research & EU Affairs	FÁS
Ms Ann Nolan	Principal Officer	Department of Finance

<sup>7</sup> Resigned in February 2005

<sup>8</sup> Appointed May 2005

<sup>9</sup> Replaced Kevin McCarthy in November 2005

**Dr. Don Thornhill**Chairman



# National Competitiveness Council

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Dr Don Thornhill <sup>10</sup>	Chairman	
Members		
Mr Rory Ardagh	Director	Leap Broadband
Mr Brendan Butler	Director – Enterprise	IBEC
Mr Donal Byrne	Chairman	Cadbury's Ireland
Mr Martin Cronin	Chief Executive	Forfás
Mr Patrick Delaney ¹⁰	Director	Small Firms Association
Dr John Fingleton	Chairman	The Competition Authority
Ms Thia Hennessy¹º	Senior Research Officer	Teagasc
Ms Annette Hughes	Economist	DKM Economic Consultants
Mr Peter McLoone	General Secretary	IMPACT
Mr Patrick O'Brien¹º	Partner	Arthur Cox and Company
Mr Seamus O'Morain	Assistant Secretary	Department of Enterprise, Trade and Employment
Mr William Slattery	Chief Executive Officer	State Street International (Ireland)
Mr Paul Sweeney <sup>10</sup>	Economic Adviser	Irish Congress of Trade Unions
Mr John Travers	Consultant	
Prof. Ferdinand von Prondzinski	President	Dublin City University

<sup>10</sup> appointed February 2005

 $\operatorname{Mr}$  William Burgess resigned as Chairman of the Council in November 2004

Ms Joan Carmichael resigned in February 2004

Ms Áine Mizzoni resigned in September 2004

Mr Neil Ormonde resigned in February 2005

Ms Jane Williams resigned in January 2004

#### **Advisers to the Council**

Ms Mary Doyle	Assistant Secretary	Department of An Taoiseach
Ms Mary Moylan	Assistant Secretary	Department of the Environment, Heritage and Local Government
Ms Sara White	Assistant Secretary	Department of Communications, Marine and Natural Resources
Mr John Murphy <sup>11</sup>	Assistant Secretary	Department of Transport
Mr Eamonn Kearns	Assistant Secretary	Department of Finance
Mr Paul Kelly	Assistant Secretary	Department of Education and Science
Mr Paul Bates <sup>12</sup>	Assistant Secretary	Department of Arts, Sport and Tourism



<sup>11</sup> Mr John Murphy replaced Mr John Fearon as Adviser to the Council in January 2005

<sup>12</sup> Mr Paul Bates became an Adviser to the Council in April 2005

**Mr Leo Enright** Chairman



# Discover Science & Engineering Steering Group

Chairman		
Mr Leo Enright	Chairman	
Members		
Ms Helena Acheson	Manager, Science, Technology & Innovation Policy & Science Awareness Division	Forfás
Mr John Cahill <sup>13</sup>	Manager of Science & Technology Unit	FÁS
Ms Ruth Carmody <sup>14</sup>	Principal Officer	Department of Education & Science
Dr Sheila Donegan	Director, CALMAST	Waterford Institute of Technology
Ms Siobhan Greer	Former Chairperson	Irish Science Teachers' Association
Ms Una Halligan	Government & Public Affairs Manager	Hewlett Packard
Dr William Harris	Director General	Science Foundation Ireland
Mr Paul Holden	Managing Director	Rédacteurs Ltd
Mr Kevin Kernan <sup>15</sup>	Director General	The Institution of Engineers of Ireland
Mr Matt Moran	Director, pharmachemical Ireland	IBEC
Dr Pat Morgan	Faculty of Science	National University of Ireland, Galway
Ms Ellen MacCafferty <sup>16</sup>	Assistant Principal, Office of Science & Technology	Department of Enterprise, Trade and Employment
Mr Frank Turpin	Education Manager	Intel Ireland

Dr Roger Downer stepped down from the Committee in late 2004

<sup>13</sup> Mr John Cahill replaced Mr Greg Craig in mid 2004

<sup>14</sup> Ms Ruth Carmody replaced Mr Kevin McCarthy in late 2004

<sup>15</sup> Mr Kevin Kernan replaced Mr Paddy Purcell in mid 2004

<sup>16</sup> Ms Ellen MacCafferty replaced Mr Martin Shanagher in mid 2004

# Publications – 2004/2005

Broadband Telecommunications Benchmarking Study	January 2004
Research and Development in Ireland, 2001 – at a glance	January 2004
Competitiveness through Innovation National Competitiveness Council (NCC)	February 2004
International Trade & Investment Report, 2003	March 2004
Wireless Communications: An Area of Opportunity for Ireland	April 2004
National Code of Practice for Managing Intellectual Property from Publicly Funded Research Irish Council for Science, Technology & Innovation (ICSTI)	April 2004
Forfás Annual Report	April 2004
Ahead of the Curve - Ireland's Place in the Global Economy Report of the Enterprise Strategy Group	July 2004
Statement on Nanotechnology Irish Council for Science, Technology & Innovation (ICSTI)	July 2004
Building Ireland's Knowledge Economy The Irish Action Plan for Increasing Research and Development to 2010	September 2004
Statement on Prices and Costs National Competitiveness Council (NCC)	September 2004
State Expenditure Priorities for 2005  Irish Council for Science, Technology & Innovation (ICSTI)	September 2004
Sustainable Development in Ireland Irish Council for Science, Technology & Innovation (ICSTI)	October 2004
Annual Competitiveness Report 2004 & The Competitiveness Challenge National Competitiveness Council (NCC)	October 2004
Innovate, Market, Sell – Review of the Sales, Marketing and Innovation Capabilities of Irish Exporting SMEs	November 2004
Broadband Telecommunications Benchmarking Study	December 2004
Survey of Research and Development in the Higher Education Sector 2002	December 2004
State Expenditure on Science & Technology, 2002 and 2003	December 2004
From Research to the Marketplace – Patent Registration and Technology Transfer in Ireland	March 2005
Making Technological Knowledge Work – A Study of the Absorptive Capacity of Irish SMEs	March 2005
Strategic Technology Platforms Irish Council for Science, Technology and Innovation	March 2005
Towards the Seventh EU Framework Programme for Research and Technological Development Irish Council for Science, Technology and Innovation	March 2005
International Trade & Investment Report, 2004	April 2005
An Impact Assessment of the Proposed EU Chemical Policy (REACH) on Irish Industry	April 2005
Annual Employment Survey, 2004	April 2005
Make Consumers Count: A New Direction for Irish Consumers Report of the Consumer Strategy Group	May 2005
Business Expenditure on Research & Development (BERD) Ireland 2003/2004	May 2005
Languages and Enterprise Expert Group on Future Skills	June 2005

# Report of the Comptroller and Auditor General for presentation to the Houses of the Oireachtas

I have audited the financial statements on pages 64 to 74 under the Industrial Development Act, 1993.

# Respective Responsibilities of the Board and the Comptroller and Auditor General

The accounting responsibilities of the Board are set out on page 62.

It is my responsibility, based on my audit, to form an independent opinion on the financial statements presented to me and to report on them.

I review whether the statement on the system of internal financial control on page 63 reflects Forfás's compliance with applicable guidance on corporate governance and report any material instance where it does not do so, or if the statement is misleading or inconsistent with other information of which I am aware from my audit of the financial statements.

#### **Basis of Audit Opinion**

In the exercise of my function as Comptroller and Auditor General, I conducted my audit of the financial statements in accordance with auditing standards issued by the Auditing Practices Board and by reference to the special considerations which attach to State bodies in relation to their management and operation.

An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the financial statements. It also includes an assessment of the significant estimates and judgments made in the preparation of the financial statements, and of whether the accounting policies are appropriate to Forfás's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations that I considered necessary to provide me with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement whether caused by fraud or other irregularity or error. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements.

#### **Opinion**

In my opinion, proper books of account have been kept by Forfás and the financial statements, which are in agreement with them, give a true and fair view of the state of affairs of Forfás at 31 December 2004 and of its income and expenditure and cash flow for the year then ended.

John Purcell

Comptroller and Auditor General

20 May 2005



**Financial Statements** 

# Statement of Board Members' Responsibilities

For 2004 Annual Financial Statements

Paragraph 7(2) of the First Schedule to the Industrial Development Act, 1993 requires Forfás to keep, in such form as may be approved of by the Minister for Enterprise, Trade and Employment with the consent of the Minister for Finance, all proper and usual accounts of money received and expended by it.

In preparing those financial statements, Forfás is required to:

- select suitable accounting policies and apply them consistently;
- □ make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that Forfás will continue in operation; and
- disclose and explain any material departures from applicable Accounting Standards.

The Board is responsible for keeping proper books of account which disclose with reasonable accuracy at any time its financial position and which enables it to ensure that the financial statements comply with Paragraph 7(2) of the First Schedule to the Industrial Development Act, 1993. These books of account are located at the Agency's headquarters, Wilton Park House, Wilton Place, Dublin 2. The Board is also responsible for safeguarding its assets and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

On behalf of the Board

Eoin O'Driscoll

Chairman

**Martin Cronin** 

Chief Executive Officer

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#### Statement on internal Financial Control

On behalf of the Board of Forfás I acknowledge our responsibility for ensuring that an effective system of internal financial control is maintained and operated in the Agency.

The system can only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded, and that material errors or irregularities are either prevented or would be detected in a timely period.

The Board has taken steps to ensure an appropriate control environment is in place by:

- Establishing formal procedures for monitoring the activities and safeguarding the assets of the organisation;
- Clearly defining management responsibilities and powers;
- Developing a culture of accountability across all levels of the organisation.

The Board has established processes to identify and evaluate business risks by:

- □ Identifying the nature, extent and financial implication of risks facing the body including the extent and categories which it regards as acceptable;
- □ Assessing the likelihood of identified risks occurring;
- Working closely with Government and various Agencies to ensure that there is a clear understanding of Forfás goals and support for the Agencies' strategies to achieve those goals.

The system of internal financial control is based on a framework of regular management information, administration procedures including segregation of duties, and a system of delegation and accountability. In particular it includes:

- A comprehensive budgeting system with an annual budget which is reviewed and agreed by the Board;
- Regular reviews by the Board of periodic and annual financial reports which indicate financial performance against forecasts;
- Setting targets to measure financial and other performance;
- □ Formal project management disciplines.

Forfás has an outsourced internal audit function, which operates in accordance with the Framework Code of Best Practice set out in the Code of Practice on the Governance of State Bodies and which reports directly to the Audit Committee. The work of internal audit is informed by analysis of the risk to which the body is exposed, and annual internal audit plans are based on this analysis. The analysis of risk and the internal audit plans are endorsed by the Audit Committee. The Audit Committee meets quarterly to review with the Internal Auditor the outcome of their audits and to confirm the ongoing adequacy and effectiveness of the system of Internal Financial Control.

I confirm that in respect of the year to 31 December 2004, the Board conducted a review of the system of internal financial controls. The Board's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of the internal auditor and the Audit Committee which oversees the work of the internal auditor and the control exercised by the executive managers within Forfás who have responsibility for the development and maintenance of the financial control framework.

Signed on behalf of the Board

Eoin O'Driscoll

Chairman

# **Accounting Policies**

# Industrial Development Acts 1993, 1995, 1998 and 2003

Forfás, the policy advisory and co-ordinating board for industrial development and science & technology in Ireland, was established on 1 January, 1994, under the provisions of the Industrial Development Act 1993, as amended by subsequent legislation. It is the body through which powers are delegated to Enterprise Ireland, for the promotion of indigenous industry, and to IDA Ireland, for the promotion of inward investment.

In addition to its core advisory and co-ordinating function, Forfás has the additional responsibility for pension costs of retired staff of Forfás, IDA Ireland, Enterprise Ireland, Science Foundation Ireland and certain former agencies, under the Industrial Development Acts 1993, 1998 and 2003, as set out in Note 6 of these Financial Statements.

#### (1) Basis of Accounting

The Financial Statements have been prepared under the historical cost convention in the form approved by the Minister for Enterprise, Trade and Employment with the consent of the Minister for Finance under the Industrial Development Act 1993. The Financial Statements are prepared on an accruals basis, except where stated below and are in accordance with generally accepted accounting practice. Financial Reporting Standards, recommended by the Accounting Standards Board, are adopted as they become effective.

#### (2) Income recognition

Income from Oireachtas Grant represents actual cash receipts in the year.

#### (3) Fixed Assets and Depreciation

Fixed Assets comprise tangible fixed assets which are owned by Forfás and are stated at cost less accumulated depreciation. Depreciation is calculated in order to write off the cost of fixed assets over their estimated useful lives. Fixtures, Fittings and Computer Equipment below the capitalisation threshold of €1,000 are expended in the Income & Expenditure Account in the year of purchase.

#### (4) Capital Account

The Capital Account represents the unamortized funds utilised for the acquisition of Fixed Assets.

#### (5) Foreign Currencies

Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rates ruling at the Balance Sheet date. Revenues and costs are translated at the exchange rates ruling at the dates of the underlying transactions.

#### (6) Pension Costs

Pension Payments are accounted for as they fall due.

#### (7) Operating Leases

The rentals under operating leases are accounted for as they fall due.

# **Income and Expenditure Account**

Year Ended 31 December 2004

	Notes	2004 €'000	2003 €'000
Income			
Oireachtas Grant	1	22,395	20,265
Oireachtas Grant - Technology Foresight	1	-	20,031
Professional Fees - National Accreditation Board	2	742	777
Other	3	692	674
Departmental Programmes	4	2,290	1,906
		26,119	43,653
Expenditure			
Administration and General Expenses	5	13,710	12,785
Pension Costs	6	9,836	8,615
Depreciation	7	216	308
Departmental Programmes	4	2,290	1,906
Technology Foresight	8	-	20,031
		26,052	43,645
Net Movement for Year		67	8
Balance at beginning of Year		1,591	1,515
Transfer from Capital Account	9	100	68
Balance at end of Year		1,758	1,591

There are no recognised gains or losses, other than those dealt with in the Income and Expenditure Account. The Accounting Policies, Cash Flow Statement and Notes 1 to 16 form part of these Financial Statements.

On behalf of the Board:

**Martin Cronin** 

Chief Executive Officer

Monda Cromi

Eoin O'Driscoll

Chairman

# **Balance Sheet**

As at 31 December 2004

	Notes	2004 €¹000	2003 €'000
Fixed Assets			
Tangible Fixed Assets	7	259	359
Total Fixed Assets		259	359
Current Assets			
Accounts Receivable	10	5,048	4,424
Bank		48	82
		5,096	4,506
Accounts Payable	11	3,338	2,915
Net Current Assets		1,758	1,591
Net Assets		2,017	1,950
Represented By:			
Capital Account	9	259	359
Income and Expenditure Account		1,758	1,591
		2,017	1,950

The Accounting Policies, Cash Flow Statement and Notes 1 to 16 form part of these Financial Statements.

On behalf of the Board:

Monda Crami

Martin Cronin

Chief Executive Officer

Eoin O'Driscoll

Chairman

# **Cash Flow Statement**

Year Ended 31 December 2004

	Notes	2004 €'000	2003 €'000
Reconciliation of Net Movement for Year to Net Cash Flow from Operations		000	C 000
Net Movement for Year		67	8
Bank Interest		(40)	(40)
(Profit)/Loss on Disposal of Assets		20	18
Depreciation Charge:			
- Tangible Fixed Assets	7	216	308
(Increase)/Decrease in Accounts Receivable		(624)	(1,329)
Increase/(Decrease) in Accounts Payable		423	1,278
Net Cash Flow from Operations		62	243
Cash Flow Statement  Net Cash Flow from Operations		62	243
Returns on Investment and Servicing of Finance			
Bank Interest		40	40
Cash Flow before Capital Expenditure		102	283
Capital Funding			
Disposal of Tangible Fixed Assets		-	1
Purchase of Tangible Fixed Assets	7	(136)	(259)
Cash Flow after Capital Expenditure		(34)	25
(Decrease)/Increase in Cash		(34)	25
Reconciliation of (Decrease)/Increase in Cash to Ca	ısh at Bank		
Movement in Cash for the Year		(34)	25
Cash at Bank at 1 January		82	57
Cash at Bank at 31 December		48	82



## **Notes to the Accounts**

Year Ended 31 December 2004

#### (1) Oireachtas Grant

	2004 €'000	2003 €¹000
	€ 000	€ 000
Forfás		
Administration and General Expenses	22,395	20,265
Technology Foresight (to 25 July 2003) (Note 8)		
Administration and General Expenses	-	2,423
Capital	-	17,608
	-	20,031

- a) Under Section 35 of the Industrial Development (Science Foundation Ireland) Act, 2003, the aggregate amount of grants made by the Minister to Forfás and its Agencies, to enable them to discharge their obligations and liabilities shall not exceed €3,400,000,000. At 31 December, 2004 the aggregate amount so provided was €2,209,243,030.
- b) Under Section 14(3) of the Industrial Development Act, 1986, Section 37 of the Industrial Development Act, 1969, and Sections 2 and 3 of the Industrial Development Act, 1977, the aggregate amount of grants made by the Minister to Forfás and its Agencies to enable them to meet their obligations or liabilities in respect of principal and interest on foot of Loan Guarantees under any of these sections shall not exceed €158,717,260. At 31 December, 2004 the aggregate amount so provided was €13,547,211.

#### (2) Professional Fees - National Accreditation Board

The Irish National Accreditation Board (INAB) was established as a Board of Forfás under Section 10 of the Industrial Development Act, 1993 as amended by Section 46 of the Industrial Development (Enterprise Ireland) Act, 1998 to perform the functions specified below.

It is the national body responsible for accreditation of organisations involved in calibration, testing, and certification of quality, product, and personnel management systems in Ireland and is also the statutory GLP (Good Laboratory Practice) compliance monitoring authority. Professional Fees are generated from these activities which involve assessment of laboratories and certification bodies. Costs incurred in generating this income are included in the relevant expenditure heading.

#### (3) Other Income

Total	692	674
Bank Interest	40	40
Sundry Income	15	2
Rental Income	637	632
	2004 €'000	2003 €'000

Year Ended 31 December 2004

#### (4) Departmental Programmes - Income and Expenditure

These Programmes are administered by Forfás, on behalf of the funding bodies listed below:

Programme		2004	2003
		€'000	€'000
Discover Science and Engineering			
(previously STI Awareness)	1	1,751	1,237
Expert Group on Future Skills Needs	2	324	473
Irish Council for Bioethics	3	215	150
eBusiness Development	4	-	46
Total		2,290	1,906

#### **Details of Funding Bodies:**

- 1 Office of Science & Technology of the Department of Enterprise, Trade & Employment
- 2 National Training Fund of the Department of Enterprise, Trade & Employment
- 3 Department of Enterprise, Trade and Employment
- 4 Information Society Fund

Administration and General Expenses	2004	2003
	€'000	€'000
Board Members' Remuneration and Expenses	289	269
Pay Costs	6,897	6,275
Other Personnel Costs	380	379
Travelling Expenses	470	448
Specialised and Professional Services	855	897
Research and Studies	1,289	1,233
Rents, Rates, Repairs and Maintenance <sup>1</sup>	1,984	1,610
Other Operating Expenses	1,435	1,661
Office of the Chief Science Adviser <sup>2</sup>	96	-
Audit Fee	15	13
Total	13,710	12,785
Pay Costs comprise:		
Wages and Salaries	6,420	5,858
Social Welfare Costs	371	308
Superannuation Costs	106	109
Total	6,897	6,275

<sup>1</sup> These are net of rentals received from sub-tenants of former Industrial Development Authority headquarter buildings.

The Office of the Chief Science Adviser (CSA) was established by the Government on 1 September 2004 to provide independent expert advice on any aspect of Science, Technology and Innovation (STI) as requested by Government. In relation to these functions he operates independently from and is not accountable to the Board or management of Forfás. The day to day budgetary requirements of the CSA and his staff are funded by Forfás. The CSA reports to the CEO of Forfás on administration issues and is required to comply with Forfás policies and procedures and other governance obligations as may be required from time to time.



Year Ended 31 December 2004

#### (6) Superannuation

(a) Forfás has responsibility for the pension costs of retired staff of Forfás, IDA Ireland, Enterprise Ireland, Science Foundation Ireland and certain former agencies, under the Industrial Development Acts 1993, 1998 and 2003. These costs arise under the terms of the following schemes

SCHEME	STAFF COVERED	ТҮРЕ
Forfás	The Forfás scheme covers the following categories of staff in Forfás and its Agencies - (a) staff recruited up to 5 April 1995 who became pensionable after that date, (b) staff recruited after 5 April 1995, (c) a small number of staff previously covered by the Garda Siochána Superannuation Scheme, (d) a small number of staff previously covered by the FAS/AnCO Schemes.	Contributory, Defined Benefit, Unfunded. A small number of those in category (b) are included on a non contributory basis.
Former Industrial Development Authority	Staff of the former IDA and those recruited by Forfás and its Agencies in the appropriate grades between 1 January 1994 and 5 April 1995.	Contributory, Defined Benefit. Funded to meet pension costs at retirement. Post retirement increases are unfunded and met by Forfás from Oireachtas Grant.
Former Eolas	Staff of the former Eolas (other than those covered by the former NBST scheme below) and those recruited by Forfás and its Agencies in the appropriate grades between 1 January 1994 and 5 April 1995.	Non-Contributory, Defined Benefit, Unfunded.
Former National Board for Science and Technology (NBST)	A small number of staff of the former NBST serving on 31 December 1987.	Contributory, Defined Benefit, Unfunded.
Former Irish Goods Council	A small number of staff of the former Irish Goods Council serving on 31 August 1991.	Contributory, Defined Benefit. Funded to meet pension costs at retirement. Post retirement increases are unfunded and met by Forfás from Oireachtas Grant.
Former An Bord Tráchtála (ABT)	Staff of the former ABT (other than those covered by the former Irish Goods Council scheme above) who were pensionable employees on 22 July 1998.	Contributory, Defined Benefit, Unfunded.

Apart from the former Irish Goods Council Scheme, each of the Schemes include Spouses' and Children's Schemes.

(b) Forfás meets the net costs arising from normal retirements. These are paid out of current income and are accounted for as they fall due. Contributions received by Forfás from staff in the contributory unfunded schemes outlined above are used to part fund ongoing pension liabilities.

Costs associated with seconded staff retiring under Voluntary Early Retirement (VER) are carried by the appropriate Agency until normal retirement age is reached.

Year Ended 31 December 2004

### (6) Superannuation (cont.)

#### (c) FRS 17 Retirement Benefits

For accounting periods ending on or after 1 January 2005, Financial Reporting Standard 17 (FRS17) will require financial statements to reflect at fair value the assets and liabilities arising from an employer's superannuation obligations and any related funding and to recognise the costs of providing superannuation benefits in the accounting periods in which they are earned by employees. As a transitional measure for accounting periods ending on or after 22 June 2001, the Standard requires that the present value of scheme liabilities be disclosed as a note to the accounts.

The valuation of defined benefit schemes used for the purposes of FRS17 disclosures has been carried out by an independent actuary in order to assess the liabilities at the balance sheet date. Scheme assets are stated at their market value at the balance sheet date.

The financial assumptions used to calculate the retirement liabilities and components of the defined benefit cost under FRS17 were as follows:

Valuation method:	Projected Un	it:
	2004	2003
Discount Rate	4.70%	5.25%
Inflation Rate	2.25%	2.25%
Salary Increases	4.00%	4.00%
Pension Increases	3.50%	3.50%

The market value of the assets in the pension schemes, the expected rate of return and the schemes' liabilities at 31 December, 2004 were:

	Expected Return 2004	Expected Return 2003	Market Value at 31 December 2004	Market Value at 31 December 2003
			€'000s	€'000s
Equities	7.30%	7.75%	112,879	102,987
Bonds	3.80%	4.75%	21,999	23,496
Property	5.30%	6.50%	11,379	10,974
Other	3.00%	3.00%	5,462	3,236
			151,719	140,693
Present Value of pension schen	nes' liabilities		809,196	687,894
Net deficit in pension scheme			(657,477)	(547,201)
Related deferred tax liability			-	-
Net pension asset/(liability)			(657,477)	(547,201)
Analysis of the amount which	would be charged to	operating profit is a	as follows:	
Current Service Cost			13,733	11,435
Past Service Cost			1,108	-
			14,841	11,435
Analysis of the amount which	would be credited to	other finance incon	ne is as follows:	
Interest on scheme liabilities			36,023	31,056
Expected return on scheme ass	ets		(9,829)	(8,642)
			26,194	22,414



Year Ended 31 December 2004

## (6) Superannuation (cont.)

## (c) FRS 17 Retirement Benefits (cont.)

Analysis of the amount which would be recognised in the statement		
of total recognised gains and losses (STRGL) is as follows:	2004	2003
	€'000	€,000
Actual return less expected return on scheme assets	3,429	7,327
Experience gains and (losses)	(19,547)	(65,770)
Changes in assumptions	(69,206)	(28,534)
Actuarial loss which would be recognised in the STRGL	(85,324)	(86,977)
Analysis of the movement in deficit during the year is as follows:		
Deficit at the beginning of the year	(547,201)	(440,576)
Current service cost	(13,733)	(11,435)
Contributions	16,083	14,201
Past service costs	(1,108)	-
Other finance income/(charges)	(26,194)	(22,414)
Actuarial gain/(loss)	(85,324)	(86,977)
Deficit at end of year	(657,477)	(547,201)

The above calculations are included for information only. FRS17 requires full recognition of pension scheme assets/liabilities in the financial statements for periods ending on or after 1 January 2005.

Tangible Fixed Assets	Computer	Motor	Fixtures &	
	Equipment	Vehicles	Fittings	Total
	€'000	€'000	€'000	€'000
COST				
At 1 January 2004	1,365	59	3,563	4,987
Additions	103	-	33	136
Disposals	(88)	-	(208)	(296)
At 31 December 2004	1,380	59	3,388	4,827
DEPRECIATION At 1 January 2004 Charge for Year Disposals	1,231 124 (76)	30 14	3,367 78 (200)	4,628 216 (276)
At 31 December 2004	1,279	44	3,245	4,568
NET BOOK AMOUNT				
At 1 January 2004	134	29	196	359
Net Movement for Year	(33)	(14)	(53)	(100)
At 31 December 2004	101	15	143	259

The cost of Tangible Fixed Assets is written off by equal instalments over their expected useful lives as follows:

(i)	Computer Equipment	3 years
(ii)	Motor Vehicles	4 years
(iii)	Fixtures & Fittings	5 years

Year Ended 31 December 2004

#### (8) Technology Foresight

In February 2000 the Government approved the establishment of the Technology Foresight Fund as an important new initiative to provide significant resources for investment in basic research projects. Science Foundation Ireland (SFI) was established as the mechanism for the management, allocation, disbursal and evaluation of this Technology Foresight Fund and operated as a committee of Forfás until 24 July 2003.

SFI was established as an agency of Forfás with effect from 25 July 2003.

#### (9) Capital Account

Total

			€'000
	At 1 January 2004		359
	Transfer to Income and Expenditure Account		
	- Cost Additions	136	
	- Cost Disposals	(296)	
	- Depreciation Additions	(216)	
	- Depreciation Disposals	276	
			(100)
	At 31 December 2004		259
	At 31 December 2004		259
	At 31 December 2004		259
(10)	Accounts Receivable	2004	259
(10)		2004 €¹000	
(10)			2003
(10)	Accounts Receivable	€'000	2003 €'000

General Debtors include €1,579,905 (2003: €1,701,841) VAT recoverable by Forfás on behalf of the Forfás VAT Group (Forfás, IDA Ireland & Enterprise Ireland).

5,048

Interagency Balances represents amounts due, if any, from the Forfás Agencies (IDA Ireland, Enterprise Ireland and Science Foundation Ireland).

4,424

) Accounts Payable	2004	2003
	€'000	€,000
General Creditors	24	-
Accruals	1,101	1,083
Payroll	58	-
Inter Agency Balances	2,155	1,832
Total	3,338	2,915

Interagency Balances represents amounts due, if any, to the Forfás Agencies (IDA Ireland, Enterprise Ireland and Science Foundation Ireland) and includes VAT payable of €1,850,212 (2003: €1,819,564) to IDA Ireland and Enterprise Ireland, when refunded by the Collector General.

#### (12) Commitments under Operating Leases

A net total of  $\in$ 1,040,000 (2003  $\in$ 1,036,000) has been charged in respect of operating leases on buildings in the accounts of Forfás. Forfás has commitments of  $\in$ 7,158,000 to pay during 2005 in respect of leases expiring as set out below. Costs arising out of these commitments in 2005 will be shared between Forfás Agencies and tenants in proportion to agreed office space occupied. The net Forfás share of these costs in 2005 is anticipated to be approximately  $\in$ 1,178,000.

€'000

		C 000
(i)	2005	87
(ii)	2006 - 2009	66
(iii)	2010 Onwards	7,005

#### (13) Taxation

Section 227 of the Taxes Consolidation Act, 1997, exempts Forfás from further taxation on Case IV and Case V rental income in excess of that deducted at source.

#### (14) Board Members - Disclosure of Transactions

In the normal course of business, Forfás may enter into contractual arrangements with undertakings in which Forfás Board Members are employed or otherwise interested. Forfás has adopted procedures in accordance with the guidelines issued by the Department of Finance in relation to the disclosure of interests by Board Members and these procedures have been adhered to by Forfás during the year.

During 2004, payments amounting to €227,966 were made to an organisation in which a Board Member declared an interest, in respect of services provided by that organisation to the Agency. The member concerned did not receive any documentation on the transactions nor did the member participate in or attend any Board discussion relating to these matters.

#### (15) Contingencies and Legal Actions

There are no contingencies or legal actions which require specific provision in the Financial Statements.

#### (16) Approval of Financial Statements

The Financial Statements were approved by the Board on 8 February, 2005.







Wilton Park House Wilton Place Dublin 2 Ireland

Tel: + 353 1 607 3000 Fax: + 353 1 607 3030 Website: www.forfas.ie Email: info@forfas.ie

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