Foreword by An Taoiseach

The competitiveness of Ireland's economy is the key focus of government policy to ensure that our enterprises have the right conditions and the right incentives to enable them to win success and to go on doing so. Competitiveness is the foundation for employment growth and increased living standards. A major objective of the Government is to ensure that the overall environment for investment by the traded goods and services sector in Ireland is more favourable than it is in other countries. The performance of the Irish economy in recent years indicates that some success has attached to government policies in this area. The challenge now is to build on the success that has been achieved.

With a rapidly changing world economy, continuous review of policy and of the environment for the development of existing and new enterprises is essential. Ireland's skills, infrastructure, labour and capital markets, science and technology and public administration are among the important determinants of Ireland's future economic success. Competitiveness analysis takes an overview of these issues, recognising the way in which they are linked. It provides an essential framework for good policy formulation and its implementation.

A central element in Ireland's economic success has been the partnership established between workers, employers and government. The most recent expression of this is Partnership 2000, and this Government is committed to its full implementation as the best foundation for economic stability and social progress in the future. As agreed in Partnership 2000, the National Competitiveness Council was established in the Summer of 1997, with representation from all the social partners. It will provide a vital input to government action on competitiveness, by assessing the factors that determine competitiveness and identifying the actions most urgently needed to maintain and enhance that competitiveness.

I am pleased therefore to introduce the first reports of the National Competitiveness Council. The Council has produced a summary statement on competitiveness - The Competitiveness Challenge - as well as the first Annual Competitiveness Report for 1998. The Government greatly appreciates the work of the Council and the relevant Ministers will give careful consideration to its recommendations in the formulation and implementation of policy

An Taoiseach Bertie Ahern T.D.

Council Members

Brian Patterson	Chairman
Kevin Bonner	Partner, Business Insight
Donal Byrne	Chairman, Cadbury Ireland
Des Geraghty	Vice President, SIPTU
Alan Gray	Managing Director, Indecon Economic Consultants
Billy McCann	Chairman ESB
Martha O'Byrne	Managing Director, Blooming Clothing Company
Patricia O'Donovan	Deputy General Secretary, ICTU
Martin Swarbrick	Country Manager, Motorola BV
Lorraine Sweeney	Chairperson, Small Firms Association
John Travers	CEO, Forfás

The National Competitiveness Council

The Council held its first meeting in June 1997. The terms of reference announced on the formation of the Council are as follows:

- Prepare and submit to An Taoiseach, a report on the main challenges facing the enterprise sector over the medium-term and the policy responses required to meet them.
- Examine and monitor policies and actions that impact on the competitiveness of the enterprise sector and prepare reports on priority competitiveness issues, as appropriate, with recommendations required to improve competitiveness.

The Council's role is:

- Strategic: it gives advice to the Government at the highest level.
- Independent: The Council's views are its own, the collective view of its members.
- **Inclusive**: The Council draws its membership from all the social partners.
- **Experience-based**: The Council embodies many years of practical experience of the enterprise sector, the way a business works, the needs of its staff, and the way in which government influences it.
- Action oriented: The Council's role is not to carry out theoretical research, but directly to influence change. It will measure its own success by how far its recommendations are translated into action. In some instances, the Council's role will be to press for action where analysis has already been carried out or where decisions/commitments have already been made.

The Council therefore does not intend to duplicate the work of existing bodies. Much useful work has already been carried out by, for instance, NESC, and the Small Businesses and Services Forum. Important new contributions are being made, for example, by the Irish Council for Science, Technology and Innovation (ICSTI), and by the Information Society Commission. The National Competitiveness Council sees its role as adding value to the work of others by synthesising the findings and recommendations emerging from this work, by initiating its own studies as required on priority competitiveness issues, by integrating it with the practical experience of its own members, and by carrying it forward through direct policy advice and advocacy to the Government.

The Council recognises the significance of competition in its wider sense for the future development of the economy, and accordingly sees the necessity for global benchmarking. This means that what we do in this country in terms of enterprise performance and the performance of education, infrastructure and public services has to be measured against the best practice elsewhere, wherever that may be.

The Council will examine policy issues to develop sets of recommendations on key issues to government that are comprehensive, consistent and address the most critical problems.

In conjunction with this Summary Statement, the Council is issuing its first Annual Competitiveness Report, in which an overview of Ireland's standing is made. It intends to strengthen and expand this activity for the next year, with a new annual report to be published early in 1999. As discussed in Section 5, the Council's Work Plan identifies four priority themes for 1998. These are skills, costs, telecoms and the information society. The Council will issue statements on these at intervals during the coming year, identifying areas where government action is required as a matter of urgency.

Overview

Ireland has seen much success in recent years. Growth in GNP and in productivity have been the highest among OECD countries in the last four years. Exports and employment have grown substantially. Inflation is the lowest in the EU. Real income has risen. Irish people are returning from abroad to take up work here again. So are those from other countries. Our tourism has reached record levels.

What have been the causes of this success? They have included a number of factors: the economic and social partnerships that have guided economic policy since 1987, the careful management of the economy towards the targets set by the Maastricht Treaty, the investments made in education and in infrastructure, the moves to open the economy which began in the 1950s, the cumulative effects of foreign direct investment and, the growing confidence that has encouraged the Irish enterprise sector and contributed greatly to the growth of employment, especially in the services sector.

Past success is no guarantee of future success. The economic progress is recent, and has not yet redressed significant deficiencies in infrastructure, in income distribution and in entrepreneurship. Much remains to be done before Ireland has a comprehensive industrial structure, one with a full range of manufacturing and service companies with sufficient diversity, flexibility and creativity. A complex and vibrant structure will be the best guarantee of future growth in a challenging world. Such a structure has not yet been achieved.

Moreover, there are a number of forces at work that can jeopardise future prospects for the economy:

- Globalisation: World trade continues to be liberalised. Increasingly, the world's manufacturing and services industries are being distributed across continents, with new forms of industrial organisation and with telecomm-unications and information technology providing the links between them. Restrictions on capital movements worldwide have been greatly relaxed. Movement of labour across international boundaries is becoming increasingly common, especially skilled labour. In general, the world economy is becoming more complex, more sophisticated and more interconnected across national boundaries and therefore more competitive.
- Intensified Competition: Globalisation has meant increased competition in trade and also in attracting foreign direct investment. EMU, which Ireland will be part of, will accelerate these trends. New economic forces are emerging. Eastern Europe, in particular, is becoming a magnet for foreign investment, attracted by its proximity to the EU, its labour costs, and its skills. Outside Europe, the so-called "big five" (Russia, China, Brazil, Indonesia and India) have begun to increase their influence in the world economy and have become the focus of business strategy for firms in many parts of the world. Recent events in some Asian economies are a discontinuity which could alter the competitiveness world map, leading to intensified competition from this region. In this new and rapidly changing situation, Ireland has to make special efforts if it is to continue to compete in world trade and investment markets. Increased resilience and responsiveness to the challenges of the world economy are the best defence, but they have to be built up continuously.
- **Risks of inflation:** The recent depreciation of the Irish pound, coupled with falling interest rates and significant tax reductions will increase inflationary pressure. Rapid growth such as we have seen in Ireland in the last few years has led to strong consumer demand as well as to new strains in the labour market. There are shortages in some specialised areas of skills, in a number of craft skills, and in some semi-skilled areas such as machinists. The tourism industry is also facing recruitment problems. Skill and labour shortages may constrain future growth and may encourage inflation if action is not taken to deal with them. Moreover, once Ireland is in EMU, inflationary pressures cannot be countered by the traditional response of higher interest rates. Therefore, the importance of sound fiscal policy and continued social partnership are increased.

• **Risks for Social Cohesion:** In spite of good progress in reducing unemployment, much remains to be done. The rate of unemployment is still much higher than in many of our competitor countries, such as the UK, the United States and the Netherlands. The numbers of long-term unemployed remain as a continuing challenge to the efficiency of the economic system. In addition, if the benefits of economic growth are not seen to be distributed fairly, this could call into question one of the most important causes of present success, the national economic and social partnership.

Irish economic policy has been through many phases. Import substitution policies were followed for many years. In the 1960s, the economy was opened up to foreign investment and to free trade. Subsequent policy reviews emphasised the importance of the Irish-owned sector and also the significance of the whole economic environment in encouraging growth. Ireland needs a new enterprise policy for the next millennium. Important steps in this regard have been taken recently with the publication of the Forfás document "Shaping Our Future" and the new Enterprise Strategy document from the Department of Enterprise, Trade and Employment. Globalisation means that competition for Irish industry and services is coming closer and becoming more intense with every day. Globalisation also means that in the future it is likely there will be an even greater foreign presence in the economy, and equally it is likely that Irish firms will accelerate present trends of investing abroad. Foreign competition in utilities, transport and financial services will be just some of the ways in which globalisation of services will affect the Irish economy. The spread of the information society will be a further development of globalisation.

In this context, there is a clear need for new policy perspectives. The traditional role of government in determining industrial policy will be rewritten by what is happening in the world at large. The growing use of the internet for electronic commerce will provide more competition in many fields, but it will also limit the power of the State to regulate and to maintain standards. In legal terms, the increase in the powers of the World Trade Organisation and the EU Commission, as well as the growing trends towards limiting national freedom on investment incentives will restrict policy choices of the traditional kind for the future.

Where then can the policy choices be found? Principally in new areas: in a rethinking of the role of education and training, and infrastructure, to develop new skills, to provide new information, to encourage new forms of industrial organisation, and to foster new forms of partnership in the workplace. These are broad concepts. They cannot be translated into reality quickly. Much remains to be done in terms of defining them more precisely and in setting out all the steps needed to make them a reality. But competitive pressures are increasing day by day, and Ireland's response to them has to begin as soon as possible. The new industrial policy must take account of a world that has become more and more competitive and it must be appropriate for an Ireland that is successful and part of the industrialised world.

The Enterprise Sector in Ireland

The enterprise sector is not homogenous. It contains large, medium, small and microenterprises, carrying out an enormous variety of activities. They cannot be easily categorised, and there is a risk of oversimplification by grouping them on one side as large/foreign/hitech/hi-productivity/exporter and on the other side small/Irish-owned/low-tech/lowproductivity/domestic-oriented. There are small Irish-owned hi-tech firms who export, and there are large foreign-owned firms who cater mainly for the Irish market. Moreover, there are growing links between firms in Ireland. Not as many as there should be, but the presence of foreign multinationals in Ireland has over the years encouraged Irish suppliers to a considerable degree, including both component manufacturers, raw material suppliers, and service providers. It is equally misleading to think of small firms as less dynamic than large ones. In many cases, Irish-owned small firms have been fast growing and are creating large numbers of jobs, especially in the services. The needs of all these different types of firms have to be taken into account in government policy. Some mechanisms exist for this, at an institutional level, but more needs to be done. The Council intends to make sure that it fully understands the views and priorities of all parts of the enterprise sector, and the deficiencies to be found in terms of size, sector, market position, value-added and position in the value chain. Without such an understanding, action to deal with some concerns may have a negative impact on others. A one-suit-fits-all policy is inappropriate.

Competitiveness Issues

In beginning its work, the Council has identified a number of issues that it believes are of central importance to improving Ireland's competitiveness, and will determine our success in the future. In selecting these issues, the Council has considered a variety of work carried out in these areas, but has also drawn upon the experience of its own members and their sense of what represent the key challenges facing Ireland in years to come. These are:

- Human Resources: A workforce possessing the required attitude and skills of the modern, higher value-added economy will allow a more sophisticated advanced economy to emerge with the ability to compete in a wider range of business opportunities.
- **Costs:** These are important for all companies, especially the major costs, both direct and indirect, such as labour costs, utilities charges, insurance and congestion costs, which are absolutely critical for some enterprises.
- **Infrastructure:** Under this heading, there is a section on the continuing need for investment in telecommunications and transport infrastructure, and in the case of telecommunications, the argument for investment ahead of demand.
- **The Information Society:** This is a post-industrial society, one in which information is produced, communicated and used intensively. The technologies and skills involved are having, and will have, a profound effect on the economy and society.
- **EMU:** Economic and Monetary Union represents one of the greatest strategic challenges that the Irish economy has ever faced. The changeover to the new currency will require detailed planning in good time by all Irish enterprises, but there are even more strategic issues at stake. The need to be globally competitive will increase within the enterprise sector as a whole. Small companies that are proportionately more exposed to the UK will be particularly sensitive to the euro/sterling exchange rate.
- Science and Technology/Research and Development: To compete effectively, Irish enterprises must match or exceed the innovative capacity of other companies in the global marketplace. Science and technology underpin technological innovation which is the mix of elements required to bring competitive products and processes to the market.
- **Public Administration:** The efficiency of public adminis-tration has an important bearing on the competitiveness of the economy as a whole. Its responsiveness and its strategic vision in the area of public investment will be crucial for continued success of the Irish enterprise sector.
- **Macroeconomic and Fiscal Policy:** Governments by their actions in the fiscal and monetary fields affect the general economic environment for business. They also affect specific economic variables that have an impact on business, such as supply of labour. Economic management and fiscal policy are crucial competitiveness issues.
- **Competition:** Competition is at the heart of the competit-iveness debate. Competition creates downward pressure on prices, and upward pressure on the range and quality of services and products available.
- **Taxation:** Taxation funds government support to enterprise but it also affects the returns from employment and investment, crucially influencing competitiveness. Tax reliefs and allowances are not a substitute for good policy in other areas and should be limited to key priorities so as to minimise overall tax rates.
- **The Consensus Process:** The consensus bargaining process plays a major part in the competitiveness of Ireland. A continuation of this process is essential in the future.

Human Resources

These are the key ingredients for our success in the future. With the advance of globalisation, and with all business activity being linked through telecommunications, location is not as important as the skills with which enterprise is carried out. Ireland's human resources are already of significant importance in our success. They are the reason that much of our foreign direct investment takes place, are the basis for the success of our tourism and services sectors and are the reason that our innovation is increasing. Ireland is unique among Western European countries in having a growing labour force, because of our young population, increasing participation of women in the workforce and the attractiveness of Ireland as a work location for immigration.

However this resource has to be properly developed for the future. The education system on which all the skills of the workforce will be based has to respond to the challenges of globalisation. Its outward looking character has to be increased, especially through a greater focus on languages, both European and non-European and on problem-solving abilities and the development of independent minds. These will be the fundamental skills to deal with the challenges of technological change, and to meet the requirements of flexibility and innovation. The education system needs to be more open and flexible to adapt to provide lifelong learning. The education system if it is developed in this way will better meet the needs of the economy and society as a whole, because it will be better able to meet the challenges of global competition.

Technological change is rapid. It is devaluing old skills and creating new ones. The existing education and training systems may not be adequate to deal with the pace of change. We are, for instance, behind a number of other countries in language skills and in science and technology. The White Paper on Human Resources Development has been a significant step forward, and important new initiatives have recently been taken, especially in the establishment of a technology education fund, and in work now going on to create new training systems operating as a partnership between the Government and the enterprise sector. But much more action is needed beyond these welcome steps. The present system does not yet provide a comprehensive view of the skill requirements for the future. Such a system has to be developed, building on the Forfás/ESRI skills identification project currently underway and linked to the work now initiated by ICSTI in technology forecasting. Careful analysis is needed to form the basis of planning, so that the necessary resources can be allocated in good time.

However, immediate skill gaps are also a critical area. They are emerging not only in some high-technology areas such as software, but also in traditional areas such as the building industry. These may be simply manifestations of labour market tightening in some cases, but in others, they represent gaps that could widen dangerously and put a brake on the present economic progress. There are shortages also in non-skilled areas of certain sectors, such as the retail and tourism sector of the economy. In an economy increasingly emphasising the importance of high skilled jobs, there may be growing difficulties in attracting workers to take up lower skilled jobs, when the alternative may be further study or training that leads to better paid work. In addition, unemployment persists even though vacancies are increasingly emerging.

The Government needs to look carefully at the incentives in the existing system to enterprises to provide training. Are they adequate or do they have a negative effect, discouraging firms from providing their own training?

Few firms are providing high levels of training. In fact, our whole concept of training is too narrow, and the formal training system does not apply to most occupations in which people are actually engaged. A dramatic extension of the certification system is needed, so that all occupations in the industry and services sectors are covered, and the people working in them have objectives to strive for and recognition of their achievement. Germany has a long-standing system of this kind, and the UK has introduced national vocational qualifications in a number of occupations.

Such a system will also encourage a rethink of the operations of many enterprises, and the degree to which their present ways of working offer enough possibilities for job satisfaction to the increasingly educated workforce that our education system is producing. New entrants into the labour force are not necessarily attracted by repetitive work, in which individual initiative and achievement has little or no place. While some repetitive work will remain, its context can be altered. Hierarchical models can be replaced by new participative ones, where teamwork is emphasised. In this way, skill upgrading becomes a way of addressing labour shortages, and enterprises themselves can improve efficiency and become more competitive. This would also lay the basis for a much broader enterprise culture. Entrepreneurship would then be seen not as something different or apart from working life but as simply one manifestation of the qualities that everyone working needs, whether they are an entrepreneur or not: initiative, innovation, flexibility, responsiveness and partnership. Close interaction between education and business at a regional/local level is also of crucial importance. Therefore the structures need to be developed to ensure that educational institutions work in partnership with business to ensure that the skills they are teaching are the skills most needed by the enterprise sector. This will also help ensure that those receiving training will be in a position to enter the workforce directly as their skills will be those needed by enterprises. The best way to ensure that training meets the needs of business is for the process to be business-led.

- A comprehensive system of skill forecasting, looking at the requirements of the future has to be developed, so that supply can be matched with the likely dmend. The recent establishment of an expert group on future skills needs is a welcome development in this regard.
- Improvements need to be made to in-company training capabilities. The government needs to look carefully at the incentives in the existing system to enterprises to provide training.
- A dramatic extension of the certification system is needed.
- Increased resourcing needs to be undertaken to address the quality of primary and secondary education, especially in language and science and technology.
- Awareness of the career opportunities offered by new technologies, especially Information and Communications Technologies (ICTs), has to be increased among those choosing careers. Changed perceptions of career prospects in computing are needed to encourage new entrants.
- Low skills also need atteny=tion, particularly in the services sector with some areas needing urgent action.
- Training systems should be business-led to ensure that the needed skills are developed and that all firms are involved in this process. Moreover, the education system must produce people who are adaptable enough to adjust to the ever-changing skill requirements of the labour market.
- Forecasting can never be completely accurate, and therefore a flexible education and training system, one that is needs-driven, will have to be developed in order to minimise the mismatch between demand and supply.

Costs

Costs are an important basis of competition. Enterprises compete on innovation, quality, responsiveness, flexibility and other factors. But prices determined by costs can still make the difference between success and failure, since price is often a threshold below which other factors are diminished or even eliminated.

Ireland can never be a low cost country. As a prosperous member of the European Union, it is one of the richer countries in the world. Low cost countries, such as China, will increasingly dominate world trade and world foreign direct investment. Ireland's future lies in making best use of its own advantages, including its small size which facilitates social cohesion and specialisation, its educational tradition, its established base of skills and technology, and its geographical position between the United States and Continental Europe. But Irish enterprises still need to have their costs as low as possible.

The cost structures of enterprises differ widely. Typically, however, there will be a number of elements: the raw materials and intermediate products, transport, telecommunications, electricity, financial services and labour costs. The combination of these costs for a particular enterprise determines whether it is profitable or not. Labour costs represent, on average, about a quarter of the total costs of all firms in Ireland. The next largest costs group, credit and insurance, constitutes 3 per cent of total costs.

Unit labour costs are often critical, because they are related to what is often the largest single item in the cost structure of most enterprises. The direct and indirect costs of labour inputs have to be carefully monitored both for their incentive effect in encouraging people to take up work and for their impact on total costs. In Ireland, the position is mixed. Our unit labour costs are competitive enough to attract foreign direct investment in key growth areas such as electronics and pharmaceuticals, but in these areas we face intense competition from other regions in Europe, and other parts of the world, for investment location. There is particular competition in this regard from some regions in the UK, where, outside of London, total costs, and because taxation and PRSI are lower, although this will have changed with recent exchange rate fluctuations.

A number of Irish-owned industries are involved in so-called "traditional" sectors, such as clothing, where they face considerable competition not just from other European countries, but more importantly from Asian and African countries, where similar products can be produced more cheaply because unit labour costs are dramatically lower than in Ireland. While wage costs are lower in developing countries, productivity is not necessarily proportionately low, possibly leading to lower unit labour costs than in Ireland. The way forward for Irish companies lies in continuous improvements across the range of factors that make up the competitiveness agenda. These include costs, innovation, marketing, use of new technology, improved quality and increasing scale. In the meantime, a reduction in the tax wedge will have important incentive effects in encouraging take-up of employment, and in reducing upward pressure on wages in this sector.

Other important aspects of costs include utilities, such as telecommunications, gas and electricity. Ireland's ranking on these costs in European terms is quite good but the UK is better. Competition in these sectors has to be encouraged, as this will be the best way of bringing down costs to business. Delays in the introduction of competition in these areas are not in the public interest.

Insurance costs for business also appear to be very high in Ireland compared to other countries. The reasons that have been put forward for this include the high levels of awards made by the courts. This in turn suggests that the system should be carefully examined in this regard for its impact on competitiveness.

- The way forward for cpmpanies facing low wage foreign competition lies in continuous improvement accross the full range of competitiveness factor. Government action in support of such measures has to be susteined and expanded.
- Government, employers and trade unions must continue to work together to moderate wage increases.
- A reduction in the tax wedge will have important incentive effects in encouraging takr-up of employment, and in reducing upward pressure on wages across the economy.
- Competition in utilities has to be encouraged as this will be the best way of bringing down costs to business.
- The legal system as it fluctuates in relation to insurance claims needs to be examined in order to reduce the very high public liability and employer's liability costs being faced by business.
- Global benchmarking is needed to provide a basis for policy analysis.

Infrastructure

The main items of infrastructure that affect competitiveness are the transport infrastructure and telecommunications. These take time to build up, usually measured in years. Actions in these fields must be identified and implemented as quickly as possible.

Ireland's telecommunications infrastructure has been one of the best in Europe, through strategic investment in the 1980s, but our advantages are being eroded. Broadband services are now widely and competitively available in countries with which we compete. This gap is set to widen further as telecom markets across the EU were liberalised from 1 January 1998 while the Irish telecom market will not be fully liberalised until 1 January 2000. What we need is urgent investment to expand our broadband telecommunications capabilities. The existing infrastructure is not providing the broadband services required at competitive prices for the information society. The structure, therefore, cannot allow for the growth of new service-based industries, which represent a highly important opportunity for Ireland in the future, both in terms of attracting inward investment and indigenous development. The infrastructure needs to be in place ahead of demand, in order to stimulate that demand.

The introduction of infrastructure liberalisation from 1 July 1997 has stimulated a high-level telecom investment in a number of locations of high demand across the country. However, new industries and information-based services will want the broadband services to be in place if they are making an investment decision. It will not be enough for operators to wait until customers ask for service. A decision on an investment and rollout programme for the provision of broadband telecommunications service in advance of demand across the entire country is required as a matter of urgency.

The most effective way to secure the required investment in broadband infrastructure and services in advance of demand is the introduction of a strong pro-competitive regulatory framework, encouraging competition and implementing policies aimed at accelerating investment in and the use of broadband services. Amendments are required to the legislation establishing the Office of the Director of Telecommunications Regulation to enhance the role and powers of the Office. The regulator should have a key role in encouraging competition in the sector and in creating a conducive environment for telecoms investment.

The financing of infrastructure development needs to be an integral part of its planning, and in the context of possible scaling down of EU financing, this is a critical issue. New mechanisms for the financing of infrastructure through cooperation with the private sector need to be more widely considered. Build-Operate-Transfer (BOT) and other private finance partnership schemes are among the possibilities to be taken into account.?

Helped by EU funding, there have been great improvements in Ireland's road structure. But much remains to be done. In particular, crucial gaps exist with respect to port access. Road and air transport need more integrated planning. More generally, a gap exists between the levels of infrastructure available and what is actually required. To some extent this is the one of the problems of success: the infrastructure available is often based on estimates of growth made five or more years ago, when the present strong growth was not envisaged. Because of the time required for decisions to be implemented in this field, the planning process itself needs carefully developed and coherent strategies. These should cover the full range of issues, including environmental and financial issues.

The lack of an adequate public transport system is perhaps the greatest infrastructure deficiency. The costs imposed on enterprise and on the environment by the present traffic congestion in Dublin and our other cities represents an enormous burden for enterprise, reducing productivity, and inhibiting flexibility and speed of response. Inadequate public transport systems are an important cause of this congestion. They affect the availability of part-time workers. The development of an adequate public transport system will take time, but in the meantime use of the existing infrastructure should be prioritised for public transport and for business use with private car transport taking third place.

The administrative and legal framework for physical planning is another critical area of concern. At the moment, the procedures in place delay investment decisions unnecessarily, not so much because decisions can be appealed against, as because of the time that it takes to reach a final decision on whether a project can go ahead. It is certainly possible to create a

system that, while protecting the environment, and the rights of individuals, nevertheless can reach fast decisions and at a reasonable cost.

A partial solution that may be appropriate for some strategic investment projects is the preplanning of designated sites, which would be cleared in advance for particular kinds of industrial activity or a number of possible activities. The potential investor would then know that there was a site available that could be used for the purpose he/she had in mind, providing they comply with plans for the site. Although work has commenced within the Department of Environment on this issue, it should be treated as a matter of urgency.

- Amendments are required to the legislation establishing the Office of the Director of Telecommunications Regulation to enhance the role and powers of the Office
- Telecommunications are a key factor to competitiveness, and the Council plans to make specific proposals on this in mid-1998
- A decision on an investment and roll-out programme for the provision of broadabnd telecommunications service accross the entire country is required as a matter of urgency
- Oriority broadband investment should be encouraged using structural funds in cooperation with the private sector
- The use of the new telecommunications infrastructure should also be promoted
- Ireland's derogation from full competition in voice telephony should be curtailed immediately
- An adequate public transport system must be developed, but in the meantime use of the existing infrastructure should be prioritised for public transport and for business use with private car transport taking thierd place
- The introduction of a pre-planning process for strategic industries should be given a high priority and the process of planning decision-making speeded up

The Information Society

The information society, or post-industrial society, is one in which information is produced, communicated and used intensively. The industrial revolution in the nineteenth century was driven by steam and steel technologies. The technologies that will make possible the information society include advances in computer hardware, software, multimedia and telecommunications. Information and Communications Technologies (ICTs) are having and will continue to have a profound effect on the economy and society. Productivity growth, improved product and services design and faster response to market needs are all aspects of competitiveness that are directly affected by the new technologies. The new technologies are inevitably reducing jobs in some areas, but they are creating them in others. A number of initiatives are under way in Ireland to accelerate progress towards the information society, and it is important to emphasise that steps towards it will represent improvements in Ireland's competitiveness. The Information Society Commission, established within the Department of the Taoiseach, has just issued its first report. Measures such as connecting all schools to the internet and the Information Age Town Competition are underway, a new National Centre for Technology in Education has been established, and work is under development on an Information Society Learning Initiative, and on the feasibility of establishing a Digital Park. In November 1997 the Government announced the establishment of a £250 million Education Technology Investment Fund. The Fund will aim to modernise the infrastructure of third-level institutions, develop new areas of study to deal with high technology skills gaps and promote innovation. These measures, while welcome, will need sustained support and will have to be supplemented by action in other spheres. Teacher training will be essential and new training systems will be needed to reflect the pace of technological change. Other countries are not standing still. The United States plans to have every classroom connected to the internet by the year 2000. Singapore has made heavy public investments in education and R&D in this field.

There is an important aspect of telecommunications costs and service availability that directly affects the developments of the information society. Broadband infrastructure and services are widely available in other countries with which we compete at speeds of up to 155Mbit/s and priced as such compared with only 2Mbit/s in Ireland. A number of these countries including the Netherlands and the UK also have programmes to assist enterprises in the take-up of ICTs and broadband services. Access to the internet for the majority of users in Ireland is through telephone lines (rather than ISDN links). Thus business use of the internet, in particular, will be affected by the peak home cost of local telephone calls to the Internet Service Provider (ISP). Ireland had the highest peak ratio internet access charges in 1996. Its ISP service charges are below the OECD average, but the telephone call component of the total costs of access are so high that Ireland's competitive position with respect to a key area of business information and a key building block of the information society is being serious weakened.

The development of the cable TV network already installed throughout our cities to provide broadband communications would greatly reduce internet charges and could therefore greatly accelerate the development of the information society.

Digital broadcasting also offers great scope for a number of information services. However, the development of these services is constrained by the absence of a national policy on digital broadcasting, one that would set out a course for future growth in this field. An early policy decision is required to provide market indications for Irish content providers, especially in film, TV programmes production and information services. Delay carries a risk that the market could be dominated by foreign interests distributing foreign programming by satellite. This would not be in the interests of Irish businesses in the content industry.

Actions Required:

• The Education Technology Investment Fund is welcome. It will need susteined support and will have to be supplemented by action in other spheres. In particular, akey issue requiring attention is that of courseware, which is the relevant curriculum material needed when the equipment and teachers are in place. Tewacher training is another necessary component.

- A detailed policy on lifelong learning should be developed
- Loacl telephone call charges must be reduced to encourage internet usage.
- An ownership structure of Cablelink needs to be put in place which would quickly invest in and develop the cable TV network for multimedia, internet and telephony services.
- Clear policy guidelines in relation to digital broadcasting should be developed by the Government as a matter of urgency.
- The role of the regulatort should be strenghtened and directed towards full deregulation of the telecommunications market in the year 2000 or earlier.
- ICTs should be used to enhance the efficiency and effectiveness of the public services.
- A policy on digital signature should be implemented to encourage safe electronic commerce.
- The legal framework for the protection of intellectual property should be strenghtened.

EMU

Economic and Monetary Union represents a major strategic challenge and opportunity. The changeover to the new currency and the dual use during the transition period require detailed planning in good time by all Irish enterprises. But there are even more strategic issues at stake.

The existing Irish domestic market will, to a certain extent, merge into a larger one of 300 million instead of 3.5 million. Trading with the other countries of the euro area will be greatly simplified, with cultural and language differences being the most obvious, but also most significant, of the remaining obstacles to the expansion of trade. Opportunities for Irish firms will increase, but so will competition. Companies located in other EMU countries will now find it easier to export to Ireland and can therefore be expected to do so in greater numbers. These challenges are likely to intensify as time goes by. Moreover, transparency of prices will further accelerate competition in goods and services markets, and also in labour and capital markets.

At the same time, there are considerable opportunities for Irish firms, both in finding new markets, and also in finding new sources of supply. The strengths of the Irish enterprise sector, especially in customer orientation and service delivery, will have to be built on, especially through close attention to costs, quality, and innovation. The opportunities offered by EMU will only be fully reaped if the Irish product and labour markets display the flexibility and efficiency required to respond rapidly to the demands of the changing environment. In the large EMU market, the small scale of many Irish firms needs to be addressed. This should be done in the first place by firms themselves but their efforts should, where possible, be supported by the relevant government agencies. The developments of trading links between Irish firms at a sectoral level, and also between Irish SMEs and SMEs in other EMU countries could help minimise the disadvantages of small scale.

A question that is very important to Irish firms is that of the UK membership of EMU. However, the significance of the UK remaining out of EMU in the initial stages should not be exaggerated. It will be recalled that the ESRI Study on this question found that the balances of advantage for Ireland still lay with EMU membership. However, it is necessary to recognise that firms who exploit all available opportunities to reduce their exposure to sterling whether by increasing the flexibility of their cost base or hedging their exposure to sterling in other ways will be best placed to operate in the new environment. Irish firms who export to the UK at the moment enjoy a favourable Irish pound/UK pound exchange rate. With the beginning of the EMU, the exchange rate of concern to them will be the sterling/euro exchange rate. In that sense, little will change. However, there will be benefits, because Irish firms will be able to quote in euro to an increasing degree, in cases where they were unable to quote in Irish pounds and because interest rates can be expected to be lower and more stable than in the past.

Sterling is widely believed to be currently overvalued and may enter EMU at a lower rate. There are nevertheless some fears of a major sterling devaluation with reference to its equilibrium value while outside EMU. But the degree to which this is likely is questionable in light of the British-announced intention to join when conditions were right, and their desire to remain at the heart of European policy. Nevertheless, it is important to avoid complacency. Those Irish enterprises that are dependent on the UK market, or that face competition from UK producers on the Irish market, must be prepared for such an event, however unlikely, and take substantive measures to improve their competitiveness. This will be more difficult for the smaller firms and they are, on average, disproportionately dependent on the UK market. This, given their stage of development, could make many vulnerable. The scope for government action expressed in the form of State services to enterprise is limited by EU rules to restructuring and reorientation of enterprises.

The increasing pressure of transnational (overwhelmingly UK) retailers in Ireland is a related issue, because it is having a number of effects not all of which are positive. Increased competition in the retail sector or any other, especially from best practice companies, is beneficial to the consumer and the existing firms also, by encouraging them towards greater efficiency, quality and innovation. However, foreign retailers, if their Irish operations are established as or transformed into an extension of their own domestic operations, may tend to

source their supplies from one supplier, which may in turn tend to be in their home country. Existing markets for Irish producers may therefore be lost. It might be argued that Irish firms would have new opportunities to serve wider markets, through access to foreign retailers operating here. But in practice many Irish firms may not be able to increase dramatically the scale of their operations in the short time required. Thus when in the context of EMU the prospect of broadening their markets has opened up for some producers, domestic markets may come under increased pressure due to changes in the retail sector. In particular, growing UK resence in the retail sector may lead to a growth of imports sourced in the UK, thus limiting the diversification possibilities opened up by EMU.

- The strenghts of the Irish enterprise sector, especially in customer orientation and service delivery, will have to be built on, especially through close attention to costs, quality and innovation.
- The small scale of many Irish firms needs to be addressed, especially through consolidation and cooperation with other firms in Ireland and the EMU area.
- Irish enterprises that are dependent on the UK market, or that face competition from UK
 producers on the Irish market, must be prepared for the future fluctuations in the value of
 sterling with respect to the euro and take substantive measures to improve their
 competiveness and if possible, to cover their exposure to sterling.

Science, Technology and Innovation

The Government acknowledged the key role of science, technology and innovation in the modern economy by establishing the Irish Council for Science, Technology and Innovation (ICSTI) in April 1997. In September, ICSTI published its first public Statement on national priorities for science and technology. The Statement covered issues which are vital for national competitiveness, including industrial innovation, third-level education and research, and science in schools. The proposals in this section are based on the ICSTI Statement. Ireland is an emerging knowledge-based economy and our future depends on the capability of our enterprises to compete in the global technological environment. Technology is a global commodity. While Ireland itself contributes only a small fraction of new global knowledge, what is important for Ireland is that it should develop and maintain the capability to benefit from global research of relevance to its industrial base. This means that the technical competence has to be developed in enterprises to enable them to identify emerging technologies and adapt them to improve their competitiveness. A programme of research and development in an enterprise implies a commitment to a structured approach to facing the challenge of new technology in the global environment.

Business expenditure on R&D has risen significantly in recent years. As a proportion of GDP, however, it is still well below the OECD average. This is in spite of some considerable efforts that have been made to encourage enterprises to invest in R&D. Since 1993 a major new initiative has been available to support industrial R&D, funded entirely from European Regional Development Funds. Enterprises match these investments with their own funds. About £20 million has been allocated per year to R&D projects in firms from this Industrial R&D Initiative (known as 'Measure 1'), which represents about 5 per cent of the total business sector spend on R&D. Additional resources will continue to be needed for industry R&D in the future. The number of enterprises committed to R&D needs to be increased. It is still the situation that almost 50 per cent of companies have no involvement in R&D and a further 26 per cent have only an occasional involvement.

ICSTI has also warned of the excessive dependence of public sector support for science and technology in Ireland on Structural Funds and of the potentially disastrous situation when the current round concludes in 1999.

Another important link to global scientific developments takes place within the academic research community. Only here are to be found the wide range of skills and expertise capable of monitoring technological advances around the world. Allied to this is the increasing relevance of basic scientific research to modern high-technology industry. For those reasons, and also to train and keep in Ireland the best of our scientific graduates, it is essential to strengthen the very weak State support for research in third-level colleges. The recently announced Scientific and Technological Education Investment Fund, through which the Government will allocate an additional £250 million for capital expenditure in schools and third-level colleges over the next three years, is a very welcome development and will address either directly or indirectly a number of competitiveness issues. Skills have to be developed appropriately if R&D and innovation are to grow. Ireland should aim to raise the performance of school children in science and mathematics; this would enable more people to study science and engineering at third-level. Additional resources are required to strengthen the science curriculum in primary and secondary schools, involving investments in science laboratories and a major commitment to teacher training. Clearly, with the rapid development of the information society, particular attention must be given to computer skills at all levels.

The Irish Council for Science, Technology and Innovation recommended that the Government establish a Strategic Innovation Investment Fund to help finance the accelerated development of those areas of science, technology and innovation of strategic importance to Ireland's competitive position. The recent government announcement to this effect is very welcome.

- Irish firms must develop and maintain the capability to benefit from global research of relevance to their industrial basis.
- Ensure that adequate funding continues to be available for science and technology activities after the current Structural Funds round ends in 1999.
- Realloacte an additional £12 millin from Structural Funds in 1998 for the Industry R&D Scheme ('Measure 1'), with a focus on encouraging new R&D performers and on building long-term research capabilities within enterprises.
- Allocate additional resources to strenghening the links between industry and third-level colleges.
- Additional resources are required to improve the standards of science in primary and secondary schools, particularly to fund teacher training in this area.
- Increase suppoet for basic research in third-level colleges from£2 million per year at present to £6 million per year.
- Financial support for postgraduate research students needs to be increased.

Public Administration

The efficiency of public administration has an important bearing on the competitiveness of the economy as a whole. Its responsiveness and its strategic vision in the area of capital expenditures especially will be crucial for continued success of the Irish enterprise sector. Recent reorientation of public administration towards a goal oriented activity, in the form of a strategic management initiative, is a critical step forward. At the same time, the regulatory role of the State, in ensuring basic quality in services in the protection of the consumer, and in the prevention of unfair competition, are vital roles. They need to be followed by positive action in the area of increased competition in the provision of services, especially those that are critical cost elements, and the quality elements in enterprise operation. Examples are telecommunications, where Ireland has not yet seen the level of competition to be found in countries such as the UK and United States. Other examples would be in areas that are significant cost factors, such as credit and insurance, where costs in Ireland are much higher than in competitive countries.

Actions Required:

 There needs to be positive action in the area of increased competition in the provision of services, espacially those that are the critical cost and quality elements in enterprise operation.

Macroeconomic and Fiscal Policy

Governments by their actions in the fiscal and monetary fields affect the general economic environment for business. They also affect specific economic variables that have an impact on business. As such, economic management is a competitiveness issue. Overall economic management affects economic growth, and it is the prospects for business expansion that will be influenced by overall growth. Businesses are more likely to be successful if the economy as a whole is growing. For that reason growth prospects, which are partly determined by government action, have a major effect on business confidence.

In recent years, Ireland has seen remarkably favourable macroeconomic conditions, that have encouraged growth and are expected to do so for some years to come. Low inflation, declining interest rates and outstanding GDP growth have all come together. Among the immediate causes of recent growth are the stable economic policies in recent years, which have begun to release the potential of the Irish economy and to realise the investments made over many years. A second feature has been the steady progress towards meeting the Maastricht criteria for EMU, which has resulted in debt reduction as a percentage of GDP, a government surplus, low inflation, low interest rates, and reduced exchange rate volatility. The important role of EU funding in Ireland can be expected to be gradually reduced, since new members will have greater claim on funds and Ireland's living standards are rapidly approaching the EU average. Economic management will have to prepare for this. Future potential difficulties might include, for instance, an interest rate level for the euro that was inappropriate for Ireland's economic situation at a particular time or exchange rate fluctuations that might possibly inhibit new foreign investment, discourage exports and create major difficulties for Irish companies on the domestic market. In general, a sharp decline in the growth of GDP could be accommodated more readily if government finances were prepared now for less favourable situations in the future. Government borrowing will have to be further reduced. Advantage should be taken of the present growth to make provision for future potential difficulties. Apart from low growth of government spending in absolute terms, a reduction in government spending in relative terms is also necessary: it has to become a smaller share of GNP.

The thrust of taxation policy needs to be focused on increasing the level of enterprise and investment in the economy in order to accelerate the pace of development and create additional employment opportunities.

- Economic management and excahange will have to prepare for reduced structural funding, the possibility of inappropriate interest rates and a slowdown in GNP growth.
- Government borrowing should be reduced whenever conditions are favourable, as they are now.
- The overall burden of taxation should be lowered in order to assist the development of enterprise.
- As a consequencew, public expenditure growth must be restrained to meet the need to reduce taxation and to aliminate borrowing

Competition

Competition is at the heart of the competitiveness debate. Competition creates downward pressure on prices, and upward pressure on the range and quality of services and products available. The public administration, especially in the form of the Competition Authority, has an important function in encouraging competition. The regulatory activity has to be institutionally linked with the work of the Competition Authority. Barriers to entry, especially licensing requirements and other government limitations on entry into economic activity, may in some cases be justified on health, safety and other grounds related to the general public welfare, but if not they should be eliminated as they distort competition.

The Council believes that privatisation and competition policy should be determined on economic criteria rather than for ideological reasons. For the small number of state-owned firms in Ireland that operate in competitive markets, privatisation or strategic alliances are likely to be an increasing important option to improve their competitive position. Such policies can provide access to increased capital or to economies of scale or enhanced commercial linkages. However, for state-owned monopolies the issue is more complex, and private sector monopolies are usually worse than state-owned monopolies. In such cases regulatory or competitive reforms are much more important and policy should focus on these issues first irrespective of ownership. There is, however, merit in considering appropriate strategic alliances for some of these companies. For the provision of services the principle of market contestability should apply.

- Competitive criteria for price and quality should be established for state enterprises.
- Non-trader private services and potential abuse of dominant position in these areas should be key targets of competition policy.
- State regulatory and licensing activities that impact on competition should be reviewed with the objective of eliminating regulations that impede competition.
- A monitoring system for input costs in key non-traded sectors should be established.

Taxation

Taxation plays a key role in competitiveness. It is a source of income for government that allows it to provide the essential services of public administration, education and health, and social welfare, together with a wide variety of technical and support services that contribute to the success of the enterprise sector. But it has other effects too, in reducing the direct returns of work for an employee and the returns to investment of the enterprise.

Although Ireland is not a very high tax country, it must remain a central policy that the tax burden be reduced. The thrust of taxation policy needs to be focused on, increasing the level of enterprise and investment in the economy in order to accelerate the pace of development and create additional employment opportunities. Tax reliefs and allowances are not a substitute for good policy in other areas and should be limited to key priorities so as to minimise overall tax rates.

Lower PRSI and personal taxes play a key role in facilitating increased employment by reducing employment costs and the extent of the tax wedge compared with Ireland's competitors, particularly the UK. If these costs appear too far out of line with the UK, for example, certain sectors of the Irish economy can move elements of production to the North of Ireland or to England where they have production plants. Labour costs can represent a significant proportion of overall costs in certain sectors, such as metals and engineering clothing, footwear, paper and printing and the services sectors and employment in these sectors can be affected significantly by PRSI/income tax changes. Sometimes, even small differences can tip a decision for or against Ireland as a manufacturing location. In addition, Ireland needs to retain skilled people in the Irish workforce, and levels of personal taxation have a very significant role in location decisions.

Taxation has played a major role in encouraging foreign investment in Ireland. The proposed low corporate tax regime post 2005/2010 arises from the need to remain competitive with other investment locations in other jurisdictions, not just for manufacturing industry but also for services. Recent measures to clarify the situation and establish a clear path towards a reduced level of corporation tax for most sectors of the economy are very welcome. The situation should be closely monitored in the light of changes at an international level and the process of tax reduction should be accelerated as far as possible, with due regard to any associated inflationary risks. For small firms, greater tax reductions should be introduced. Measures of this kind will encourage the emergence of new businesses and encourage existing ones to grow.

- PRSI and personal taxes should take account of the need to remain competitive with respect to the UK.
- Enabling legislation should be introduced for the proposed corporate tax regime post 2006/2010 and the standard corporate tax rate continue to be decreased gradually in the intervening period.
- Greater reductions in corporate tax for small firms should be planned.
- The overall level of taxation should be lowered in order to assist the development of the enterprise sector directly. As a share of GNP, it is still high compared to some other countries.

The Consensus Process

In discussing the competitiveness challenge above, it was pointed out that recent success did not contain in itself any guarantees that this could continue. An essential component of our success in the future will be a continuation of the consensus that has contributed so much to progress over the last ten years. Partnership 2000, therefore, is a key element in competitiveness. In fact, the National Competitiveness Council was created as part of that agreement. But, in the future, new ways of reaching and maintaining competitiveness will have to be found. The structures and key players in the consensus process are changing and will change in the future. We need to refresh the process continuously in order to maintain this vital partnership.

The pressures of the outside world will increase, and the pace of globalisation will mean that rapid response to challenges will be needed. Flexibility within enterprises, but also in social structures, will be an essential requirement, and the more the issues facing Ireland in terms of competitiveness are understood, the wider will be the acceptance of change. The Council, apart from direct advice to the government, sees itself as having an important role in providing that information, in explaining the issues at stake and in encouraging progress in resolving them.

This will provide the necessary complement to the future development of partnership at the enterprise level. Competitive firms will be those flexible and far-seeing enough to identify opportunities and challenges and respond to them. Such a response will need the involvement and commitment of all those in the firm. In this light, it can be seen that competitiveness, which brings general benefits, needs general participation for it to be achieved.

The Council's Work Plan 1998

Objectives

The Council has as its overall objective to provide recomm-endations to government on how Ireland's competitiveness can be improved through policy changes and other actions. Work in 1998 will focus on defining this task in more detail, with the aim of developing a general view of Ireland's competitiveness and identifying some particular key issues on which the most urgent action is needed.

The Council cannot analyse all issues and provide the definitive solutions to all problems. Moreover, the impact of different key issues varies depending on the sector involved, and the size of the enterprise. If the Council makes proposals for government action it needs to have a good appreciation of how the competitiveness issues stand at the level of the individual sectors, and how action at a national level will have an impact. This will be achieved through dialogue with the sectors concerned, and with both large and small firms. The work of the Council in 1998 can therefore be summarised as follows:

- Development of a vision of improved competitiveness in terms of targets.
- Continuing an overview of Ireland's competitiveness internationally.
- Analysis of key issues (skills, costs, information society and telecommunications).
- Analysis of key sectors.

Competitiveness, Vision and Targets

The vision and targets will be developed in pragmatic terms. They will be specifically related to indicators of competitiveness performance and competitiveness process. They will rely on rankings under a number of key issues. They will be expressed in terms of improvement in the rankings by a specified time (5 or 10 years).

Selection of the indicators to be used as targets will require consideration of what are the most important issues and who are the competitors. In the area of exporting, home market competition and attracting foreign direct investment, all countries in the world are, in principle, competitors. The selection of indicators to be used as targets will have to recognise this diversity. It will also have to recognise that issues have more emphasis for some sectors than for others. For instance, the development of telecommunications may be more important to internationally-traded services than it is for some manufacturers.

Selecting these targets, accordingly, will be a difficult task. We will have to rely on dialogue between the Council and others in the field of competitiveness, gathering the views and experiences from the trade unions and the business sector, including large multinational companies and small and medium enterprises (SMEs) alike.

Overview of Competitiveness

The Council will prepare a new edition of the Annual Competitiveness Report to be published in early 1999. This will focus on updated data and expansion of the coverage of some issues, especially in the areas of transport and on public administration.

Key Issues

Work will be carried out as follows:

- Skills: Work will include an examination of the requirements for expansion of the vocational and apprenticeship schemes to cover wider industrial training requirements that are not being met by the present system. Progress in the discussions already underway in this field will be monitored and recommendations made for acceleration in the process.
- **Costs:** A number of costs for enterprise are already monitored within the Annual Competitiveness Report. However there is a need to go deeper, by looking at matched plant comparisons, collecting data at the enterprise level in order to see the costs structures of comparable plants in other countries and how they compare to those in Ireland. This will be carried out in conjunction with an analysis of productivity.
- **Telecommunications:** Here the work of the Council will be in two parts. Firstly, it will monitor progress in improving the telecommunications infrastructure and to make recomm-endations on how that progress could be accelerated. This would relate particularly to the need to expand broadband infrastructures. Recommendations would

also be formulated in connection with the need to improve competition in this sector. A second focus of the Council's work in this sector would be on the need to develop telecommunications-based industries.

• Information Society: The work of the Information Society Commission in the Department of the Taoiseach will be supported by analysing policies in other areas, particularly in such issues as taxation, incentives, skills, education, etc, that could encourage progress towards the information society and the implementation of the recommendations of the Commission.

Sectoral Approach

The Council will address the issue from several perspectives that reflect the diversity of enterprises in the Irish economy and the different weights to be attached to competitiveness factors according as they impact on different groups. A first level of analysis will be to consider issues as they relate to companies associated with inward investment and Irish-based companies. It will, for certain purposes, also be necessary to distinguish between manufacturing and services and between medium to large companies and small companies. These different perspectives will be maintained, as appropriate, in assessing the significance of different competitiveness issues and the required policy priorities.

Conclusion

This is the first statement of the National Competitiveness Council. The issues highlighted have been those on which the Council considers that urgent action is required, and the recommendations have been based on analysis of the main obstacles to improved competitiveness. In this the Council has drawn on the work of other bodies and a number of existing studies and reports.

Competitiveness is a broad subject and comprehensive coverage of all the issues is difficult both because of their variety and interactions and because of the pace of change in the world economy. Urgent action is often necessary. To achieve competitiveness, actions will increasingly have to be assessed and implemented in a short timeframe. The recommendations in the present report are urgent, and future recommendations will be as urgent if not more so. Only in this way can competitiveness be achieved, by responding in policy terms to the shifting challenges and opportunities that technological change and globalisation continuously create.