To the Minister for Enterprise & Employment

Pursuant to the Industrial Development Act, 1993, Forfás herewith presents its report and accounts for the year ended December 31, 1996

Do Aire Fiontar & Fostaíochta

De bhun an Achta um Fhorbairt Tionscail, 1993, tá a thuarscáil agus a chuntais don bhliain dar chríoch 31 Nollaig, 1996, a dtíolacadh leis seo ag Forfás.

Tom Toner Chairman

John Travers Chief Executive

CHAIRMAN'S STATEMENT

The Irish Economy - an excellent performance

A very positive picture can be painted of Ireland's economy at the end of 1996. Our economic progress has been remarkable, combining strong economic growth, low inflation, unprecedented levels of job creation, falling unemployment levels and low interest rates.

Today Ireland enjoys the fastest growing economy in the European Union. Much has been achieved in social and economic progress and Ireland can look forward with confidence to a continuation of growth during 1997 and beyond.

A number of factors are acting in favour of the Irish economy. Prudent Government economic policies over the last ten years with a National Partnership approach to development strategies, moderate wage increases, and relatively low interest rates and inflation have created an environment that has boosted competitiveness and both business and consumer confidence. It also has contributed to strong foreign investment flows into the country.

In addition to these, the impact of EU support funds, particularly in the areas of science and technology initiatives and infrastructural development has had a positive impact in promoting the development of many sectors of the economy and provides potential for further growth. Participation in a single currency bloc under EMU will further enhance overall growth prospects for Ireland in future years, provided that good preparations are made by both the public sector and by individual firms.

All of these factors have contributed to record employment creation, falling unemployment and rising living standards. At the same time, income from taxation is at record levels, creating opportunities for reduced taxation rates.

Finally, the international perception of Ireland as a country with a young, well-educated and flexible workforce, modern infrastructure and technology, together with a highly stable political and economic environment, has boosted confidence in investment and encouraged job creation. The result has been an unprecedented level of sustained growth in Ireland's economy over past years, achieved without giving rise to widespread inflationary pressures.

Partnership 2000: a welcome

National agreements between the social partners have a vital role in Ireland's competitiveness and economic progress. Forfás greatly welcomes the launch of Partnership 2000 in 1996. It should, as its predecessors did, contribute significantly to maintaining the positive and stable business environment Ireland has enjoyed for some years.

This agreement was drawn up with the overall aims of strengthening the ability to generate economic growth and employment, raising living standards and making further progress on improving social inclusion. Partnership 2000 sets out specific objectives in areas such as tax reduction, moderate and co-ordinated wage agreements, reductions in Government debt, control of public finances, and a specific programme aimed at social inclusion and equality. The achievement of these objectives will greatly contribute to Ireland's future international competitiveness and social cohesiveness.

The agreement aims to keep wage inflation in the region of 2.5% per annum over the 31/4 year duration of the agreement within an agreed programme of PAYE tax reductions. It is crucial that these commitments are fully met by all sides in order to maintain competitiveness and contain inflation in a fast growing economy that could, otherwise, give rise to strong growth in wage demands, resulting in higher inflation and reduced competitiveness.

In that context, Forfás strongly supports the measures set out by Partnership 2000 to promote increased co-operation and partnership at the firm level.

Forfás also supports the move towards ensuring that the negotiations for National Partnership Programmes be conducted within a longer term framework for social and economic advance. Forfás made a contribution to that process in the case of the Partnership 2000 negotiations through a number of reports and other inputs.

Shaping our Future: a long-term strategy for promoting enterprise in Ireland

The sustained economic progress achieved in Ireland over the past decade under a series of social partnership agreements indicate a strong national potential to drive forward towards further increases in employment and further improvements in the quality of life of Ireland's people. However, advances in employment creation and living standards will only be sustained by wise policy decisions that take into account the global competitive environment and the new technological changes that are underway and that will intensify as Ireland crosses the threshold of a new century. Such decisions can be facilitated by establishing a strategic frame of reference that takes a 10-15 year perspective on developments, and likely trends in the forces that shape social and economic progress at both national and international levels.

During 1996, Forfás made an important contribution to this process by publishing, at the request of the Government, a report entitled 'Shaping Our Future: A Strategy for Enterprise in Ireland in the 21st Century'. The Shaping Our Future Report represents the first attempt in Ireland to establish a long-term strategic public policy framework for promoting the development of the enterprise sector. In doing so, it sets ambitious goals for public policy, encompassing employment, raising of standards of living and improvement of quality of life.

The underlying thrust of the report is that a dynamic and expanding enterprise sector, in particular the services sector, is an essential foundation in achieving a level of social and economic progress in Ireland that has not previously been attained. The report sets out a strategy for the development of both Irish-owned and overseas-owned industry. It places the services sector at the heart of enterprise strategy, along with manufacturing. A wide range of proposals are made in critical support areas such as taxation, skills, infrastructure, science and technology and competition policy.

Action is underway on the implementation of these proposals. To take some examples:

The need to reduce both **personal and business taxation** in Ireland was pinpointed. The recent downward direction of taxation rates on both counts is encouraging in this respect and is welcomed by Forfás. The recently announced changes in the Corporation Tax regime for the Post 2006 and Post 2010 periods follow from the analyses and options set out in the Report.

Human resource developmentwas identified as a central issue in maintaining and enhancing the competitiveness of Ireland's economy and Forfás has since established an expert group to identify the actions that need to be taken to avoid future skills shortages. This group has already identified software, computer technicians and languages as priority areas for skills development. These are key disciplines where demand is growing very quickly and where the existence of significant shortages in the near future is a strong likelihood unless action is taken. In response to the work of the group the Government announced immediate plans to provide 1,000 extra third level places in languages, 1,000 places in software and 750 places for electronic technicians.

In the context of upgrading general skills levels, 'Shaping our Future' recommended increasing the school leaving age to seventeen. Forfás welcomes the decision to raise the leaving age to sixteen, with the aspiration of further increasing it in the future.

The Report recommended the development of a strategy for an **Information Society**. This Strategy would embrace the huge potential of developments in information and telecommunications technology to improve the competitiveness of the Irish economy and to advance living standards and social cohesion. This strategy has since been developed by an **Information Society Steering Committee** appointed by the Minister for Enterprise and

Employment. The Committee included the Chief Executive of Forfás, John Travers, and Forfás also provided the Secretariat for the Committee. The Government have broadly endorsed the recommendations of the Committee and established an Information Society Commission to report to the Taoiseach on the implementation of the strategy.

'Shaping our Future' emphasised the critical importance of **Science and Technology** and the need for strong links between Industry and third level institutions. The new advisory council on science, technology and innovation, representative of wide-ranging interests, has since been established under the Forfás legislation to provide independent expert advice on S&T matters to Government.

Logistics was another important area identified in 'Shaping Our Future' as a means by which Ireland could address critical disadvantages in location. A recommendation was made that a national Logistics Institute be established, providing practical training, education and research services for industry in this increasingly important area. The recommendation has been accepted and plans are well underway for the establishment of such an Institute.

The promise of the Future: what can be achieved

Ten years ago few would have predicted the level of social and economic progress that has been achieved in recent years in Ireland. That progress has not been the result of any single factor or restricted group of factors. Its roots lie deep

- in the lessons learned from the process of policy formulation and implementation in the past and present.
- in supporting the potential of the labour force to create and take advantage of international trading opportunities and
- in developing a range of consistent policies responsive to a changing global trading environment.

There is now a unique opportunity to build on what has been achieved. With the right Government policies and a reasonably favourable economic environment at international level Ireland can over the next 10-15 years:

- more than halve the overall level of unemployment to less than 6 per cent of the workforce;
- achieve a greater level of reduction in long-term unemployment which remains at unacceptably high levels;
- increase the average standards of living in Ireland as measured by GNP per person to achieve the average for the present 15 member states of the EU;
- improve the quality of life in Ireland by reference to:
 - lower unemployment levels especially for the long-term unemployed;
 - improved access to health, educational and training facilities;
 - sensible conservation of the natural and built environment;
 - achieving a reasonable balance in regional development;
 - greater access to improved cultural and heritage facilities;
 - increased resources to tackle the fundamental issues of social deprivation;
 - ensuring that every individual has the opportunity to achieve a basic level of income which allows a decent standard of living.

The Way Forward

With the right policy framework there are good prospects for significant further improvements in social and economic progress in Ireland. Fundamental to this is a clear recognition that the enterprise sector is the driving force for such progress: the main source of the employment and wealth-creation which provide the resources needed for the high-quality social and cultural facilities which characterise modern, advanced economies. Good social and cultural facilities in turn support and reinforce a productive enterprise sector.

One of the functions of Forfás is to advise the Minister for Enterprise and Employment on these issues. It has done so in a comprehensive series of reports, memoranda and discussions during 1996, which are outlined in more detail elsewhere in this Annual Report. I will exercise a Chairman's privilege to highlight some of these:

The continuation of **taxation and public finance reform,** is essential. This should involve a substantial reduction in the overall level of taxation and, in particular, in taxation at the lower levels of personal income. Tight control of government spending and reduced Government borrowing are the prerequisites of reducing the burden of taxation on people and on business. An important issue is the future of the 10% **corporation tax** regime when it expires in 2010 for general manufacturing and in 2006 for the IFSC. The recent decision announced by the government to introduce a single low rate of corporation tax is welcome. It is important that the required legislative changes are prepared as soon as possible.

Ireland's international **competitiveness** is another key issue. Policies aimed at keeping inflation, wage increases and interest rates low are essential, as are continued efforts to enhance social cohesion. The establishment of a National Competitiveness Council reporting to the Taoiseach was recently announced. Forfás will provide the research and secretariat services for the Council in consultation with the Department of Enterprise and Employment and other Government departments and State agencies.

The availability of **people with appropriate skills** is critical to the achievement of success. In that regard, a major drive is required to raise the skills profile of people, both through education and the achievement of higher investment by firms in training and human resources development. It is important that a substantial proportion of the extra third level places in software, computer technicians and languages, referred to earlier, are provided in the 1997 - 1998 academic year.

The **services sector** has become the main source of new employment creation and this is set to continue. A proactive and co-ordinated policy towards the development of the Irish services sector is required, built on the clear growth potential of international and local services. The policy guidelines for services sector promotion announced by the Minister for Enterprise and Employment are welcome in that context. There is a need to improve competition policy to ensure that all services are subject to fair competition and intelligent regulation.

Investment in **telecommunications infrastructure** is critically important if Ireland is to establish a niche in advanced telecommunications services. Rapid advances in the provision of such services are being made in other countries. Increased investments must quickly be put in place in Ireland if a technology gap with other countries is not to become a barrier to economic growth and development.

This can best be achieved through promoting competition and encouraging investment in telecom infrastructure. To facilitate this the powers of the Regulator established under recent legislation should be strengthened. Furthermore, strong consideration should be given to the reallocation of EU structural funds to support strategic investment in telecom facilities that offer fully open access to service providers.

Finally I would like to say that I am greatly encouraged by, and appreciative of, the support of the Minister for Enterprise and Employment, other Ministers and the Government for the work of Forfás in 1996. That work has been well acknowledged in a range of Government publications, policy decisions and actions which are of significant importance to the development of the enterprise sector in Ireland.

I also acknowledge the top-class work and results achieved in 1996 by our colleagues in Forbairt and IDA Ireland. The development agencies have played an important part in the success that Ireland has achieved in economic growth and employment creation in recent years.

Acknowledgments

As Chairman, I extend my thanks and appreciation to my fellow Board Members and to the many organisations and individuals who have contributed to the work of Forfás in 1996.

I wish to thank in particular the Minister for Enterprise and Employment, the Department of Enterprise and Employment and other government departments for their support and cooperation. I also wish to acknowledge the significant financial support provided by the EU for industrial development and the support of Science and Technology in Ireland through the Operational Programme for Industry and through a range of other programmes which have a large impact on the environment for enterprise.

I also extend my thanks to the State development agencies and other organisations with whom we worked closely throughout the year for their co-operation - in particular to Forbairt and IDA Ireland, an Bord Tráchtála and FÁS, the third level education sector, employer bodies and business organisations, trade unions and the media. All of these have been supportive of our work and that support is acknowledged and appreciated.

Finally, I want to thank sincerely the staff of Forfás for their continued dedication, hard work and professionalism throughout the year.

Tom Toner Chairman

CHIEF EXECUTIVE'S REPORT

Review of 1996 - a remarkable year

1996 was another record year for output and employment growth in the enterprise sector. The outlook for the years immediately ahead continue to be positive - provided that sensible polices continue to be effectively developed, clearly articulated and efficiently implemented.

1996 Overview

1996 was another remarkable year for employment growth in Ireland. The total estimated average net increase in employment in 1996 came to over 50,000 jobs. In the three years from 1993-1996, more additional jobs have been created in Ireland than in the previous 30 years. Increased employment in industry and international services promoted by the development agencies made an important contribution to this growth.

New organisational arrangements for industrial promotion have operated since 1st January 1994 and over that period more than 52,000 new first-time jobs have been created in companies supported by Forbairt and IDA Ireland. In 1996 alone job gains in companies supported by Forbairt and IDA Ireland exceeded 25,000 jobs - the highest level ever attained in firms supported by the promotional agencies. At the same time job losses are at historically low levels so that significant reductions in the numbers unemployed are beginning to occur

The record growth in manufacturing output and employment is being accompanied by significant increases in investment in R&D by the business sector. This investment is both a cause and effect of increases in output and investment generally in the enterprise sector. Business sector R&D investment has increased to 1% of GDP for the first time ever - a level comparable with that of other small European economies but still below the 1.2% of GDP level for the EU as a whole and the 1.5% average for OECD countries.

The outlook for growth and employment in the enterprise sector, in the years immediately ahead, continues to be positive but it is not a foregone conclusion. It is essential that sensible policies continue to be effectively developed, clearly articulated and efficiently implemented.

During 1996 Forfás effectively discharged its statutory role of advising the Minister for Enterprise and Employment on matters relating to the development of industry in the State. It did this through direct contact and through a series of reports and direct participation in the preparation of a number of policy statements issued by the government in 1996. These included:

- Growing and Sharing our Employment; A Strategy Paper on the Labour Market
- A Government Strategy for Services
- The White Paper on Science, Technology and Innovation; (published by the Minister for Commerce, Science & Technology)
- The White Paper on Human Resource Development, (published in 1997)
- Growing Our Employment Sharing Our Growth (published in 1997)

Forfás also finalised or published itself a number of important statements and reports in 1996 as an input into the formulation of Government policies. These included:

- Shaping Our Future; A Strategy for Enterprise in the 21st Century.
- Information Society Ireland: A Strategy for Action (prepared by Forfás under the aegis
 of a Steering Committee established by the Minister for Enterprise and Employment
- at the request of Forfás).
- World Class to Serve the World: Report on Transport and Logistics.
- Review of the Property Function for Industrial Development Purposes.
- State Investment in Science and Technology 1996 (Science Budget)

In 1996 also Forfás continued to coordinate the work of An Bord Tráchtála, FÁS, Forbairt and IDA Ireland, to evaluate the programmes administered by these bodies and to undertake a range of surveys and analyses of performance essential to policy formulation and development. Work on the development and certification of standards was undertaken effectively through the National Standards Authority of Ireland (NSAI) operating as a division of Forfás in 1996. The executive functions involved in the accreditation of laboratories and certification bodies was also effectively discharged through another division of Forfás - the National Accreditation Board (NAB).

The reports prepared by Forfás were followed through by substantive discussions with the Government Departments and agencies responsible for the recommendations contained in them. They formed the basis for a range of Government decisions important to the development of the enterprise sector. Forás also provided inputs into the process of negotiation between the social partners on the new national Partnership 2000 agreement. It worked with the Ministers of Enterprise and Employment and Commerce, Science and Technology and their Departments on EU Presidency issues during 1996. In the context of EU Heads of Government Summit in Dublin in December 1996 an EMU Business Awareness Campaign was launched. This campaign is being managed by Forfás at the request of the Government and under the aegis of the Ministers for Enterprise and Employment, Finance and Tourism and Trade.

Ireland in Transition: opportunities and challenges

Ireland at a turning-point: Ireland is now at a major turning point in the evolution of its economic and social development. Remarkable progress has been made over the recent past. Irish living standards have greatly improved and are moving steadily towards the EU average, putting them among the highest in the world. Significant strides have been made in the expansion of educational facilities, greatly improving access to education and training. Progress in the fields of science and technology has accelerated in recent years.

However, a number of social and economic imbalances persist which have, paradoxically, been highlighted by the very good economic performance of recent years. Unemployment, relative poverty and deprivation still represent significant issues which remain to be overcome in many communities. External challenges include increased international competition and the profound effects of technological change. Ireland still has some distance to go to achieve the general and widespread level of prosperity to which most people aspire.

The importance of social cohesion: The kind of society which develops in Ireland in the future is substantially determined by the choices that citizens and society make now. Economic growth and development is a necessary but not a sufficient condition in providing equality of opportunity to advances in living standards and quality of life for people throughout the country.

Experience in Ireland and elsewhere demonstrates clearly that a successful and thriving enterprise sector is the foundation for advances in social and economic progress for all citizens.

A favourable foundation: At present, Ireland has a favourable economic climate, macroeconomic stability and low interest rates, a young population and a well-educated and flexible
workforce. Strengths also include a falling proportion of people in the dependent age groups.
Ireland has an increasing openness to world trade and a growing integration with the global
economy, a demonstrated attractive location for foreign direct investment, social consensus on
the broad thrust of social and economic policy and a growing opportunity for the services
sector to become a source of wealth creation and employment.

Communications: Nevertheless, there also are challenges. Ireland's peripheral location results in higher costs for transport and distribution and increased delivery and service time, imposing additional costs that have to be offset by other means by business firms. Increased

investment in an efficient transport and logistics infrastructure and in telecommunications is essential together with improvements in the regulatory framework to facilitate this.

Public finances: Government expenditure also remains high, although the ratio of general government debt to GNP is decreasing. A fundamental change is needed in the approach to planning public finances. To a considerable extent the approach to date has been expenditure driven: new and existing programmes and projects of expenditure are first put forward for financing as the primary approach in the budgetary process followed by an examination of how these will be financed. The approach must shift towards agreeing targets for the overall level of taxation and the national debt, and then fixing Government expenditure in the context of these targets and the funds generated by economic growth. At present, the levels and incidence of taxation greatly affect the competitive position of firms, in particular those competing with UK firms. While good headway has been made in recent years further progress is required in ensuring that the incentive to work at lower levels of income is not undermined by the interaction of the taxation and social welfare systems.

Education and skills - the response required: The quality and productivity of Ireland's labour-force has been a major factor underlying the strong growth in output and employment of recent years. This is a strongly positive endorsement of the fundamental excellence of Ireland's educational system that is not always fully acknowledged. The very success achieved in promoting development inevitably brings with it certain pressures in matching skills supply and demand in particular areas of activity. Forfás, for example, has recently circulated to every school-leaver in the country a brochure on the opportunities for well-paid satisfying employment in the areas of teleservices, software graduates and computer technicians and on how to acquire the qualification and skills needed to secure these jobs. The brochure was prepared in consultation with the educational authorities and the development agencies.

The Importance of Human Resource Development.

In recent years, Ireland has enjoyed significant success in employment creation in the industrial and services sectors. As indicated this success owes a great deal to the quality and skills of the labour-force. In order to capitalise on what has been achieved and to provide a launching pad for further economic and social progress, it is important that new demands for skills are effectively anticipated and adequate provision made to meet this demand. Investment in the development of human resources is immensely important in securing competitive advantage for both firms and nations in the knowledge-driven global economy of the present day. For Ireland, as for other countries, the skills and knowledge of the labour-force will remain central to the capacity of firms to adapt to this new world.

Characteristics of the Irish labour market include the very large numbers of young people entering the labour force; the return to Ireland of many former emigrants; the growing participation of women returning to the labour market; a changing occupational mix towards those with higher skills levels; and the emergence of new patterns of work, in particular the growth of part-time working. These changes place significant new demands on the educational and training systems in Ireland. In addition, in order to compete successfully, Irish firms are increasingly moving to the production of higher value-added products requiring higher levels of skills. The increasing importance of the services sector for job growth and wealth creation brings significant new demands for skills and training.

The effective development of Ireland's human resources is crucial, not just for meeting the needs for certain skills, but also for creating a positive disposition on the part of individuals and firms to the continuing renewal of these skills. For each firm, the aim must be to become a 'learning organisation' that continuously acquires the knowledge and skills needed to compete effectively by establishing the capability to innovate and to adapt to a changing competitive environment.

Key objectives in the area of human resource development include promoting an increase in the level, relevance and quality of private sector training, assisting small enterprises to overcome the skill barriers to business development and improving the level of management training and development. They also include promoting a commitment to life- long learning and

training on the part of individuals and their employers and developing a strong quality assurance system for human resource development and training activities.

There is an immediate need to provide a substantive increase in places in both the training and educational sectors to meet immediate requirements in the areas of language skills, computer technicians and graduates in computer and software skills. Forfás, in consultation with FÁS, Forbairt, IDA Ireland, HEA and the Departments of Education, Enterprise & Employment and Finance has identified the immediate requirement for places. Government commitment to meeting these requirements, in a substantive way, has been announced. It is particularly important that this commitment is translated into the provision of the places required from September 1997. Forfás has given particular priority to putting in place a system to anticipate future skill requirements and to make adequate educational and training provisions for them. An expert group with full participation from the state development and training agencies, from the HEA and from the Departments of Education, Enterprise & Employment and Finance was established for this purpose in 1996. The approach adopted has been endorsed in the recent Governmental White Paper on Human Resource Development and the work and composition of the group in being extended.

EMU: an opportunity and a challenge

European Monetary Union is a major competitiveness issue for Ireland. The way that both the public and private sectors respond is of huge strategic importance for the eEMU: an opportunity and a challenge European Monetary Union is a major competitiveness issue for Ireland. The way that both the public and private sectors respond is of huge strategic importance for the economic future of the country. EMU represents a significant step towards the completion of the European single market and will have an impact on every enterprise in the country. Work undertaken and published by the ESRI indicates that the overall economic impact for Ireland is positive. But EMU will affect different sectors and sub-sectors of the economy in different ways. The challenge and opportunities which will face individual companies will vary. It is, therefore, essential that every enterprise in the country prepares well for the introduction of EMU and that these preparations start on time.

The most significant impact of EMU will be on the stability of exchange rates, the level of interest rates and the cost of foreign trade transactions. EMU will create significant new market opportunities for Irish firms, making it easier to export goods. It will also impact, in a fundamental way, on the way goods and services are marketed as price transparency increases. As well as increasing export potential EMU will also facilitate the import of goods and services into Ireland, resulting in increased competition for Irish firms. The preparations which firms undertake must, therefore, encompass strategic as well as day-to-day operational issues. Ireland is on course to qualify as one of the first group of countries to join the EMU. As the expected date for the introduction of the euro approaches, a number of important policy issues must be effectively addressed, as well as implications for firms at the strategic and operational level. The operational implications for firms of Ireland's participation in EMU while the UK remains outside requires to be considered in detail. Entering EMU demonstrates clear confidence on the part of Government in Ireland's economy and commitment to European development. This, in turn, encourages foreign direct investment, a vital component in national economic strategies. In the present positive economic climate, it is important that Ireland responds to the challenges positively and with confidence in its future.

In this context, the Government launched the EMU Business Awareness campaign in December 1996. It is managed by Forfás on behalf of the Government. Features of the first phase of the campaign include an information pack that has been widely disseminated. The information pack sets out clearly the steps that firms should take to prepare for EMU and the issues they must address in making such preparations. A Web site, a newsletter and a series of national and regional seminars also form part of the campaign. The campaign is part of a wider national programme of public information on EMU and the changeover to the euro, launched at the same time. A co-ordinating committee has been established by Forfás to act as a forum for co-operation and information exchange on EMU related issues between business associations, professional bodies and the state agencies and government departments dealing with enterprise.

Competitiveness: the key to economic growth

Competitiveness in its broadest sense, has been identified in the Forfás 'Shaping our Future' strategy as the key to economic growth. Policies to improve competitiveness are increasingly important in a global competitive environment and will be critical in the context of EMU membership. Competitiveness is not just about costs and pay increases although these are important. It encompasses a wide range of issues, including innovation, quality, flexibility, responsiveness to market changes, and the fiscal and regulatory regime within which business operates. Competitiveness in the context of the global marketplace is of crucial importance; there is no part of our enterprise sector - domestic or international, services or manufacturing - that will not come under increasing pressure from international competitors.

Ireland is in competition with many other countries seeking trade and inward investment. Jobs are increasingly mobile and will go to the places that are most competitive. Internationally mobile investment - both foreign-owned and Irish-owned - will locate in Ireland only to the extent that Ireland provides an environment in which a skilled, well qualified, technologically-adept labour-force is available and supported by good infrastructure and a regulatory environment conducive to business competing in a global market-place.

Technological innovation has a vital role to play and it must be underpinned by increasing investment in R&D. A vital part of this is the capability to capitalise on basic and applied research. Encouraging signs are present as Irish-owned industries are now investing proportionally at the same level as foreign-owned companies. Business R&D spend is growing by 17% per annum since 1988 and is now approaching the EU average. However, in a small economy, competing in a world where national competitive advantage is determined by knowledge and skills rather than by natural resource endowment, investment in science and technology becomes increasingly important. It is, therefore, important that the progress made in this area in recent years, with the support of EU funding, is maintained and developed as a national priority.

In order to facilitate policy decisions which strengthen the competitiveness of the enterprise sector, Ireland's competitive position across a wide range of factors requires to be benchmarked on a regular basis against the position in countries with which we compete. Forfás has published a number of analyses which contribute to this approach. A more comprehensive analysis which will form the basis of regular reviews of Ireland's overall competitiveness position was initiated in 1996. This will provide an important input into the work of the National Competitiveness Council recently established by the government and for which Forfás will provide administrative support.

The Information Society: a new era

The revolutionary technological changes that are taking place in electronics and telecommunications are already changing fundamentally the way people work and live. These changes have profound social as well as economic consequences. A new Information Society is emerging.

In the Information Society, information is produced, communicated and used intensively; the constraints of time, distance and location are considerably reduced; transactions of all sorts are processed electronically; and life and work are dramatically altered by the use of information and communications technologies (ICTs). This is happening here and now - the Information Society is not a society far away in the future.

In 1996 Forfás completed a report on the policy implications of these changes and the actions that are required to benefit from them. The report was prepared under the direction of an Information Society Steering Committee established by the Minister for Enterprise and Employment. That report has since been published as Information Society Ireland: A Strategy For Action.

In response, the Government decided to establish an Information Society Commission, reporting directly to the Taoiseach to oversee the implementation of the report. The

Commission will have the task of shaping and managing the strategic framework for the Information Society in Ireland. Other measures being taken, arising from the recommendations of the report include: investment in technology for schools and training of teachers in ICTs; promotion of the use of computers in homes; and the selection of 22 areas throughout the country for guaranteed broadband service access.

Science and Technology.

The first ever Government White Paper on Science, Technology and Innovation (STI) was launched in November 1996 by the Minister for Commerce Science & Technology. It drew on the report and advice of the Science Technology and Innovation Advisory Council (STIAC) and on the task force chaired by the chief executive of Forfás to advise on the implementation of that report. The White Paper marks a new beginning in the national approach and aims to locate science and technology firmly within the framework of wider industrial, economic and national development policies. Science and technology are global issues of competitive importance. If Ireland is to capitalise on even a tiny fraction of the advances made each year, the capability to tap into and to absorb this resource must be developed and nurtured through investment in people and in equipment. Developing an effective capacity to undertake high-quality R&D is critical, as are associated international collaboration and linkages.

A number of decisions in the White Paper were identified for priority action. These include:

- The establishment of a cabinet sub-committee on S&T;
- The establishment of a new interdepartmental committee to ensure a coherent and comprehensive approach to national expenditures on science and technology;
- The establishment of an advisory council on science, technology and innovation with representatives of industry, universities, research organisations and other interests, to provide advice to the Government;
- New structures for the Programmes in Advanced Technology.
- An on-going professional campaign to promote improved awareness of the importance of STI:
- An annual National Plan for Science and Technology and planning for the position that will emerge at the completion of the present Community Support Framework in 1999.

Forfás participated in the formulation of the White Paper and will have a substantial involvement in the implementation of the decisions which it sets out. A new advisory council on science, technology and innovation has been established under the existing Forfás legislation, with Forfás providing the research support and secretariat. Forfás is also managing an Awareness Campaign on Science and Technology issues.

Looking Ahead

Recent years have seen an unprecedented increase in the rate of economic development and employment creation in Ireland. The progress achieved is hugely impressive by international standards. The foundations for that performance have been laid over a long number of years and are based:

- on prudent macro-economic policies which have resulted in a low-inflation, low-interest regime conducive to investment,
- on a social partnership approach which has achieved a good balance between the social and economic determinants of growth, and
- on a range of policy measures supportive of the enterprise sector and which have been applied on a consistent basis over a long period of years. Improvements in the quality and skills of the labour force and the upgrading of infrastructure (transportation, energy, telecommunications) have been central to the progress that has been made.

These developments have greatly facilitated the work of the development agencies in promoting investment by the enterprise sector from both home and overseas sources and the creation of additional productive capacity and of exports. The reorganisation of the development agencies has also brought greater focus and effectiveness to a significant part of

the state promotional effort in recent years and helped to establish a consistent and well-researched policy agenda supportive of the enterprise sector.

Inevitably, the success achieved has brought with it its own fundamental challenges. Among the most significant of these are emerging pressures on the supply and quality of infrastructure, on the living environment and, importantly, on the quality, skills and availability of the labour-force. The immediate challenge in sustaining recent growth trends well into the future is how to effectively address these emerging pressures. In Shaping Our Future: A Strategy for Enterprise in the 21st Century, completed in 1996, Forfás has set out a longer-term framework and set of immediate practical recommendations that address these issues. Many of these recommendations have already been incorporated into Government policies and programmes.

Good progress has also been made in the area of education and skills with the publication of the White Paper on Human Resource Development and a range of new initiatives in the area of education. Actions to continue improving the skills and quality of the labour-force - for new entrants, for those already in employment and for unemployed people - are, perhaps, the most important and critical issues to be addressed in sustaining social and economic development in the years ahead. The training and educational implications will remain central to the work of Forfás and the development agencies in 1997 and subsequent years.

John Travers
Chief Executive

AN OVERVIEW OF 1996

1. INTRODUCTION

The Irish economy maintained the strong performance in 1996 which has been a feature of recent years. This combined high GNP growth, low inflation with a substantial strengthening in the public finances and moderate interest rates. Continued strong growth is forecast for 1997 and beyond.

This performance has ensured that Ireland continues to make rapid progress in reducing unemployment and in improving living standards towards the EU average.

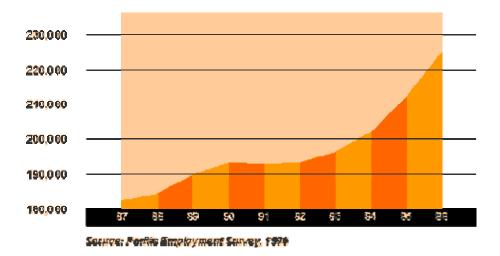
2. EMPLOYMENT

Employment Growth

Ireland's strong economic growth rate continues to generate very positive employment growth. Results from the annual Employment Survey carried out by Forfás show that full time employment in IDA Ireland and Forbairt backed companies rose by around 12,100 (5.7%) in 1996, bringing the total employed to 223,800 (Figure 1). Job gains in companies supported by Forbairt and IDA Ireland amounted to around 25,300 in 1996, of which 20,700 were new first time jobs, the second year in a row of record growth. Job losses were around 13,200. Continuing the trend of recent years, international traded and international financial traded services are the fastest growing sectors.

The average level of employment in 1996, at 1,310,000, was 50,000 above the 1995 average. This growth is exceptionally strong and, since 1993, the total numbers employed have increased by 149,000 or almost 13%. This is almost double the increase achieved over the previous 30 year period, (1963-93) and indicates how strong and unprecedented the current employment growth is.

Figure 1
Trends in Full Time Employment 1987 - 1996
Manufacturing, Internationally Traded and International Services



Cost of Employment

The average cost of each job sustained over a seven year period for Forbairt and IDA Ireland supported companies continued the downward trend of recent years and fell from £11,100 in 1995, to £10,900 in 1996 (Figure 2). This reflects both the improved value-for- money approach pursued and the growth in international services projects, where the investment costs are lower than in manufacturing projects.

Figure 2

Cost per job sustained in Forbairt and IDA supported projects at 1996 prices

Services Sector

Source: Fortes

The average level of employment rose by 39,000 in the services sector in 1996, compared with 15,000 in industry and a 4,000 decline in agriculture (Figure 3). These figures emphasise the growing importance of the services sector as a source of employment growth in the economy.

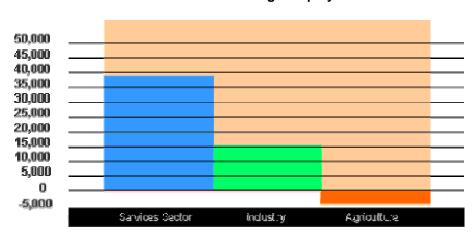


Figure 3
Increase/Decrease in Average Employment Levels 1995 to 1996

Source: ERSI

Growth in the labour force

Another factor having an impact on employment trends is the very strong growth in the overall labour force. This is the result of two key trends:

- A net inflow of people into the country in 1996 as the current strong economic growth both cuts emigration and encourages Irish people (and indeed other EU nationals) to come to Ireland for employment.
- The continuing high rate of growth in the female participation rate. Out of the increase
 of over 45,000 in the labour force in the year to April 1996 almost 37,000 were female.
 This represents a rise of over 7% in the number of females in the labour force in 1996
 alone, compared with less than a 1% rise among males.

A consequence of these two trends is that the labour force is growing very quickly (by over 3% in 1996). This is a benefit in that growth in numbers maintains a good labour supply for the

buoyant economy, allowing growth to continue, augmenting the skills pool and helping to contain wage inflation. However, it also makes it more difficult for those who are unemployed, particularly the long-term unemployed, to get a job, and thus share more fully in the growing prosperity of the country.

Employment in Manufacturing, International Traded Services & International Financial Services

At a national level, permanent full-time employment in manufacturing, international traded services including international financial services rose to almost 250,000 in 1996, an increase of 13,151 (5.5%) on 1995. The number of permanent full-time jobs created in 1996 in companies supported by IDA Ireland, Forbairt, Shannon Development and Údarás Na Gaeltachta amounted to 28,533, an increase of 5.7% on 1995.

The number of jobs lost fell to 15,385, a decline of 1.3% on the figure recorded in 1995, which represents the lowest level of job losses recorded since 1987. This is the third year in a row that job creation has increased and the rate of job losses has declined.

Of the 13,151 net increase in permanent full-time employment in 1996, 5,811 (44%) were in Irish-owned companies and 7,340 (56%) in foreign-owned companies.

- Manufacturing employment accounted for 8,388 jobs (64%) of the total net increase of 13,151;
- Internationally traded and international financial services sectors continued to grow strongly, accounting for 4,763 (36%) of the total increase.

Figure 4
International Trends in Manufacturing Employment 1987 - 1996

Statistics: Japan, - since 1990; Germany - since 1991 (re-unification); Ireland, UK, USA - since 1987

Source: OCED Main Economic Indicators and UK Office for National Statistics. Data for Ireland from Forfás Employment Survey

The increased significance of internationally traded services and international financial services to job creation is clear from the numbers employed (26,221) in 1996 which has grown from a base of 7,738 jobs ten years ago. The biggest contributor to the growth was the international financial services sector, where a 31% increase in permanent full-time employment in 1996 is directly attributable to the continued development of the International Financial Services Centre (IFSC) in Dublin.

The performance of Ireland's manufacturing sector is in contrast to international trends. Figure 4 demonstrates sharp declines in manufacturing employment during the last 10 years in many developed economies. For example, in the UK, which is our closest neighbour and largest

trading partner, manufacturing employment has fallen by 17%. In Ireland, by contrast, there has been a strong 13.8% growth in the period 1987 to 1996.

The latest data, collected during 1996, shows that full-time manufacturing employment in Ireland has grown by 10% since 1993. The growth in 1996 alone was 4%. The 1996 data indicates, therefore, that Ireland's consistent development of its manufacturing base, which is increasingly focused on high technology industries, is continuing apace and well ahead of international trends.

Part-time, Temporary and Short-term Contract Employment

Temporary, part-time and short-term contract employment fell by 1,150 to just under 23,000 in 1996 (Figure 5). The fall is mainly due to temporary employees moving into permanent employment in a number of companies (mainly foreign-owned) in the electronics sector, a positive development and an indication of the strength of output and employment growth in the sector.

25,000
20,000
15,000
10,000
U

Service Factio Employment Survey, 1996

Figure 5
Trends in Part-time. Temporary & Short-term Contract Employment 1987 - 1996

Unemployment and the Long-Term Unemployed

Unemployment figures continued to show a downward trend in 1996, although employment in the food production sector was adversely affected by the BSE crisis. Average unemployment fell from 188,000 in 1995 to 180,000 in 1996, a fall from 12.2 % to 11.4% of the labour force. This is still far too high but heading in the right direction.

However, long-term unemployment remained unchanged from 1995 figures at just over 100,000. This is a disturbing outcome in the present context of a buoyant economy, rapidly increasing employment and falling levels of overall unemployment.

It highlights the fact that long-term unemployment cannot be solved by policies aimed at stimulating broad-based economic growth and employment growth alone. Medium to long-term measures to improve general skills levels and re-skilling processes, coupled with strategic implementation of human and community resource development, are crucial elements of the solution to this problem

3. EXPENDITURE

Irish Economy Expenditures (IEEs) refers to the amount of money spent each year in the Irish economy by manufacturing and internationally traded services companies on wages and salaries, Irish-produced raw materials and components, and services. Forfás carries out a Survey of IEEs annually.

Table 1
Estimated Irish Economy Expenditure (IEEs) of Manufacturing and International Traded Service Industry 1994-1995

		1995 Foreign- owned £m		1994 Total £m	% Change
Total Sales	13,709	21,963	35,672	31,353	13.8
Total Irish Economy Expenditures	10,669	8,670	19,339	17,188	12.5
Of Which					
Wages & Salaries	2,076	2,259	4,335	4,134	4.9
Irish Raw Materials	6,090	2,524	8,614	7,866	9.5
Irish Services	1,653	3,515	5,168	4,131	25.1
IEE as a percentage of Total Sales	77.8%	39.5%	54.2%	54.8%	-1.1%

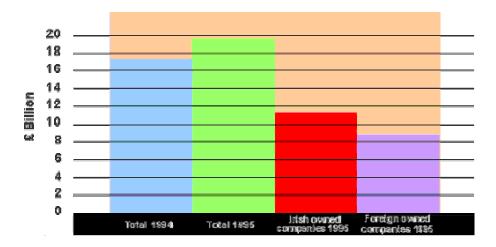
Source: Forfás Annual Survey of Irish Economy Expenditures: Results for 1995

The Forfás Irish Economy Expenditures annual survey shows that there was a £2.1 billion spending increase by manufacturing and internationally traded service companies within the Irish economy in 1995. This represents an increase of 12.5% in total expenditure of £19.3 billion (Figure 6). Irish-owned companies contributed £10.7 billion (55%) of the total, an increase of 5.3% on 1994. The balance (£8.7 billion) was contributed by foreign-owned companies and was a rise of 22.9% on 1994.

Irish economy expenditures as a proportion of sales fell marginally, mainly reflecting improvements in labour productivity and a lag between rapid increases in the output of industry and the sourcing of supplies in Ireland.

Figure 6

Manufacturing & International Traded Service Industry Irish Economy Expenditures
1994 - 1995



Corporate Tax

Forfás in 1996 has continued to develop taxation policy in the context of increasing competitiveness and promoting growth and employment. Work was undertaken during the year in developing proposals for the reform of Irish Capital Markets, including the role that taxation, particularly capital taxation, plays in enterprise development in Ireland.

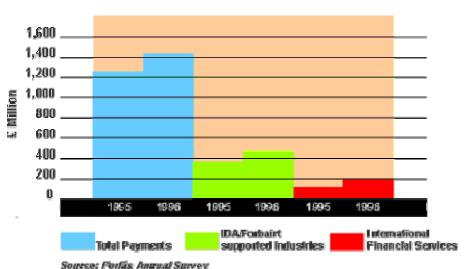
Table 2

Corporation Tax Payments	1995 £ million	£	Increase/ Decrease £ million	%
Total Payments (all sectors)	1,146.0	1,426.0	+280.0	+24.4
IDA/Forbairt supported manufacturing and internationally traded services	361.3	469.0	+107.7	+29.8
International Financial Services Centre	133.0	190.0	+57.0	+42.9

Source: Forfás Corporation Tax Survey 1996

Table 2 shows that corporation tax payments by IDA Ireland and Forbairt supported manufacturing and internationally traded services companies surveyed in 1996 increased by 29.8% that year, bringing the total to £469.0 million.

Figure 7
Corporation Tax Payments



Looking back over the longer term, there has been an increase of 140% in the total corporation tax take during the period 1991 - 1996. (£593 million in 1991 rising to £1,426 million in 1996). The increase in the amount contributed by manufacturing and internationally traded service companies surveyed has been unprecedented, increasing from £124.4 million in 1991 to £469.0 million in 1996, a rise of 277.0%. When the International Financial Services Centre is included, the contribution from these three categories represented 46.2% of the total corporation tax of £1,426 million paid in 1996.

A strong contribution by these companies to the overall tax take is also projected for 1997 and 1998.

R&D in the Business Sector

Monitoring undertaken by Forfás of R&D performance within the business sector showed that industry in Ireland spent £397 million in 1995 on in-house R&D. This represents a continuation of the strong 17% per annum real rate of growth witnessed since the late 1980s. Business sector R&D spend as a percentage of GDP rose to 1% for the first time in 1995, up from 0.84% in 1993. This level of expenditure is comparable to a number of other small European economies but is still short of the EU average of 1.2%.

The Forfás 'R&D in the Business Sector' surveys indicate that the per annum growth rate between 1991 and 1995 is twice that of the per annum growth rate between 1986 and 1990. There was, therefore, a substantial increase in R&D activity at the beginning of the 1990s which has proven to be well sustained.

400 350 300 250 200 150 1 02 0.96 100 0.63 0.53 0.49 0.47 50 0 1995 1986 1999 1990 (991 1994 As % of GDP **Current Prices** Constant Prices Source: Forfas

Figure 8 **Business Expenditure on Research & Development 1988 - 1995**

Features of R&D spend include:

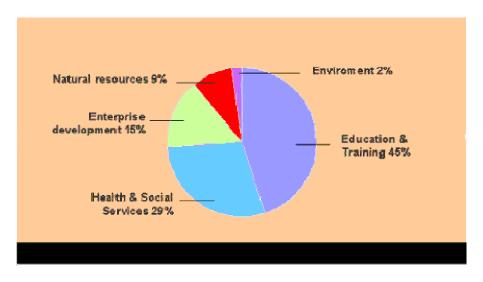
- The two groups, foreign-owned industry and Irish-owned industry, show similar rates of growth over the four year period from 1991 to 1995.
- Foreign-owned companies, however, account for two thirds of total R&D spend, a share which has held constant since the late 1980s.
- This is not considered surprising, however, given that R&D activity is concentrated mostly in the electronics, software, chemicals and pharmaceuticals sectors where a large share of output and employment is accounted for by foreign-owned companies.

The survey of business sector R&D activity in 1995 showed that:

- 52% of manufacturing and internationally-traded services companies with at least 10 employees had undertaken some R&D between 1993 and 1995.
- Half of this group (26%) spent money in each of these years on in-house R&D.
- A similar share of Irish-owned and foreign-owned companies have some involvement in R&D.
- It is recognised that there is significant concentration of R&D activity within a small number of companies in a few industrial sectors. Such concentration of activity is not unique to Ireland but is a feature of R&D activity in almost all economies.

State Investment in Science & Technology

Figure 9 **State Investment in Science & Technology 1996**



Source: Forfas

The 1996 "State Investment in Science and Technology" report, published by Forfás, shows that the total public allocation of funds to science and technology in 1996 amounted to £659m and was supplemented by £124m earned income to reach a total of £783m, an increase of £82m over the 1995 level. In considering these figures it is important to recognise that a high proportion of the funds are allocated to salaries and associated expenses and that year-to-year discretionary expenditure is limited. The major expenditure increases in 1996 occurred in:

- Education and Training £34m, mainly to compensate for fees abolition in third level institutions.
- Health and Social Services £24m, extra funding for the health laboratories and Central Statistics Office.
- Enterprise Development £20m, mainly for increased support for R&D in industry.

Survey of National Expenditure on the Promotion of Enterprise

Ireland has increased its direct commitment of resources to stimulate the development of enterprise by 25% in real terms since 1994. In 1996 over £500 million was spent on these resources.

These are the main findings of a new analysis undertaken by Forfás and outlined in the National Enterprise Budget which details resources expended to foster the development of the enterprise sector and to create employment. In addition the report reviews the European Union co-funding of these activities through ERDF, ESF, and FEOGA programmes. In 1996 an estimated 27.3% of the total expenditure was funded in this way.

The document also highlighted the following:

• There has been a swing from capital and other fixed asset grants (54% in 1988 to 42% in 1995) to non-fixed asset supports such as employment grants, R&D and equity investment. Examination of the spending pattern of the main enterprise development agencies1 on a broad nationality basis indicates that overseas-owned industry received 57.5% in 1995, in line with 56.1% in 1988. This reflects the continuing success of development agencies in securing overseas flagship projects in recent years.

- Since 1993, with the aid of development support from the County Enterprise Boards, small Irish-owned companies secured a rising proportion of payments when compared with medium and large industry, increasing from 55.5% in 1992 to 58.4% in 1995.
- There was an increase in staffing levels in the development agencies from 2,313 in 1988 to 2,518 in 1996, reflecting the increased development activity on the ground.

ACTIVITIES IN 1996

In 1994, Forfás was established as the Industrial Policy Advisory Board. In this capacity:

- Forfás advises the Minister for Enterprise and Employment on the development of State policies designed to stimulate and foster enterprise and employment;
- It is responsible for co-ordinating key aspects of the activities of the promotional agencies;
- It is also responsible for evaluating and monitoring programmes which promote enterprise development, science and technology.

In 1996 Forfás had overall responsibility for the work of the National Standards Authority of Ireland (NSAI) and of the National Accreditation Board (NAB) which provides internationally recognised accreditation for laboratories and standard certification bodies.

During 1996 Forfás also worked with a number of advisory groups which it established to help identify and address the issues that are critical to developing and sustaining Irish industry's competitive and comparative advantage. These included the 'Shaping our Future' steering committee, groups on Transport & Logistics, the Information Society, Education and Training, Taxation and Expenditure, Commercial Telecommunications, Trade and Market Development and Regional Policy.

1. POLICY

'Shaping Our Future'

Today, Ireland enjoys the fastest-growing economy in the European Union. Employment is growing rapidly and interest rates are low. The standard of living of people as measured by conventional indicators is rapidly improving. It is now an opportune time to develop long-term strategies to capitalise on this progress so that people in Ireland can attain higher levels of prosperity.

Forfás in 1996 published 'Shaping Our Future: A Strategy for Enterprise in Ireland in the 21st Century'. This work represents the first substantial attempt at the elaboration of a long-term strategic framework for the development of the enterprise sector in Ireland. In doing so:

- It identifies the key issues and trends that need to be taken into consideration to sustain, in the medium to long-term, the recent strong economic performance achieved:
- It sets out a number of ambitious but realistic objectives for employment creation and output growth and for tackling unemployment, reducing the number of long term unemployed and increasing the standard of living and quality of life of people living in Ireland:
- Specific policy recommendations are set out for manufacturing and services:
- Recommendations are also made for critical support areas such as training and skills, taxation, services, science and technology, telecommunications, transport, regional policy and public sector reform.

Skills

In 1996 a Future Skills Identification Group was established by Forfás, at the request of the Department of Enterprise and Employment. The Group, comprises representatives of FÁS, Forbairt, IDA Ireland, the Department of Enterprise and Employment, the Department of Education, the Department of Finance and the Higher Education Authority. The purpose of the Group is to address the question of how the skills needs of industry might be identified and responded to in a more systematic way.

The Group initially addressed a number of issues where immediate action is required to address emerging pressures on the availability of skilled manpower resources. The government has responded to this initial work of the Group by the announcement of a commitment to:

- 1,250 extra places in one-year post graduate computer applications courses;
- 1,000 extra places in third-level language courses and placement abroad of 1,000 students per annum;
- An intention to identify the most cost-effective way to increase the number of software and computer technician places per annum by 1,000 and 750 respectively.

The Group is also developing a systematic approach for identifying future skills needs and to formulate action proposals to address potential skills shortages before they arise. This work is well advanced.

Taxation

Forfás in 1996 put forward a number of proposals in taxation policy aimed at increasing competitiveness and promoting growth and employment in the enterprise sector. Work was undertaken during the year in developing reform proposals for Irish Capital Markets, including the role that taxation, particularly capital taxation, plays in enterprise development in Ireland. A joint Forfás and Forbairt study on Capital Markets and the long-term financing needs of Irish firms recommended the following:

- i. Consistency of tax treatment of various forms of savings/investments. The study recommended the creation of a new 'eligible savings account' to simplify and rationalise the existing situation with regard to the taxation of savings. The 'eligible savings account' would have a special tax rate that would apply to the investment returns achieved on the account. In the long term, most forms of savings would be included in such an account. This account would substitute for the varying tax treatment of different forms of savings and investments and help to bring clarity and simplification to an existing complex plan of incentives for savings/investment purposes. It would also help to improve the relative return from investment in the enterprise sector compared with investment in areas such as property and savings accounts;
- ii. Capital gains tax. The standard rate of capital gains tax should be moved down towards the standard rate of income tax. Progress was made in the 1997 Budget with the reduction in the lower rate of capital gains tax from 27% to 26%. The report recommended that the capital acquisitions tax provision dealing with the transfer of shares in a business within a family should be amended to avoid claw-back of reliefs. The 1997 Finance Act further improved the capital acquisitions tax relief for business assets by increasing it from 75% to 90%, encouraging family businesses to grow;
- iii. Tax Incentive Schemes. The existing set of incentives such as the Business Expansion Scheme and Seed Capital Scheme should be refocused to favour investment in companies at an early stage of development.

Corporate Taxes. In the 'Shaping our Future' strategy report Forfás outlined the need to consider the reform of corporate taxes and set out three options for consideration:

- i. The introduction of a single low rate for trading income, as close as possible to 10%, with a higher rate for non-trading income; or
- ii. The extension of the 10% manufacturing rate beyond 2010 and a reduced standard rate; or
- iii. A 'ruling system' to provide low effective corporation tax rates for preferred sectors of economic activity on a general or on a case-by-case basis.

The Finance Act 1997 reduced the standard rate of corporation tax from 38% to 36%, and reduced the lower rate of corporation tax, which applies to the first £50,000 of taxable income, from 30% to 28%. This will assist smaller services companies in particular.

On 13 May 1997, the Government announced the decision on the future corporation tax regime. It involves a single low rate on profits arising from trading activities until the year 2025, and a higher rate on profits from non-trading activity. The new regime will become effective from the beginning of the year 2011 for companies availing of the 10% manufacturing rate, and from 2006 for all other companies.

To ensure the continued high revenue base from business, the Government is committed to introducing new and strengthened anti-abuse measures coupled with compensating revenue raising measures. To ensure the continued high revenue base from business, the Government is committed to introducing new and strengthened anti-abuse measures coupled with compensating revenue raising measures.

Subject to this, the new regime will boost after tax income and encourage the use of retained earnings as a means of funding the development of indigenous service companies.

This is the most important decision in the area of corporation tax since the introduction of the 10% rate.

Finance

The Capital Markets Study also proposes the integration of a number of strands of policy in a coherent way as follows:

- The provision of more effective access to seed and venture capital and promotion of competitive credit finance to smaller companies should be considered through measures such as mutual loan guarantee schemes of a kind that operate in some other EU member states and a credit rating agency for SMEs in Ireland, supported by the main financial institutions and the development agencies. Further evaluation work is currently underway in Forfás in conjunction with Forbairt and the Department of Enterprise & Employment into the loan guarantee schemes and the credit rating agency recommendation;
- The improvement of the flow of finance for investment in start-up and early stage developing enterprises, including the establishment of a viable Developing Companies Market;
- With the objective of assisting to overcome market failure in the provision of equity capital to early stage businesses, the state development agencies should increase their participation in the ordinary equity of firms through the establishment of equity investment funds which would share in the risks and rewards of enterprise;
- Consideration should be given to providing access to a wider body of domestic investors - institutional and private - to sections of economic activity currently conducted by businesses owned by the state;
- To promote a culture of direct share ownership and openness to having external shareholders involved in private business, the implementation of profit and share option schemes in certain State owned enterprises is recommended.

Science and Technology

The Forfás report on 'State Investment in Science and Technology 1996' showed an allocation of over £783 million on activities broadly defined as science and technology (S&T) related. EU contribution was over 11% of the total. The Exchequer funding element of overall S&T activity grew, in real terms, by 3.1% per annum between 1985 and 1995.

Some of the key issues identified in the Report include:

- The need to establish an improved system of co-ordination and prioritisation for the significant expenditures involved;
- The need to consider, evaluate and plan for the position which will emerge at the completion of the present Community Support Framework in 1999 and under which the EU contribution to S&T expenditure is particularly important in a number of areas, including Enterprise Development (44%) and Natural Resources (23%).

Evolving from the report of the Science Technology and Innovation Advisory Council (STIAC) and the work of the Task Force on the implementation of the STIAC Report, chaired by the Chief Executive of Forfás, the Government White Paper on Science, Technology and Innovation (STI) was launched in November. The White Paper marked a new beginning in the national approach to science and technology issues. It aims to develop the National System of Innovation in Ireland and to locate science and technology firmly within the framework of wider industrial, economic and national development policy.

The White Paper outlines decisions in a number of priority areas including:

- The continuation of the cabinet sub-committee on S&T;
- An inter-departmental committee to ensure a coherent and comprehensive approach to science, technology and innovation policies and programmes;
- A permanent advisory council on science, technology and innovation under the Forfás legislation, representative of wide-ranging interests;
- An initiative on inter-firm collaboration that will encourage firms to co-operate in strategic activities, such as research and development, and help to overcome disadvantages of small scale;
- New structures to achieve more effective management of the important Programmes in Advanced Technology;
- A campaign to increase the level of awareness and greater appreciation of the importance of science, technology and innovation.

The new council has been established with Forfás providing the research support and secretariat. Forfás will assist in monitoring the implementation of the various Government decisions announced in the White Paper.

Ireland's Information Society

A fundamental transformation in economic and social life in Ireland is being brought about by the convergence, diffusion and pervasiveness of information and communications technologies. The emerging "Information Society" is one that uses information intensively and in a way that significantly reduces the traditional constraints of time and space. Full adoption of the new technologies will be crucial to the competitiveness of the enterprise sector, to increased employment, to Ireland's continued attractiveness as a location for inward investment and to its ability to capitalise on emerging opportunities.

In March 1996, the Minister for Enterprise and Employment announced the formation of the Information Society Steering Committee, which brought together representatives of industry, trade unions, telecommunications and relevant Government departments. Forfás provided the research and secretariat support for this Committee.

The Committee presented their report to the Minister for Enterprise and Employment in December 1996, setting out a vision of what Ireland can achieve in the "Information Society". It also set out a comprehensive policy framework and recommendations on harnessing the benefits of new technologies to increase employment and living standards.

Its main recommendations include:

- An awareness campaign to ensure popular support for, and participation in, a future "Information Society";
- Provision of an advanced tele-communications infrastructure capable of supporting enterprise and citizen demands in the "Information Society";
- Ensure that educational and training practices incorporate the appropriate use of
 information and communication technologies (ICTs) in order to enable people to
 benefit fully from the "Information Society" both educationally and vocationally.
 Ireland's skill base must be among the best in the world and maintained in that
 position over the long-term.

- Ensure that Irish enterprises adopt and use new technologies and participate successfully in key growth markets in the Information Society. Information and communication technologies must permeate every aspect of the economic life of the country. A leadership position must be established in key growth areas such as the content industry;
- Deploy information and communication technologies in Government for the provision of citizen-centred services and develop and implement policies that support the transition to the Information Society. The government must play a leadership role in embracing the Information Society.

Since its completion and launch, there has been enormous interest in the Report, culminating in an announcement by An Taoiseach in April 1997 of a range of measures designed to address the issues raised in the report. An Information Society Commission is being established in the Department of An Taoiseach to report directly to the Taoiseach on the implementation of the measures recommended in the Report.

Telecommunications

Forfás has worked in recent years with Government Departments and Agencies to develop proposals in the area of telecommunications which support the development of the enterprise sector and published a report in 1996 on the outcome of this work. The report looks at the current and likely future trends in technologies and assesses their implications for Ireland.

A critical conclusion is that a broadband communications infrastructure, offering advanced multimedia services at competitive prices, requires to be provided ahead of demand and before competing countries if Ireland is to reap the full economic benefits of the major advances which are taking place in information and communications technologies.

In the enterprise sector, the types of services that will require broadband include:

- Multimedia Internet access:
- Corporate networking/Intranet, involving networks between buildings and offices at a distance;
- Videotelephony and business TV services, especially relevant to centres providing software support and training;
- Collaborative working, e.g., design, engineering and R&D;
- High-speed file transfer, e.g., X-rays and software;
- Database access, and library and archived services, which are important in electronic publishing and corporate R&D, as well as in access of public services.

A rapid deployment of broadband, that could not be justified on normal commercial criteria, will show a national economic return in terms of increased competitiveness and more jobs. The Government's decision to request the Information Society Commission to select 22 areas throughout the country for guaranteed broadband service access is very welcome in this regard.

Fifth Framework Programme

The EU Framework Programme enables organisations in Ireland, in partnership with organisations in Europe and beyond, to compete for funding for specific research which the European Community considers important for its industrial competitiveness and quality of life.

The Fifth Framework Programme (FP5) will succeed the current Fourth Framework Programme in 1999. In preparation for this, early in 1996 the development of a national position for our negotiations with the EU in respect of FP5 was undertaken by Forfás in association with National Advisory Panels appointed by the Office of Science and Technology. The Irish position is that FP5 should build on the experience and success of previous programmes. Ireland also sees as essential that equality of opportunity between regions of the Union and enterprises, both large and small, is maintained and further developed in the Fifth Framework Programme.

It will be important to ensure that key areas where Ireland has demonstrated the capability to benefit from previous Framework Programmes are points of major focus in FP5. These areas include information and communications technologies, agriculture and the marine.

Throughout 1997/1998, Member States will engage in negotiations on the shape, content and level of funding of the Fifth Framework Programme. The formal proposal was published by the Commission in April 1997.

Services

In 'Shaping Our Future', the growing importance of the services sector as a source of wealth and employment growth was clearly recognised and articulated. The Report placed the services sector at the heart of future enterprise policy. The recent publication of the Government 'Strategy for Services' strongly reinforces this view and has placed the services sector high on the agenda of overall government enterprise policy.

In 'Shaping our Future' Forfás outlined a policy approach to help achieve the development potential of the services sector. Among the main elements of that strategy are:

- Achieving an early leadership position in the rapidly expanding telecommunications based services and back-office support markets;
- Substantially enhancing the foreign language skills of the labour force;
- Reducing the standard rate of corporation tax for services.

During 1996, Forfás carried out further analysis of the services sector. This included a broadly based study of the dynamics of the services sector in Ireland and how it compares with other industrialised countries. The main conclusions of the study are:

- The size of Ireland's market services sector was found to be broadly in line with its level of GDP;
- Ireland appears to have lower levels of productivity across the services sector and in particular in the sector 'Finance, Insurance, Real Estate and Business Services';
- Ireland has lower levels of international trade in services and a large and growing trade deficit;
- As income per capita increases, an increasing proportion will be devoted to services;
- Key potential growth sectors identified for Ireland include business and financial services; community, recreation and leisure services; personal services; and hotels and restaurants.

A study, focusing on the quality and availability of statistics for the services sector (essential for policy purposes), together with future statistics needs in Ireland, was also carried out. 1997 will see further work on increasing our understanding of this important sector.

Competitiveness

Improvements in Ireland's competitiveness across a range of areas in recent years has played a large part in securing the buoyant economy now generating significant increases in employment and living standards. A strong focus on public policies that affect the competitiveness of firms is required to maintain this success. These policies must be developed with a continued commitment to:

- Reducing the cost base facing the traded sector of the economy;
- Improving efficiency in the non-traded sectors:
- · Enhancing human capital resources; and
- Supporting firms in adapting to new technologies and business trends.

Forfás published a limited analysis of Ireland's competitive position in October 1995. It shows that, in many areas, Ireland still has significant scope to improve competitiveness across a wide range of factors. In order to facilitate policy decisions which strengthen the

competitiveness of the enterprise sector, Ireland's competitive position requires to be benchmarked against the position in countries against which we compete.

In 'Shaping Our Future' Forfás recommended the establishment of a National Competitiveness Council with appropriate powers and resources to pursue actively the objectives set out above. A more comprehensive analysis that will form the basis for regular reviews of Ireland's overall competitiveness position is in preparation by Forfás. This Council has recently been established by the Government. The importance of its work is reflected in the decision to ask the Council to report directly to An Taoiseach. Forfás will provide the research and administrative support for the Council.

Transport

Forfás published the report of its Transport and Logistics Group, 'World Class to Serve the World', in 1996. The report, which analyses key trends in the area of distribution and logistics, highlighted the need to achieve world-class skills and capabilities in the rapidly advancing discipline of systems logistics. It deals with the actions needed to achieve the efficient integration of all elements of the supply chain along which firms operate. The report made a number of recommendations with regard to necessary improvements in infrastructure and services.

The Government acted on the recommendations to establish a Transport and Logistics Institute. The aim of the institute will be to boost training, education and research capabilities in the critical areas of industrial transport and logistics in Ireland. Following an open competition the Dublin Institute of Technology was selected to operate the new Institute and work on this has already begun.

Pre-Designated Industrial Zones

The physical planning system in Ireland provides a comprehensive framework for local economic development, for environmental conservation and for enhancing the quality of life in Ireland. An effective and efficient physical planning system is also an important part of the support infrastructure for industrial promotion and development. It is important that the system in place in Ireland is kept under review to ensure that Ireland is not placed at any disadvantage in competing for internationally mobile projects against countries that have well developed physical planning and environmental protection systems. Forfás, in consultation with IDA Ireland and Forbairt, has undertaken such comparisons in 1996.

Arising from this review, proposals have been made for a revised planning process, to include the pre-designation of a number of sites for specific strategic industries. The approach was endorsed in the Partnership 2000 agreement. These proposals are under consideration at present.

2. CO-ORDINATION

Co-ordination between the industrial development agencies is part of the core business of Forfás. This is given effect through the Board, which includes Chief Executives of the industrial development agencies and the Secretary of the Department of Enterprise and Employment. Forfás also has a number of cross-agency working and advisory groups on specific policy areas and projects. Forfás works closely with individual agencies to achieve operational consistency between agencies where necessary. There is also an inter-agency planning group, chaired by Forfás, to facilitate an integrated approach across agencies to the development needs of Irish enterprise.

The co-ordination role is also reflected in several of the policy areas outlined in the previous sections.

EMU

It is Government policy that Ireland should participate in EMU from the outset. This has significant implications for all businesses in Ireland, large and small, and it is essential that firms prepare well for the strategic and operational changes that they will face. EMU will

represent a very fundamental change in the economic environment for enterprise and the impact of EMU will have different effects on different sectors and sub-sectors of the economy. Substantive analysis undertaken by the ESRI has indicated that the overall economic impact for Ireland of EMU participation is positive.

It is vital that every enterprise in the country establishes clearly what EMU will mean for their business and the actions they need to take to deal effectively with it.

Companies must review how their business sector operates and how the individual enterprise functions within it. It is essential that, in each business, someone is nominated to collect information about EMU and the changeover to the euro and to report back on the main implications for the business. These will include implications for information technology, accounting, purchasing, marketing and training among other aspects.

Forfás has been asked, by the Minster for Enterprise and Employment to co-ordinate an awareness campaign for Irish business so that individual enterprises become aware of the changes that EMU will bring and the issues they will face. An 'information pack' and a plan for the campaign was launched in December 1996 by the Ministers for Enterprise and Employment, Finance, and Tourism and Trade. A consultative committee has been established with representatives from major business associations, professional bodies and government agencies.

These organisations will act as the main channels of information on EMU matters to enterprise throughout the country and in gathering feedback from firms on their information requirements. The emphasis of the campaign will be on helping firms to prepare for EMU by ensuring that they have all the information they require to prepare for the significant changes that will come into place.

Science and Technology Awareness Campaign

Forfás has been assigned the management of a three-year awareness campaign promoting Science, Technology and Innovation (STI) at all levels of society. The programme is under the guidance of an STI Awareness Panel that includes representatives of the agencies, the Office of Science and Technology and an independent communications advisor.

The programme:

- highlights the benefits to Ireland that can be gained through STI,
- introduces people of all ages to exciting developments in science, technology and engineering, and
- encourages learning through enthusiastic participation in science and technologybased activities in the home, in school and at work

The target audiences for the Science, Technology and Innovation Awareness Programme are young people and their educators, key decision makers in business and government, and the general public.

Four flagship initiatives formed the core of the 1996 programme:

- A prestigious national award for excellence in industrial innovation, jointly sponsored with Price Waterhouse and Irish Times;
- Preparation of a pilot television series on Science and Technology, agreed with RTE, to be screened in Autumn 1997. It is sponsored by the STI Awareness Programme and will portray science, technology and innovation issues in an entertaining and informative manner;
- An Information Technology and Science week aimed at raising general awareness of the benefits of science and information technology to people, young and old throughout society;

 An activity programme for young people, designed with the assistance of teachers' groups, including a schools competition, children's television, an interactive science roadshow and the Irish Scientists Yearbook.

An important event organised by Forfás was the second National Innovation Conference, held on 4th November 1996. The Conference fitted well into the overall objectives of the STI Awareness Programme, a major aspect of which is to increase understanding of the role that innovation plays in economic and social development.

The Conference theme was the **Management of Technology in Irish-based Firms** and it had as objectives to:

- Enable industrialists to discuss the issues involved in successfully managing technology within their company;
- Identify key policy issues arising from companies' experiences.

A summary report of the proceedings of the Conference is available as a Forfás Publication, dated November 1996.

Forfás assisted the Department of Enterprise and Employment with the holding of the annual Irish Innovation Lecture which is a joint initiative with the Department of Economic Development in Northern Ireland.

EU Fourth Framework Programme

The EU Fourth Framework Programme (FP4) is half way through its term which runs from 1994 to 1998. It provides funding for all the research and technological activities carried out on behalf of the Community in the period in question. It is implemented by 18 specific programmes which cover a number of activities, ranging from Information Technologies, Agriculture, Environment, Health, and Innovation to the Training and Mobility of Researchers.

Forfás monitors policy developments which arise in the context of FP4 and advises the Office of Science and Technology (OST) accordingly. There are two National Delegates to each specific programme, 36 in all from 18 organisations, and Forfás co-ordinates and facilitates the flow of information between the delegates and the Office of Science and Technology.

By the end of 1996, 259 organisations in Ireland were involved in 767 contracts with a total estimated value of £85.24 million. At that stage, the funding awarded to Ireland exceeded the total funding received over the five years of the previous EU Framework Programme. Of the total funding to Ireland since 1994, 35% has been won by industry, 46% by the third level sector and 9% by local authorities. Special Stimulation Measures for SMEs are available in ten of the eighteen specific programmes and to date in FP4 over 60 Irish companies have benefited from these measures.

While the benefits of participation include access to funds, the sharing of risks and costs and access to the full project results, the establishment of transnational linkages is often much more important economically than actual financial participation. These linkages can, and do, form the basis for future collaborative partnerships between industrialists, universities, research institutes and others. Under FP4 to date, Ireland has over 4,000 linkages involving 47 countries.

Ireland's Presidency of the European Union

During 1996, Forfás worked closely with and supported the Department of Enterprise and Employment in its intensive work during the Irish Presidency of the EU. The priority agenda issues in Science and Technology during this time included:

 Developing the orientation of the Fifth Framework Programme (FP5) for research and technological development. Important work was undertaken in this regard and FP5 will include specific programmes that are important to Ireland, ranging from Life Sciences,

- Information and Communications Technologies to the Training and Mobility of Researchers;
- b. The Mid-Term Review and Financial Supplement to the Fourth Framework Programme provides an additional £75 million for research into a number of areas of interest to Ireland, including BSE-related diseases, educational multi-media and transport.

Forfás also participated in the preparation of important Irish Presidency initiatives undertaken in the area of SME participation in EU programmes and the role of research in the fight against illicit drugs. The latter was one of the overarching themes of the Irish EU Presidency. In December 1996 Research Ministers agreed that these two important elements should be included in the 5th Framework Programme.

Enterprise Areas Scheme

Forfás administers the Enterprise Areas Scheme providing tax incentives to certain companies to locate in new or refurbished property in designated 'enterprise areas'. To qualify for the incentives, the owner occupiers or tenants must be companies supported by Forbairt or IDA Ireland and engaged in manufacturing or internationally traded service activities.

The three main incentives are as follows:

Capital Allowances. A 100% tax allowance for expenditure incurred on the construction or refurbishment of qualifying buildings is available, up to 50% of which may be claimed in one year;

Double Rate Allowances. Approved companies leasing new or refurbished buildings are entitled to off-set double the rental costs as an allowance against taxable income. This allowance is available for up to 10 years;

Rates Remission. This relief from local authority rates or taxes is available to approved enterprises occupying a new or refurbished building in an Enterprise Area. For new buildings, the relief is provided on a sliding scale over 10 years, tapering from 100% in the first year to 10% in the tenth year.

Forfás processes applications to this Scheme and the Minister for Enterprise and Employment issues certificates of eligibility to companies, following consultation with the Minister for Finance.

Nine projects were certified for Enterprise Area incentives up to the end December 1996, with the potential to create an additional 1,300 jobs over the next three years. There are approximately 790 people currently employed in the Enterprise Areas, including those relocating from elsewhere.

A review of the future operation of the scheme is currently underway.

Negotiating Guidelines

Forfás advises the Minister for Enterprise and Employment on negotiating guidelines and financial assistance for industrial and international service projects for IDA Ireland and Forbairt. In order to take account of the different development needs of clients, extensive consultations are held with the agencies. The aim is to ensure a balance between the need for flexibility and the responsibility of Forfás to ensure consistency and achievement of best value for money.

3. MONITORING AND REVIEW

The needs of Irish firms are changing rapidly in response to changes in the global economic climate. The development of appropriate policies and programmes to meet these needs requires accurate data on and detailed understanding of the operation, effectiveness and efficiency of existing policies and programmes.

Forfás is the premier organisation for the supply of information on performance of the enterprise sector. It co-ordinates and undertakes an extensive programme of regular Irish industry performance and competitiveness surveys. These include surveys of employment trends, corporation tax payments and spending by manufacturing and internationally traded services companies in the Irish economy. Surveys are also carried out into trends in research, development and innovation in Ireland.

Review of Technology Programmes

Forfás has in place an on-going series of reviews of industrial support programmes funded by the Department of Enterprise and Employment. Many of these reviews are being carried out jointly with the Industry Evaluation Unit established by the European Commission to review the activities supported by the European Regional Development Fund (ERDF).

During 1996 two more programmes funded by the Office of Science and Technology, with ERDF support, had reviews completed and a further two reviews were commenced. These reviews aim to ensure that value for money is achieved in the use of public funds and that state-supported schemes are meeting real and changing needs.

The completed reviews were:

Teltec Ireland: This is the Programme in Advanced Technology (PAT) in the telecommunications area. It comprises six university-based centres. In 1996 it employed 69 people, of whom 39 were post-graduate students. The main findings of the review were:

- Because of the inherent attractiveness and importance of the sector, the state should continue to invest industrial and technology policy funds in the telecommunications area generally, including Teltec;
- A significant element of Teltec Ireland's role has been the training of post-graduates in telecommunications technology. The fall in the number of postgraduates in the programme, from 55 in 1995 to 39 in 1996, is a reflection of market demand for these types of skills and endorses the important role of Teltec in producing the skilled people which industry needs.
- Teltec Ireland should be encouraged to establish a working relationship with Telecom Eireann, to increase Telecom Eireann's research capability.

Following the review, agreement in principle has been reached on a memorandum of understanding between Teltec and Telecom Eireann, covering all aspects of their relationship.

Technology Centres: The Technology Centres Programme has established a number of regionally-based centres, mainly in the Regional Technical Colleges. They provide a range of services to industry in a particular area of technology. A total of seventeen centres, had been established at the time of the review. The major findings were:

- Seven out of the seventeen centres are performing very well. This is a high success rate compared to similar initiatives in other countries;
- The remaining ten centres need to introduce significant changes in their operation if they are to survive. Boards of Management should be formed with an industrial chairperson;
- If any new centres are to be established they should carry out more stringent market research and should build on the established expertise of the host institution and its existing links with industry.

Forbairt, which administers the programme, has accepted the findings and is implementing the recommendations.

Overseas-Owned Electronics Industry

The electronics industry in Ireland develops, manufactures and markets a wide range of products, generating a third of the country's total exports and employing 42,000 people. The

'Review of the Electronics Industry in Ireland' carried out by Forfás in 1996, assessed the strengths, weaknesses, opportunities for, and threats to, the industry. It examined how current employment in the industry can be maintained and new opportunities created.

Internationally, the Electronics Industry is a rapidly expanding but volatile industry. Two major trends are becoming apparent in the industry:

- The Internet is emerging as the network for connecting people and organisations electronically. Although still in its formative stage, its present unstructured nature will be superseded by a system based on strong proprietary content and fully-integrated access to the World Wide Web.
- The convergence of the computing, telecoms, consumer electronics and content industries is leading to the emergence of a mega industry based on common digitalised technologies.
- An increase of employment levels in the industry in Ireland from 42,000 in 1996 to 57,000 is achievable over the next 5 years if changes in the international market are properly and quickly responded to. Key recommendations of the review include:
- Continuing to prioritise the electronics industry as a sector capable of further substantial medium-term employment growth while accepting a significant level of regular job losses within the sector as it restructures and responds to global competitive changes;
- Seeking to attract into Ireland the major companies in telecoms, consumer electronics and content sectors;
- Prioritising the development of certain industrial sub-sectors, for example, Internetrelated and multimedia hard and software;
- Create opportunities for a strengthening technical and management expertise in the core and applied technologies of the electronics industry and encourage inward migration of such skills from abroad;
- Enhancing market research functions within IDA Ireland to identify emerging new trends and segments and enhancing the sectoral expertise of IDA Ireland's Existing Clients Department in identifying and progressing development opportunities and issues;
- Emphasising the need for strategic financial, engineering and customer-driven design and development skills within indigenous companies in the electronics sector;
- Offering Ireland as a European regional hub location for marketing, sales and administration functions and for providing the back-up marketing functions required.

Exchange Rates

In 1996 Forfás continued to monitor and report to Government departments on the effects of exchange rate fluctuations on companies considered by IDA Ireland. Forbairt and An Bord Tráchtála to be particularly sensitive to such changes.

EU Support for Industrial Development

EU support comes principally through the Operational Programme for Industry (OPI). This programme aims to help the Irish economy adjust to increased forms of competition and to achieve a sustainable improvement in industrial performance to support further improvements in living standards. Total projected expenditure under the Programme by both the public and private sectors amounts to £3.6 billion in 1994 prices over the period 1994-1999. Projected EU co-financing of this expenditure amounts to £800 million. The OPI is managed by a monitoring committee, chaired by the Department of Enterprise and Employment. Forfás coordinates reporting arrangements on those elements of the programme implemented by the State's industrial development agencies.

Advisory Groups

In the preparation of 'Shaping Our Future' Forfás worked with a number of advisory groups representing the public and private sectors to help identify and assess issues which are critical to developing and sustaining Irish Industry's competitive advantages. All of these groups were listed in full in 'Shaping Our Future'.

Three of the groups which contributed to the preparation of 'Shaping Our Future', in the areas of Transport, Telecommunications and Taxation and Public Finance had an on-going role in advising Forfás in 1996. In addition the Interim Skills Group was established to examine issues of shortages emerging in the skills area.

Membership of these groups are listed on pages 55, 56.

National Standards Authority of Ireland

The National Standards Authority of Ireland (NSAI) publishes national standards and provides a comprehensive certification service for products, quality and environmental management systems on behalf of the Minister for Enterprise and Employment. During 1996 the NSAI operated as a committee of Forfás while legislation was prepared for its establishment as an independent agency. In April 1997 NSAI was formally established as an independent agency. This included the setting up of a subsidiary of NSAI in the U.S.

The NSAI is the Irish member body of the world-wide International Organisation for Standardisation (ISO) and the European Committee for Standardisation (CEN). It also provides resources for Irish representation in the European Telecommunications Standards Institute (ETSI), the International Electrotechnical Commission (IEC) and the European Committee for Electrotechnical Standardisation (CENELEC). The Irish Standards which are published by NSAI are in the main harmonised standards based on these five bodies which play an influential role in providing agreed standards for support of the European Union Single Market.

An important part of NSAI certification is its appointment by Government as EU 'Notified Body' to provide a service to manufacturers of products subject to EU Directives which require 'CE Marking' to allow their sale throughout Europe.

The results of NSAI certification activity during the year include 230 new registrations in respect of ISO 9000 Quality systems and eighteen registrations in respect of IS 310 Environmental Systems. In connection with the latter standard a new international standard, ISO 140001, was published in September 1996 as the harmonised standard for Environmental Management Systems. The new standard will replace the earlier Irish Standard, IS 310, once it has been granted similar status for use in the EU EMAS Scheme. For companies manufacturing medical devices NSAI granted a total of 30 registrations to the industry specific Quality Standard EN 456000.

Product certification continues at a more modest level with ten certificates issued for products manufactured to Irish Standards and nine certificates for 'CE Marking' of products included in EU Directives.

A total of 1022 Irish Standards were published during the year. Although most of these standards were adoptions of European Standards, an important standard published was IS 813 on the Safety of Gas Installations. This standard was the result of work by the Gas Standards Technical Committee which is one of several NSAI sectoral and specialist consultative committees.

In addition to the publication of standards and certifications services, NSAI provides Irish companies with information on new standards being developed. This is important information mainly related to new European Standards and it is principally provided by the NSAI Membership Service by means of regular information distribution and a programme of workshops and Technical Meetings held throughout the country.

The Irish National Accreditation Board

The National Accreditation Board (NAB) is the Irish national body with responsibility for accreditation in accordance with the harmonised EN 45000 series of European standards and the relevant International Organization for Standardization (ISO) standards and guides. It is

also the national monitoring authority for the OECD Good Laboratory Practice (GLP) Scheme under S.I. No. 4 of 1991.

It accredits organisations involved in the certification of quality and environmental management systems, products and personnel as well as laboratories involved in calibration or testing activities.

There are five distinct functions of NAB each operating to different standards and/or regulations.

Laboratory Accreditation

Laboratory accreditation granted by the NAB is commonly referred to as 'ILAB' accreditation.

During 1996 NAB accredited 8 laboratories bringing the total to 77. There were 71 enquiries and 13 applications in hand at year end.

Accreditation of Certification

The NAB accredits Certifications 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.

At year end applications from two Certification Bodies were being processed.

EMAS Eco-Management and Audit Scheme

Accreditation of Environmental Verifiers NAB accredits environmental verifiers who meet the requirements of EMAS, Council Regulation (EEC) No. 1836/93 of 29 June 1993.

At the end of 1996 two applications were processed.

Registration for sites participating in EMAS

Sites participating in EMAS have been independently audited by EMAS Verifiers and found to comply with the Council Regulation (EEC) No. 1836/93. The National Accreditation has been designated the 'Competent Body' in Ireland for the registration of sites participating in EMAS.

During 1996 one site was registered bringing the total to two.

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 NAB regulations.

This scheme was approved by the Board and launched in July in 1996. By year end three applications had been received.

Good Laboratory Practice (GLP)

The NAB 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.

During 1996 5 GLP compliance statements were awarded.

International Development Ireland (IDI)

IDI is an International Consulting Company which was until March 1997 owned by five State agencies: Forfás, ICC Bank, Coillte Teo, Shannon Development and An Bord Tráchtála.

During 1996, IDI carried out some 70 assignments in Africa, the Americas, Asia and Europe. Work continued on long term projects in Hungary, Lesotho, Russia, Kenya and Bangladesh. Other substantial assignments were completed or commenced in Russia, Lesotho, Zimbabwe, Nigeria, the Dominican Republic, Israel, Jordan, Moldova, the Slovak Republic and Fiji.

IDI also undertook training programmes at Shannon and Dublin in the areas of Industrial expansion, regional development, export processing zones, tourism and banking for over 100 international clients.

Board Members

In accordance with Department of Finance guidelines for state agencies, Forfás board members register their interests in other undertakings with the Secretary.

Ethics in Public Office Act, 1995

In accordance with the Ethics in Public Office Act, 1995, Forfás Board members have furnished a statement of interest to the Secretary and a copy has been provided to the Public Offices Commission.

In addition Forfás staff holding designated positions have completed statements of interests in compliance with the provisions of the Act.

Personnel Issues

Equality

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

A sexual harassment policy was developed and agreed to ensure that there are measures in place to protect the dignity of each individual at work.

Worker Participation (State Enterprise) Act 1988

Sub-board consultative structures have been put in place by Forfás to support the organisation's communications and consultative structure. The Joint Participative Forum 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 which encompasses all the aspects affecting staff and visitor welfare.

Users Charter Forfás published a users Charter in 1996 setting out its commitment to a high quality of service to clients and to the general public.

The members of the National Standards Authority of Ireland (NSAI) Board

Thomas Donlan Weetabix Limited

Mary Carroll Dell Products and Incline Europe

Frank De Groot J&S Engineering Limited

Brian Griffin Irish Cement Limited

Brendan Moylan Department of Enterprise & Employment

Liam Kearney Forbairt

David Lovegrove Forfás

Dr. Ursula Mac Evilly Dublin Institute of Technology

Garrett Murphy Office of the Director of Consumer Affairs

Thomas J. Quinn General Manager, NSAI

Ewing Paterson Director, NSAI

The members of the National Accreditation Board

1 January - 31 March 1996

Prof. M.G. Harrington (Chairman) Emeritus Professor, University College Dublin

Dr D. Kehoe (Deputy Chairman) Consultant

Dr D. Feeley University College Hospital, Galway

Mr M.J. McElroy An Bord Bainne

Dr Michael O'Keefe Teagasc - The National Food Centre

Dr D.M. Carroll Forbairt

Prof. W.G. Scaife Faculty of Engineering, Trinity College Dublin

Dr Marie Walsh State Laboratory

Dr Frank Smyth National Accreditation Board

1 April - 31 December 1996

Dr Marie C. Walsh (Chairperson) State Laboratory

Mr Joe Rowley (Deputy Chairman) AGB Scientific Ltd

Mr Ian McClean Environmental Protection Agency

Mr Sean Conlon Irish Quality Association

Dr William Crowe Irish Agrement Board
Dr Rosemary Boothman Department of Health

Mr Sony O'Connell Dairygold

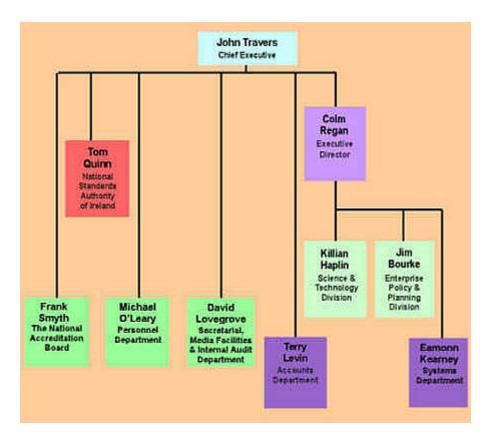
Dr Michael O'Keeffe Teagasc - The National Food Centre

Mr Lorcan Nolan Department of Finance

Mr Eamonn Mullins Trinity College Dublin

Dr Frank Smyth National Accreditation Board

Forfás Organisation



FINANCIAL STATEMENTS

REPORT OF THE COMPTROLLER AND AUDITOR GENERAL

I have audited the financial statements.

Responsibilities of Forfás and the Comptroller and Auditor General

The accounting responsibilities of Forfás are set out in the Statement of Board Members' Responsibilities on page 45. It is my responsibility, under the Industrial Development Act, 1993, to audit the financial statements presented to me by Forfás and to report on them. As the result of my audit I form an independent opinion on the financial statements.

Basis of Opinion

In the exercise of my function as Comptroller and Auditor General, I plan and perform my audit in a way which takes account of 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 judgements made in the preparation of the financial statements, and of whether the accounting policies are appropriate, consistently applied and adequately disclosed.

My audit was conducted in accordance with auditing standards which embrace the standards issued by the Auditing Practices Board and in order to provide sufficient evidence to give reasonable assurance that the financial statements are free from material misstatement whether caused by fraud or other irregularity or error. I obtained all the information and explanations that I required to enable me to fulfil my function as Comptroller and Auditor General and, 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, 1996, and of its income and expenditure and cash flow for the year then ended.

John Purcell Comptroller and Auditor General 30 June 1997

Treasury Building Dublin Castle

STATEMENT OF THE BOARD MEMBERS' RESPONSIBILITIES

For 1996 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 with the consent of the Minister for Finance, all proper and usual accounts of money received and expended by it. In preparing those accounts, 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.

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 of the First Schedule to the Industrial Development Act, 1993. 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:

Tom Toner John Travers

Chairman Chief Executive Officer

ACCOUNTING POLICIES

Industrial Development Acts, 1993 and 1995

Forfás, together with its Agencies, Forbairt and Industrial Development Agency (Ireland) "IDA", was established on 1 January 1994 under the provisions of the Industrial Development Act, 1993 (the 1993 Act). Two existing State Bodies, Eolas and the Industrial Development Authority, were dissolved and title to their land and other property was vested in Forfás.

The First Schedule of the 1993 Act was amended by the passing of the Industrial Development Act, 1995. This Act, which came into operation on 1 January 1996, extended the power to acquire, hold and dispose of land and other property or any interest therein to IDA and Forbairt. This Act also provided for the transfer of securities from Forfás to IDA and Forbairt, without assignment. Relevant balances as at 31 December 1995 and comparatives for the year then ended have been restated to take account of transfers to IDA and Forbairt.

The basis of accounting and significant accounting policies adopted are as follows:-

a. Basis of Accounting

The financial statements are prepared under the historical cost convention.

b. Fixed Assets

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.

c. Investments

Unquoted investments are stated at the lower of cost or valuation.

d. Operating Leases

The rentals under operating leases are dealt with in the accounts as they fall due.

e. Oireachtas Grant

This is accounted for on a cash receipts basis.

f. Science & Technology Programmes

These are dealt with in the accounts on an accrual basis.

g. 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. Profits and losses arising from foreign currency translations and on settlement of amounts receivable and payable in foreign currency are dealt with in the Income and Expenditure Account.

h. Capital

The Capital Account represents funds utilised for the acquisition of Fixed Assets and Investments and is written down in line with the depreciation and revaluation policies for the related assets.

i. Superannuation

i. Forfás Scheme

This non-funded defined benefit Superannuation Scheme came into effect on 6 April 1995 for new staff recruited on or after that date. Payments made and contributions received are dealt with in the Income and Expenditure Account in the year to which they relate.

ii. Former Industrial Development Authority Scheme

This funded defined benefit Superannuation Scheme was closed to new members with effect from 5 April 1995. However, staff who were members of the Scheme up to that date continue in membership of the Scheme. Contributions are dealt with in the Income and Expenditure Account in the year to which they relate.

iii. Former Eolas Scheme

This non-funded defined benefit Superannuation Scheme was closed to new members with effect from 5 April 1995. However, staff who were members of the Scheme up to that date continue in membership of the Scheme. Payments made and contributions received are dealt with in the Income and Expenditure Account in the year to which they relate.

INCOME AND EXPENDITURE ACCOUNT

For Year Ended 31 December 1996

Notes	1996 IR£	1995 IR£
4	0.004.000	7 705 000
•		7,785,000
		5,501,792
3	903,484	1,413,252
4	EGE 124	270 620
4	303,124	278,628
	16,199,325	14,978,672
		13,739,605
7	299,619	205,596
4	542,910	261,049
	533.621	772,422
	_	535,596
16(b)	1 616 204	369,149
10(b)	1,010,204	303,143
	2,149,825	1,677,167
6	(384,303)	(60,963)
	1,765,522	1,616,204
	1 2 3 4 5 7 4	1 8,961,000 2 5,769,717 3 903,484 4 565,124 16,199,325 5 14,823,175 7 299,619 4 542,910 533,621 16(b) 1,616,204 2,149,825 6 (384,303)

There are no recognised gains or losses, other than those dealt with in the Income and Expenditure Account. The 1995 comparatives have been restated to reflect changes arising under the Industrial Development Act, 1995, and are in respect of continuing activities (see note 16 (a))

The Statement of Accounting Policies and notes 1 to 17 form part of these Accounts.

On behalf of the Board:

Tom Toner John Travers

Chairman Chief Executive Officer

BALANCE SHEET As at 31 December 1996

AS at	131 Decemb	Jei 1930	
	Notes	1996 IR£	1999 IR
Fixed Assets			
Tangible Fixed Assets	7	855,057	470,75
Investments	8	300,000	300,000
Total Fixed Assets		1,155,057	770,75
Current Assets			
Accounts Receivable	9	3,303,995	2,581,284
Bank		131,086	253,82
		3,435,081	2,835,109
Accounts Payable	10	1,669,559	1,218,90
Net Current Assets		1,765,522	1,616,20
Net Assets		2,920,579	2,386,958
Representing:			
Capital	6	1,155,057	770,75
Income and Expenditure			•
Account		1,765,522	1,616,20
		2,920,579	2,386,958

The 1995 comparatives have been restated to reflect changes arising under the Industrial Development Act, 1995. See note 16 (b).

The Statement of Accounting Policies and notes 1 to 17 form part of these Accounts.

On behalf of the Board:

Tom Toner John Travers

Chairman Chief Executive Officer

CASH FLOW STATEMENT

For year ended 31 December 1996

	Notes	
	Notes	IR
Reconciliation of Net Movement for to Net Cash Inflow from Operations		
to Net Cash innow from Operations	•	
Net Movement for Year		533,621
Depreciation Charge: - Tangible		
Fixed Assets	7	299,619
Increase in Accounts Receivable	9	(722,711
Increase in Accounts Payable	10	450,654
Net Cash Inflow from Operations		561,183
CASH FLOW STATEMENT		561 183
Net Cash Inflow from Operations	7	-
Net Cash Inflow from Operations	7	561,183 (683,922 (122,739
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets Decrease in Cash	7	(683,922
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets Decrease in Cash Reconciliation of Net Cash Flow to	7	(683,922
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets Decrease in Cash Reconciliation of Net Cash Flow to Movement in Cash at Bank	7	(683,922
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets Decrease in Cash Reconciliation of Net Cash Flow to Movement in Cash at Bank Movement in Cash at Bank in the	7	(122,739
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets Decrease in Cash Reconciliation of Net Cash Flow to Movement in Cash at Bank Movement in Cash at Bank in the year	7	(122,739 (122,739
Net Cash Inflow from Operations Purchase of Tangible Fixed Assets	7	(683,922

The 1995 comparatives are not shown as it was not possible to accurately reanalyse all required opening balances for that year, due to the diversity of changed responsibilities, arising from the implementation of the Industrial Development Act, 1995.

FORFÁS ADVISORY GROUPS

Taxation and Expenditure

Chairman Dónal de General Manager, Office of the Chief AIB Bank Buitleir Executive

Eamonn Director of Finance Analog Devices B.V.

McAvinue Limited

Frank Deane Finance Director Cadbury Schweppes (Ireland) Limited

Pat O'Shea Group Tax Manager CRH plc

David Ennis Finance Director J.A.Hickey and Company

Limited

Chris Finance Director Trintech Manufacturing

Meehan Limited

Frances Associate Professor of Economics TCD Ruane

Paul Senior Researcher SIPTU Sweeney

Paul Haran Secretary Department of Enterprise

& Employment

Donal Assistant Secretary Department of Finance McNally

Brendan Planning Manager Forbairt Martin

Margaret Tax Manager IDA Ireland McCann

Colm Regan Executive Director Forfás

Eugene Reilly Department Manager, Enterprise Forfás
Policy and Planning Division

Facilitator George Partner Craig Gardner/Price Reddin Waterhouse

Marie Bourke Tax Manager, Enterprise Policy and Forfás Planning Division

Transport and Logistics

	Neil McHugh	Chief Executive	Green Isle Foods Group Ltd
	Buddy Griffin	Managing Director	Dell Computer Corporation
	Terry McKenna	Managing Director	Greensleeves Confectionery Ltd
	Finn O'Sullivan	Managing Director	Irish Express Cargo Limited
	Tosh Kellett	Managing Director	Kelletts (Oldcastle) Limited
	Ronnie Wilson	Chief Executive	Monaghan Mushrooms Limited
	John Kenna	Director of Transport Policy	IBEC
	Peter Fisher	Head of Consultancy Unit	Department of Enterprise and Employment
	Michael Daly	Principal Officer	Department of the Marine
	Tom Kennington	Principal Officer	Department of Transport, Energy and Communications
	Seamus Bannon	Manager, European Affairs Department	An Bord Tráchtála
	Derek Breen	Manager, Consumer Foods Department	Forbairt
	John Hussey	Projects Manager, Consumer Foods Department	Forbairt
	Brendan Rossiter	Projects Manager, Planning Division	IDA Ireland
	Colm Regan	Executive Director	Forfás
	Jim Bourke	Manager, Enterprise Policy and Planning Division	Forfás
Facilitator	Anthony Foley	Senior Lecturer, Economics	Dublin City University Business School
Secretary	Raymond Bowe	Manager, Policy Unit,Enterprise Policy and Planning Division	Forfás
Assistant Secretary	Declan Hughes	Enterprise Policy and Planning Division	Forfás

Commercial Telecommunications

Chairman	Maurice Whelan	Chief Managing Director	Silicon and Software Systems Ltd
	Paul Williams	Head, Data Centre and Telecommunciations Services	AIB Bank
	Chaz Mirzai	Telecommunications Manager	Dell Computer Corporation
	Diarmuid O'Colmain	Managing Director	Ericsson Systems Experience Ltd
	Brian McCarthy	Chairman	Foreign Exchange Company of Ireland Limited
	Joe McCarthy	Networks Consultant	IBM
	Kieran Close	Site Communications Planner	Intel Ireland Limited
	Maurice Pearse	Managing Director	Manorhamilton Services Limited
	Michael Pierce	Chief Executive	Mentec Limited
	Stephen Byrne	Real Estate and Construction Manager	Microsoft Ireland EOC
	Anne Renshaw	IT Manager	Motorola Ireland Limited
	Brian Hagan	Regional Sales Director	Northern Telecom (Ireland) Limited
	Susan Wheeler	Managing Director	Telephone Marketing Services(Ireland) Limited
	Tommy McCabe	Secretary, Telecommunication Services Policy Committee	IBEC
	Jimmy Joyce	Consultant	Department of Enterprise & Employment
	Martin Brennan	Principal Officer	Department of Transport Energy & Communications
	Brian O'Donnell	Manager, International Science and Innovation Programme	Forbairt
	Brendan Rossiter	Projects Manager, Planning Division	IDA Ireland
	Colm Regan	Executive Director	Forfás
	Brian Cogan	Department Manager, Enterprise Policy & Planning Division	Forfás
Facilitator	Dave Campbell	Telecommunications Consultant	Datanet Limited
Facilitator	Jim Salisbury	Associate Consultant	Datanet Limited
Secretary	Brendan McDonagh	Economist, Enterprise Policy and Planning Division	Forfás

Interim skills Group

	Prof. Frances Ruane	Chairperson	Trinity College Dublin
	Declan Purcell	Principal Officer	Dept of Enterprise & Employment
	Ronald Long	Assistant Secretary	Dept of Enterprise & Employment
	Peter Baldwin	Principal Officer	Dept of Enterprise & Employment
	Pat Dowling	Principal Officer	Dept of Education
	Eugene O'Sullivan	Principal Officer	Dept of Finance
	Michael Leydon	Industrial Development Manager	Shannon Development
	John Hayden	Chief Executive	HEA
	Colm Regan	Executive Director	Forfás
	Peter Lillis	Manager, Corporate Affairs	IDA Ireland
	Gerry Pyke	Secretaty	FÁS
	Brendan Martin	Manager, Planning	Forbairt
	Jennifer Condon	National Software Directorate	Forbairt
	Noel Gillatt	Manager, Policy & Planning Science & Technology Division	Forfás
	Niall O'Donnellan	Manager, Enterprise Policy & Economics,	Forfás
Joint Secretary	Fiona Dunn	Economist, Enterprise Policy & Planning	Forfás
Joint Secretary	Roger Fox	Manager, Planning and Research	FÁS