Executive Summary

Skills will be the key determinant of future competitiveness in the context of accelerating technological change. Therefore, the development of a skill base that will meet the needs of enterprise is one of the most significant challenges facing policymakers, educators and business people. If this challenge is met it will result in continued high economic growth and an improved standard of living. This can be brought about through increased productivity, through the exploitation of opportunities arising from technological change and through contributing to the control of inflationary pressures caused by skill shortages.

The National Competitiveness Council considers that the supply of people with the skills needed to increase competitiveness and sustain economic growth at current high levels can be provided through the following five point strategy:

- 1. Increasing the numbers of people available to work;
- 2. Strengthening the links between education and the world of work;
- 3. Increasing the numbers qualifying each year with high technology skills;
- 4. Increasing the numbers of people with the required low-medium level skills;
- 5. Raising enterprise investment in training for those already at work.

In this statement the Council considers the issues arising from each element of the strategy and proposes specific actions in each case.

- 6. The general supply of labour is becoming an increasingly important issue. Over the last four years employment has grown at an annual rate of 4.2 per cent while the supply of labour has expanded at an annual rate of 2.3 per cent. Unemployment has declined and was 7.8 per cent in the second quarter of 1998. The growth in supply is as a result of rising numbers of young people joining the workforce, emigrants returning to Ireland and more women joining the labour force. These sources of supply may not be as large in the future and this gives rise to a need for active encouragement of women and emigrants living abroad to return to the labour force. There is also a need to ensure that the tax and social welfare system encourages unemployed people to re-enter the labour force and that they have access to the required training and placement services.
- 7. The education system will need to be more responsive to the long-term needs of enterprise and the future career prospects of students. The links between the education and enterprise sectors should be promoted by a more flexible and adaptable response by the education sector to the needs of the business community. In secondary education, further resources for laboratories, teacher training and curricula development should be put in place as soon as possible to ensure that every student takes courses in science and technology and at least one overseas language. A target of one personal computer for every five students by 2001 in second level should be adopted
- 3. Ireland's success in attracting high technology projects from overseas and the development of the Irish-owned software sector have given rise to a significant need for technologists with third-level qualifications. There is a worldwide shortage of information technology skills. This represents an opportunity to attract investment from abroad if these skills are made available in Ireland. There is also an opportunity to develop more Irish-owned companies. Forfás and the Expert Group on Future Skills Needs, which represents the relevant Government departments and agencies, have provided detailed estimates of third-level high technology skill needs. The proposals of the Expert Group should be implemented in the most cost effective and flexible way possible. Full time courses in the universities and Institutes of Technology will be required but maximum use should be made of other approaches

- such as software conversion courses and the release of staff from companies for part time courses.
- 9. Labour shortages are not confined to the high technology sectors. They are increasingly apparent across the labour market. Job vacancies have been difficult to fill in medium and low skill occupations in sectors such as construction, tourism and retail services. The required skill levels for these jobs, because of advances in technology, are higher than was the case in the past. More qualified trainees should be provided to meet these new needs through vocational courses combined with work experience for those entering the labour market from second-level education. Such work-based training, which is practiced widely in Europe, is inadequately developed in Ireland.
- 10. The development of the skills of employees already at work will be of critical importance in the years to come. Some companies are slow to recognise the benefits of in-company training in increasing their competitiveness. However, it is clear that a significant upgrading of skills is required to enable existing companies to embrace new technology and meet competitive threats from other countries. The social partners should establish a business-led approach designed to raise the skill levels of existing employees. Delays in putting in place a national system of certification need to be urgently addressed now.

A full list of the Action Points proposed by the Council is set out in **Appendix 1**.

Introduction

1.1Background

Ireland's investment in education and skills has played a central role in the economic growth experienced over the past decades. Since the 1960s, the share of national income devoted to education has doubled. In recent years, the Government has made major commitments to investments in education and training. The challenge now is to seize the opportunities of rapid technological change by further developing the skills of our people in order to meet increased global competition, and to address gaps that could hinder competitiveness.

The National Competitiveness Council in its two reports - the 'Annual Competitiveness Report 98' and a summary statement 'The Competitiveness Challenge' - emphasised the crucial importance of investing in people to secure the economy's future. In this Statement on Skills the Council sets out its views on the strategies and actions required to ensure that human resources are sufficient to sustain competitiveness in the years ahead.

The statement explains the importance of skills and describes some recent trends in Ireland's human resources. It then proposes a five point strategy to provide the necessary skills, with specific actions under each element of the strategy.

1.2 The Importance of Skills

The Council recognises that increasing and extending the skills base of the economy is central to productivity growth and therefore future competitive success. In turn, productivity and competitiveness are the twin forces that will determine the scale of employment growth and the extent of advances in living standards in the years ahead.

Faced with globalisation in the world economy and enlargement and integration within Europe, Ireland's stock of human capital - the knowledge and skills embodied in the working population - offers the clearest opportunity for the creation of lasting competitive advantage.

Acquiring knowledge and competencies in all occupations is vital and, in a sense, all jobs are now skilled jobs. Despite differences in the level and the amount of learning required, skill is needed for operatives such as meat boners, brick layers, restaurant waiters and cooks, as it is for engineers and scientists, technicians and craftsmen. The "soft" skills, such as team work, communications and enterprise appreciation, are as important in building a competitive firm as the "hard" skills of operating machines, testing new products or checking goods into a warehouse.

Skills are as critical to increasing competitiveness and maintaining jobs in industries such as clothing, furniture and food as in electronics and software. Both overseas and Irish-owned companies and both larger and smaller companies have a fundamental need for a highly motivated, skilled workforce.

The skills embodied in the nation's people contribute to competitiveness and improved standards of living in a number of ways:

- skills raise productivity in existing enterprises, thereby improving cost competitiveness and enhancing the security of employment and opportunities for growth. In modern economies, investments in capital and labour are interrelated and interdependent. The combined effects of such investments yield substantial gains in productivity and long run competitiveness.
- the availability of educated, trained and skilled personnel acts as a magnet in attracting new foreign high-productivity industries to Ireland. Not only do such investment inflows provide well paid work for highly qualified Irish employees, but they further buttress national productivity growth. They can, however, also put pressure on the smaller mainly Irish-owned enterprises as competition increases for the same skilled labour.
- skills, by raising productivity, can lead to growth in personal incomes and can
 enhance employability. Long-term unemployment is concentrated amongst those with
 low educational qualifications and few skills. As a consequence of higher productivity,
 those with higher levels of education and more marketable skills tend to be paid
 more;
- 4. extending and deepening the economy's skills increases employment opportunities. Adding to the economy's skill base minimises labour scarcity and skills shortages, thereby raising the productive potential of the economy.

The significance of shortages of both skilled and unskilled labour should not be underestimated. If not dealt with, these shortages have the potential to bring the current strong growth phase to a premature end by adding to inflationary pressures and hindering the growth of existing companies.

1.3 Trends in Ireland's Human Resources

Labour Force

The number of people available for work has grown substantially in recent years. Ireland's labour force has grown by 7.8 per cent, and those employed have increased by 12.6 per cent, over 1994-97. However, while labour force participation rates have been rising in Ireland in recent years in line with the overall expansion in employment, they still remain well below the levels prevailing in the rest of the European Union.

Some of the factors in the labour force growth are as follows:

- The numbers of young people entering the labour force from education rose from 40,200 in 1994 to 45,900 in 1997, a rise of 14 per cent.
- Female participation in the labour force rose from 39 per cent in 1994 to 42 per cent in 1997, compared to an EU average of 47 per cent.
- Unemployment fell from 219,00 in 1994 to 179,000 in 1997. The numbers of short-term unemployed fell from 76,400 in 1994 to 67,100 in 1997, a decline of 12 per cent.
 The numbers of long-term unemployed fell from 128,200 in 1994 to 86,300 in 1997, a decline of 33 per cent.
- Net migration, the movement of people in and out of the country, changed from -4,700 in 1994 to +15,000 in 1997. This has been driven mostly by a rise in immigration rather than a fall in emigration although the latter has fallen by 17 per cent between 1994 and 1997.

The swiftness of employment growth in recent years is, however, now causing labour markets to tighten. The economy is increasingly exhibiting evidence of both general labour scarcity and specific skills shortages despite the continuing high levels of unemployment. With falling birth-rates¹, reductions in unemployment and declining numbers of emigrants abroad, the rate of labour force growth, as distinct from the actual numbers, which has been an important contributor to the current buoyant economic conditions, is expected to decrease significantly in the medium-term.

Unemployment

Unemployment, while declining rapidly over the past few years and while now below the EU average, still remains high at 8.7 per cent. The Government has recently set an objective of reducing Irish unemployment to seven per cent by the end of 2000². As part of the move to full employment, it intends to cut the standardised unemployment rate to five per cent within a four to five year time span. The plan implies a two per cent long-term unemployment rate.

The National Employment Action Plan provides a strategic framework for a range of activities aimed at reducing unemployment, together with associated issues of reducing early school leaving, tackling unemployment black spots and rural poverty. Other key elements in the Plan include measures to boost the flexibility of businesses and their employees, strengthen equal opportunities policies, develop entrepreneurship, provide better childcare facilities and assist disabled persons in gaining greater access to the world of work.

Participation in Education

The proportion of people participating in education has substantially increased in recent years and is now 85 per cent, which is significantly higher for 15-18 year olds than the average for OECD countries. Nevertheless, although the 20 per cent of the 25 to 64 year olds who have completed third-level education approximates to the OECD norm of 22 per cent, the proportion that has completed secondary levels is only 27 per cent compared with 40 per cent in the OECD.

Retention or 'survivorship' rates through second-level education have risen rapidly from 70 per cent in 1986 to around 82 per cent today. Policy at present is based on increasing this rate to 90 per cent by 2000. The legal school leaving age is 15 at present. It is expected that legislation will be introduced to raise this to 16. Forfás has already recommended that the compulsory school leaving age should be progressively increased from 15 to 16 to 17 by the year 2000³.

The introduction of the Leaving Certificate Applied (LCA) and the development of the Leaving Certificate Vocational Programme (LCVP) has contributed to higher second-level retention rates. More than 8,700 students took the LCVP in 1998, compared to 2,300 in 1997. The LCA course was completed by 1,760 students in 1998, compared to 753 in 1997. It is expected that the numbers participating in 1998/9 will grow to 23,000 for the LCVP (rising to 40,000 in the following year) and to 8,000 (going to 10,000 in the following year) for the LCA.

¹ Despite recent rises in the number of births, the total number of births in 1997 was 52,000. This is substantially below the 1980 and 1990 levels of 74,000 and 53,00 respectively. For the purposes of determining the medium-term supply of school leavers to the labour market, the number of births 10 to 17 years (1981-88) age rather than the current number of births is the relevant consideration. The number of births fell substantially in this period.

² Employment Action Plan', April 1998, page 5.

³ 'Shaping our future' p. 164.

High Level Technology Skills

Transfer rates to third-level education are high. In 1994, 30.5 per cent of Irish young people aged 19 to 21 were enrolled in third-level education compared with an OECD average of 21.5 per cent and an EU average of 22.3 per cent. However, it should be borne in mind that entry ages to third-level tend to be higher in the EU than in Ireland.

The numbers of professionals and technicians employed in Ireland have substantially increased from 188,400 in 1990 to 232,100 in 1997. This is partly in response to the rapid growth of the information technology industries which has led to increased demand for engineers and scientists. Ireland has a higher percentage of third-level qualifications in natural science, maths and business studies, and a lower percentage in engineering, than the OECD norm.

Low-Medium Level Skills

The demand for people with low-medium level skills has also increased. The rapid economic growth in recent years has increased jobs in most sectors. The labour force grew by almost 200,000 between 1992 and 1997, according to the Labour Force Survey. The largest increases in the period 1992-97 were in the producers, makers and repairers, professional and technical worker, and service worker categories.

Because the high levels of participation in education have emerged only in recent years, the skills of some of those at work, especially in the more traditional sectors, still lag behind those of competitor countries. For example, the percentage of Ireland's adult population that achieves higher levels of literacy is significantly less than other developed countries and especially so in quantitive literacy⁴. The percentage of the population participating in adult education and training during the past year is also significantly lower than in other developed countries.

In-Company Training

The swiftness of industrial and technological change requires a rapid adaptive response from enterprises and from those who work in them. Eighty per cent of the workforce that will be working in ten years time is already working. Raising and refining the skills of those already at work in enterprises is a crucial component in the process of industrial adaptation. Existing employee skills are seen as deficient by enterprises themselves. A Forfás/ESRI survey showed that 30 per cent of companies see skill deficiencies as a problem and 60 per cent see a need for increasing skill levels in technology, quality and customer service. More generally, small and medium-sized companies (SMEs) have relatively low labour productivity. Productivity in firms with up to nine employees, for example, is 65 per cent of UK levels.

⁴ Ireland came second last in the survey in having the largest proportion (25 per cent) of the survey scoring at the lowest level (Level 1), compared with Sweden, best at 6 per cent, and the netherlands (10 per cent) and Ireland came third last in terms of participation in education and training in the previous 12 months (29.5 per cent) comapred with 53 percent in Sweden and 40 per cent average among those surveyed.

1.4 Overall Strategy to Increase the Supply of People with Skills

In the context of slower growth in the labour force and accelerating growth in the demand for skills, the National Competitiveness Council considers that the supply of people with the skills necessary to sustain economic growth and competitiveness can be provided through the following five-point strategy:

- i. Increasing the numbers of people available to work;
- ii. Strengthening the links between education and the world of work;
- iii. Increasing the numbers qualifying each year with high technology skills;
- iv. Increasing the numbers of people with the required low-medium level skills; and
- v. Raising enterprise investment in training for those already at work.

This statement will now consider the issues arising from each element of the strategy and will propose specific actions in each case.

Increasing the Number of People Available for Work

Overview

Increasing the numbers available for work requires:

- Increasing the financial incentives to work;
- Setting targets for reducing long term unemployment;
- Improving placement and training services for the unemployed;
- Addressing barriers to work for women;
- Encouraging returning emigrants and other immigrants; and
- Supporting the disabled.

Financial Incentives to Work

Personal income taxation in Ireland is considered high at 32.5 per cent of the average industrial wage. Partnership 2000 committed the Government to introducing personal tax reductions of £900 million over three years. The 1997 budget provided reductions in taxation rates from 26 per cent and 48 per cent to 24 per cent and 46 per cent respectively and increases in allowances and changes in treatment were introduced in the 1998 budget. Nevertheless personal taxation remains high, particularly for single people when compared with countries such as the UK and the US, which are competing labour markets.

This has two consequences. First, the level of gross wages which an unemployed person has to obtain to be better off working is relatively high. This provides a major disincentive to work, especially for certain categories of unemployed people. The prospect of losing benefits such as medical cards, which permit free medical care, adds to the disincentive to work. Improved Family Income Supplement, Back to Work Allowances, retention of benefits and reviews of the need and commitment to work of social welfare recipients are substantial incentives to work but do not counteract the taxation disincentive. Further reductions in tax for the lower paid are required to achieve this objective.

Second, the incentive for returning to Ireland is less than it otherwise would be. While OECD comparisons show that Ireland has relatively low overall taxation levels as a percentage of GDP, its personal taxes as a percentage of GDP are relatively high compared to competing labour markets such as the UK. The key comparison is with the UK and the US, which are competing labour markets. Despite improvements in recent budgets in 1998-1999, a single person in Ireland compared to a single person in the UK earning a £15,000 annual salary pays nearly 2 per cent more of his or her income in taxation. The tax differential increases substantially at higher levels of income. Differential tax levels, together with rising house prices and rents, are a major disincentive for returning emigrants to enter the labour force in Ireland.

Targets for Reducing Long-term Unemployment

Reductions in the level of long-term unemployed require the implementation of a complex set of inter-related policies. These include measures to prevent the numbers growing such as training and other initiatives for school leavers. They also include counselling on a one-to-one basis to help those already unemployed to acquire a renewed interest in work and to find the training and job opportunities most suited to other talents. This requires a high degree of coordination of the activities of Government Departments and Agencies.

The National Employment Action Plan, referred to in Section 1, in moving towards full employment, sets an implicit target for reductions in the level of long-term unemployed. As part of the National Employment Action Plan, progress towards a target for reduced long-term unemployment needs to be kept under review. As total unemployment falls, long-term unemployment as a percentage of total unemployment needs to be kept below 50 per cent. This objective also needs to be kept under review.

Placement and Training Services for the Unemployed

Improved client services and operating economies could be achieved by combining the Local Employment Services (LES) and the FÁS Placement Services. The White Paper on Human Resource Development proposed this under a revitalised National Employment Service which would provide a guidance, counselling and placement service for the various categories of unemployed persons. It would act as a gateway to suitable training and career options for those particularly distant from the labour market and offer an effective recruitment service to employers. Such integration of the two services has not yet happened.

The Department of Enterprise, Trade, & Employment has outlined in broad terms the structure it envisages for the employment service. In the meantime, FÁS Employment Services have been and will continue to be strengthened, with significant extra staff being allocated. However the planned nationwide expansion of the LES has been delayed, pending discussions with interested parties and a detailed decision on the structure of the new Employment Service. It is important that a decision on this be made soon, so that an efficient and properly resourced Employment Service is available to all unemployed persons.

Additional advisors and counsellors are required to assist unemployed people, particularly the long-term unemployed, to find suitable jobs. The current ratio, of one advisor for around 600 unemployed, is considerably lower than the one advisor for 125 disadvantaged unemployed, recommended by the NESF in its report on long-term unemployment. It is vital that the Employment Services be provided with the appropriate resources to deal with the most-difficult-to-place unemployed. This implies a higher ratio of advisors to the unemployed.

It is important that the Employment Service have access to a full range of training and employment support options for its long-term unemployed clients and that the training providers be responsive to the requirements identified by the Employment Service. Evidence suggests that general training programmes and direct employment schemes will have an enhanced effect on the employment prospects of the long-term unemployed if they are followed by more market-oriented training and work experience programmes. The placement services can have an important role in making sure that sufficient places are available for the long-term unemployed.

Barriers to Returning to Work

While women's participation in the Irish labour market has increased continuously and significantly over the past two decades, only 42 per cent of Irish women over the age of 15 years were members of the Irish labour force in April 1997.

The absence of adequate childcare facilities is a clear impediment to women's participation in the Irish labour market, and as such it is an important competitiveness issue. 'Partnership 2000' established an Expert Working Group on Childcare, chaired by the Department of Justice, Equality and Law Reform. This is expected to report in December 1998, and to recommend strategies to develop a comprehensive network of quality childcare facilities throughout the country. An Equal Opportunity Childcare Programme is piloting some initiatives in this area. Under Partnership 2000, the Working Group on Womens' Access to Labour Market Opportunities is considering the barriers to women returning to work. This group is also expected to report shortly.

As a means of facilitating and encouraging the supply of childcare facilities, the Government has decided that the provision of certain créche facilities by employers will not be subject to a charge to income tax in the hands of employees as a benefit-in-kind. Furthermore, the Finance Bill, 1999 will provide for capital allowances to allow for the write off of capital expenditure incurred in connection with buildings or premises constructed or used by employers to provide childcare facilities for their staff. This capital allowances regime will also extend to providers of childcare services generally in the community.

Immigration

The 1980s witnessed extensive net emigration from Ireland. Between 1985 and 1996, net Irish migration – emigration less immigration - amounted to 160,000 people. These people, along with overseas nationals, are now returning to Ireland at a rate of 45,000 each year. FÁS has a number of initiatives under way to ensure that people working abroad are fully informed of the opportunities becoming available in Ireland. These include services provided, for example, through FÁS Placement Officers abroad and information campaigns at Christmas time. Enterprise Ireland has launched a campaign to attract people with technology skills back to Ireland. However, a comprehensive policy on migration has not been developed.

Support for the Disabled

The disabled are a particular group who face considerable difficulties in obtaining work and yet can contribute to the economy in many ways. The abolition of the National Rehabilitation Board (NRB) and the absorption of the NRB placement functions by FÁS represents major administration changes in this area. It is vital that the disabled be given a high priority in FÁS programmes and by the employment placement services.

Action Points

- 1. Future tax reductions should be focused on those at or below average industrial pay (Department of Finance);
- 2. As part of the National Employment Action Plan, progress towards a target for reduced long-term unemployment needs to be kept under review. As total unemployment falls, the share of long-term unemployment as a percentage of total unemployment needs to be kept below 50 per cent. This objective also needs to be kept under review (Department of Enterprise, Trade & Employment).
- 3. The Employment Services functions should be strengthened by integrating the FÁS and LES operations (Department of Enterprise, Trade & Employment/FÁS).
- 4. The Placement Service should be able to ensure that sufficient bridging courses and individual counselling are available for the long-term unemployed to equip them for entry to education and training options, including FÁS training courses, designed to meet the needs of companies. (Department of Enterprise, Trade & Employment/FÁS).
- 5. The disabled should be given a high priority in training and employment service programmes. (FÁS).
- 6. The recommendations of the forthcoming reports from the Expert Group on Childcare and the Review Group on Womens' Access to Labour Market Opportunities should be considered and decided upon as a matter of priority. (Department of Justice and Equality, Department of Enterprise, Trade & Employment).
- 7. A comprehensive migration policy should be developed. (Department of Enterprise, Trade & Employment).

Strengthening the Links between Education and the World of Work

Overview

The key issues in strengthening the links between education and the world of work involve:

- Increasing investment in pre-school and primary school education;
- Eliminating the flow of early school leavers;
- Increasing the commitment to technology and overseas languages;
- Enterprise and education working together.

Pre-school and Primary School Investment

Ireland is not investing enough in pre-school and primary education, which are vital foundations for developing confident, creative and critical people who can play a full role in society and the economy in later life. It is in the country's interest to have a proper investment at this early stage of people's learning. International evidence suggests that investment in primary education can result in substantial gains in learning. Yet Ireland's per capita investment in primary education is one of the lowest in the developed world, and pre-school facilities and childcare in general are at extremely low levels compared to other EU countries.

This leads to early school leaving, adult illiteracy, little exposure to science and technology and to foreign languages. All of these deficiencies are especially prevalent in disadvantaged areas. In recent years expenditure has increased on primary education. Yet much remains to be done. These deficiencies, if allowed to continue, will have a negative long run impact on social cohesion and economic performance. Substantial extra funding would be needed to raise investment in primary education to the EU average. Over the medium-term, steps should be taken to increase substantially expenditure on identified needs within primary education, in the context of the Government's overall financial targets.

Early School Leavers

Approximately 3,600 leave school each year without completing the junior cycle and a further 10,400 leave after junior cycle without completing the senior cycle. In the last year additional measures to address the issue have been put in place at a cost of £20 million over three years. Nevertheless, much remains to be done to eliminate this problem, which contributes so much to long-term unemployment.

The NESF has proposed a series of preventative and second-chance measures. Preventative measures, aimed at existing flows through the school system, could embrace more preschooling in disadvantaged areas, improved monitoring and follow up of non-attendees, and acknowledgement of achievements other than academic ones. Second-chance measures, targeted on those who have already left school, could include extra provision for training and work experience, and increased allocations of resources for second-chance education for the most disadvantaged. The 1998 Budget contained a £59 million package to address educational disadvantage, including substantial initiatives in the areas of early intervention and adult literacy.

Technology and Overseas Languages

The numbers of pupils taking Leaving Certificate examinations in science fell by 6 per cent between 1995 and 1998. The numbers of students learning an overseas language is low compared to what is needed. French attracts 57 per cent of second-level students but the numbers taking German, Italian and Spanish are substantially lower. Technology and languages are important to competitiveness and need to be studied at second-level to encourage entry to courses in these areas at third-level.

OECD comparisons suggests that Ireland's technology education is of average standard. The performance of second year students is not significantly different from the international norm in mathematics or science. Science and technology at second-level is constrained by the availability of laboratories, the numbers and skills of science teachers and outdated curricula.

The IT 2000 initiative, which envisages an investment of £40 million in equipping schools for information technology and a major effort to train teachers in the use of computers, will result in one personal computer for every ten students. This ratio is too low for students to use computers as an everyday tool. For upper secondary education, it should be expected that all pupils have computer access, while at lower levels a higher ratio of computers to students would be acceptable. A target of one computer to every five students should be set for the medium-term.

Enterprise, Social Partners and Education Working Together

Initiatives, such as the IBEC Business and Education Links Programme (which provides structured inputs to help students developtheir personal, interpersonal and enterprise skills) and ICTU's Youth Start (which provides teachers and pupils with modules about the world of work) provide excellent opportunities for teachers and students to deepen their knowledge and understanding of the world of work. In a period of unparalleled change education and business should be working together even more closely to prepare people for the challenges they face. The transition year provides particular opportunities for building links between the worlds of work and education. The programmes that provide for work experience in initial education outside third-level include Transition Year, Leaving Certificate Applied, Leaving Certificate Vocational Programmes and Post Leaving Certificate course. In addition, Youthreach and Vocational Training Opportunities Scheme (VTOS) have work experience programmes. However, they are available in only 70 per cent of schools and only 40 per cent of the eligible students participate.

At third-level, the swiftness of economic and technological change necessitates greater flexibility in course construction and delivery. The corollary of continuous change is the requirement for lifelong learning. Third-level institutions will need to accommodate these new demands for continuous learning by providing a mix of full time and part time options, by making more flexible modes of delivery available (e.g. distance learning), by increasing provision for adult education and, above all, by demonstrating increased flexibility in responding to changing workplace needs. The six month company placement in the software technician course recently developed by businesses and the Institutes of Technology is particularly innovative. The work of the Business, Education and Training Partnership, including the Expert Group on Future Skills Needs chaired by Dr. Chris Horn, should also be noted. The IBEC/CHIU Joint Council is another tangible example of the co-operation that can exist between business and education to the benefit of both.

There is a need for a national system of certification. The National Vocational Qualifications (NVQ) is being increasingly used by companies in the UK. Teastas has responsibility for introducing a similar system in Ireland. Teastas was set up on an interim basis in 1995 and has now produced two reports on the proposed structures for the new national accreditation body. These reports have provided input into the Education and Training Qualifications Bill, which is currently being drafted. It is expected that the bill will be completed by the end of 1998. Until the new body takes over, the NCVA and NCEA will continue to have responsibility

for accreditation. However, the Council is concerned about the considerable delays in the establishment of the new body. A national system of certification, covering as broad a range of skills as possible, would provide clear definitions of skills and their attainment, and make the skills market more transparent to all involved.

Action Points

- 8. Increase substantially investment in primary education, especially in identified priorities of science and technology, languages and literacy.
- 9. The present voluntary system of adult literacy education should be reinforced with increased research and planning and more professional support staff. All FÁS programmes and Local Employment Services should provide the option of referral to adult literacy programmes at induction stage.
- The impact of measures proposed by NESF aimed at early school leavers should continue to be monitored.
- 11. In secondary education further resources for laboratories, teacher training and curricula development should be put in place as soon as possible to ensure that every student takes courses in science and technology, and at least one overseas language. A target of one personal computer for every five students by 2001 in second-level should be adopted.
- 12. Links between education and enterprise should be strengthened in the following ways to promote a more flexible and adaptable response by education to the needs of the broad business community:
 - extending initiatives such as the IBEC Business Education Links programme to all secondary schools;
 - the structured development and assessment in schools of soft skills such as communication, team working, initiative, enterprise appreciation and time management skills;
 - the Transition Year is now available as an option to all schools and schools should be encouraged to take the option and make it available to all students;
 - college/industry links should be promoted for Post-Leaving Certificate courses within the national modular framework in place under the National Council for Vocational Awards, with industry involvement in setting learning outcomes and performance and assessment criteria at national level;
 - individual third-level institutions should be invited to establish curriculum development committees in co-operation with representatives of the broad business community;
 - exposure to the world of work should be a standard feature of third-level education programmes.
- 13. A national system of certification should be put in place immediately, covering as broad a range of skills as possible

The Department of Education and Science is responsible for these areas.

Meeting High Technology Skills Needs

Overview

Meeting high technology skill needs involves:

- providing the required places in technology courses;
- ensuring adequate numbers of people apply for the courses.

Third-Level Places

The rapid pace of national employment growth over the last five years, the success in attracting foreign high technology enterprises to Ireland, the increasing application of high technology skills across the economy and future expansion plans in the context of a worldwide shortage of IT skills will cause the high technology skills issue to become particularly acute in Ireland if remedial action is not undertaken. Increased Government financial provisions have already been made in both 1997 and 1998 in pursuit of this objective.

An Expert Group on Future Skills Needs, in a report to the Tánaiste and the Minister for Education and Science, published on 8 December 1998, concluded that there will be an average annual shortfall of 2,200 in technologists up to 2003. Of this, 900 are engineering and computer science graduate professionals and 1,300 are engineering and computer science technicians⁵:

The Group has proposed that the shortfall be met in a cost effective and flexible way through increased places in full time university and Institute of Technology education, greater use of conversion courses, improved completion rates, additional company-based education places, Accelerated Technician Learning and overseas recruitment. A Project Implementation Group has produced detailed costings for the required places.

Awareness

Steps such as media campaigns, teacher education, company visits and exhibitions should be taken to ensure that a higher proportion of second-level students considers pursuing third-level courses leading to careers in science and technology. While the number of applicants for technology degree courses has increased since 1992, further increases are needed to match requirements.

⁵ The First Report of the expert group on Future Skills Needs, page 7.

Action Points

- 14. The proposals of the Expert Group on Future Skills Needs should be implemented as quickly as possible (Skills Implementation Group)
- 15. The Skills Awareness Programme, initiated by Forfás on a limited scale to encourage more Leaving Certificate students to enrol in science and technology courses, should be expanded. (Expert Group on Future Skills Needs).

Meeting Low-Medium Level Skill Requirements

Overview

The key issues involved in meeting low-medium level skills are as follows:

- Forecasting demand and supply and developing responses;
- Providing traineeships and apprentice places;
- Providing more market-related and company-based training.

Forecasting Demand and Supply

Labour shortages are not confined to the high technology skills segment, but are increasingly apparent across the labour market. However some of the evidence is anecdotal and there is a need for ongoing forecasts of demand and supply in order to develop appropriate responses.

As far back as October 1996, when the labour market was much looser, FÁS found difficult-to-fill vacancies included not only high skills occupations, but drivers, assemblers, packers, general operatives and cleaners⁶. This is being confirmed by more recent surveys carried out by Forfás, IBEC and others. In particular, sectoral surveys have indicated significant labour shortages in construction, tourism, retail services and teleservices. Employment demand is expected to continue to grow in the years immediately ahead.

More Market Related and Company-Based Training

Currently FÁS and the Vocational Education Committees are the main providers for medium and low level skill training. However, the number of trainee and apprentice places is inadequate for the needs of the people who wish to be trained and for the companies who want to employ them.

FÁS organises traineeships in which employers provide in-company training. At present 1,600 trainees are involved on these programmes but the White Paper on Human Resource Development proposed an annual target of 5,000 trainees. The White Paper envisaged these traineeships being aimed at new entrants into the labour market. Some 5,500 individuals were registered as apprentices in 1997 but there is a substantial shortfall in the number of places available for off-the-job training as a result of greater than expected demand.

FÁS provides industry training for the unemployed through its own centres and through external consultants. While job placement rates are high (60 per cent), placements in jobs that are likely to use the skills acquired in training are much lower. A greater involvement by companies in the design and development of these courses is likely to lead to greater placement of trainees in jobs that require the skills acquired in their courses.

⁶ Survey of Current vacancies in selected sectors of the Irish Economy, October 1996', FÁS/IMS, August 1997.

Action Points

- 16. The Expert Group on Future Skills Needs, in conjunction with the representatives of the social partners, should quantify the skill needs of the construction, retail and tourism industries and formulate responses. (Expert Group)
- 17. The phased introduction of the National Traineeship Programme over the years to 2001, announced in the 1997 White Paper on Human Resource Development, should be accelerated to achieve the target of 5,000 as soon as possible (FÁS)
- 18. Urgent action should be taken to ensure adequate off-the-job training places for apprenticeships (FÁS and social partners)
- 19. FÁS should work more directly with companies and their representative associations to ensure that its courses are directly related to the needs of enterprise (FÁS).

Enterprise Investment in Training

Overview

The key steps to address the low level of training in companies are as follows:

- Development of a business-led process based on social partnership;
- Implementation of proposals in White Paper on Human Resource Development;
- Incentives and other support;
- Benchmarking against other countries and companies.

Business-led Process Based on Social Partnership

" ... a partnership approach between management and employees/trade unions is of key importance in managing change effectively and developing and maintaining an effective human resource development and training strategy which helps to achieve long-term competitive advantage. Mechanisms need to be developed to ensure a business-led process in the development and implementation of training policy, aimed at upgrading skill levels in business. Such processes must also accommodate employee representatives."

There needs to be a significant increase in the level and quality of training and learning undertaken by employees within companies. In particular, increased levels of management development and training are required, especially among SMEs. In the absence of such measures, there will be a serious loss of competitiveness and consequent reductions in employment growth, especially in the SME and indigenous sectors.

White Paper on Human Resource Development

Companies need to increase training expenditure from 1.5 per cent to 3 per cent of payroll. There is also a need to kick-start company training initiatives with public funds as outlined in the White Paper on Human Resource Development, which acknowledged the need to increase in-company skill training and proposed:

- A Training Awareness Campaign, to highlight the benefits that accrue to firms from investment in human resource development.
- Training Networks, to encourage the formation of networks of firms and business associations based on individual sectors, regions, skills needs or market segments.
- Increased expenditure on the Training Support Scheme.
- Tax allowances of up to £1,000 to encourage individuals to undertake part time training and education:

The Training Awareness Campaign has commenced with EU funding and is operated jointly by IBEC and ICTU. A fund of over £6.5 million has been allocated to the training networks and a number of pilot projects are being established. An extra £2 million has since been added to the Training Support Scheme and the personal tax allowances were introduced in the 1997 budget.

Incentives and Other Support

Enterprise Ireland was recently established and will be responsible for encouraging training in Irish controlled enterprises in the internationally-trading sector. FÁS remains responsible for enterprise training outside the internationally-traded sectors and for certain aspects of training, such as traineeships and apprenticeships, for all companies. Exactly how the new arrangements will specifically act to accelerate training within companies has yet to be worked out.

Companies in certain sectors are obliged by legislation to pay a training levy that is administrated by FÁS under the direction of the Industrial Training Committees. Since 1993 companies can net out the levies and their grant aid. Concerns have been expressed about the effectiveness of the levy/grant system and these concerns need to be addressed.

Benchmarking Against Other Countries and Companies

In-company training is lagging behind other countries. The exact size of the gap is hard to establish because meaningful benchmarks are difficult to develop. This issue needs to be addressed by adopting appropriate benchmarks and publishing regular comparative information at a sectoral level. Companies can then compare their own performance with sectoral norms in Ireland and other countries.

Action Points

- 20. The social partners, facilitated by the appropriate bodies in accordance with Partnership 2000, should establish a mechanism that can ensure a business-led process is established to develop and implement training in partnership with employee representatives aimed at upgrading skill levels in business. In particular consideration should be given to the following issues:
 - whether the White Paper initiatives on training awareness campaigns, training networks, and increased levels on traineeships and training support are leading to substantially increased levels of company-based training or whether alternative or/and additional initiatives need to be undertaken;
 - the strategies needed to ensure a substantial increase in enterprise training within a short and defined timeframe;
 - in the context of the substantial increases in public funds already allocated, the scale of resources required, and possible funding sources for further investment:
 - the current usefulness of, and/or the changes needed, in the levy/grant system;
 - developing a benchmarking system that would set down the required benchmarks of achievement, such as a specific number of off-the-job training days for existing employees, training budget as a percentage of sales, occupational skills relative to best practice competitors and the impact of training on productivity.

Appendix1: Action points of the Skills Statement

Increasing the Number of people Available to Work

- 1. Future tax reductions should be focused on those at or below the average industrial pay (Department of Finance):
- 2. As part of the National Employment Action Plan, progressed towards a target for reduced long-term unemployment needs to be kept under review. As Total Unemployment falss, the share of long-term unemployment as a percentage of total unemployment needs to be kept below 50 per cent. This objective also neess to br kept under review. (Department of Enterprise, Trade and Employment).
- 3. The Employment Services functions should be strengthened by integrating the FÁS and Les operations. (Department of Enterprise, Trade& Employment/FÁS).
- 4. The placment service should be able to ensure that sufficient bridging courses and individual counselling are available for the long-term unemployed to equip them for entry to education and training options, including FÁS training courses, designed to meet the nedds of companies. (Department of Enterprise Trade & Employment/FÁS).
- 5. The disabled should be given a high priority in training and employment service programmes. (FÁS)
- 6. Thge recommendations of the forthcoming report from the Expert Group on Childcare and the Review Group on Womens Access to Labour Market Oportunities should be considered and decided upon as a matter of priority. Department of Jstice and Equality, Department of Enterprise, Trade & Employment/FÁS)
- 7. A comprehensive migration policy should be developed. (Department of Enterprise, Trade & Employment).

Strengthening the Education-Enterprise Links

- 8. Increase substantially investment in primary education, eespecially on identified priorities of science and technology, languages and literacy.
- 9. The present volountary system of adult literacy education should be reinforced with increased research and planning and more professional support staff. All FÁS programmes and local Employment Services should provide the option of referral to adult literacy programmes at induction stage.
- 10. The impact of measures aimed at early school leavers proposed by NESF should continue to be monitored.
- 11. In secondary education further resources for laboratories, teacher training and curricula development should be put in place as soon as possible to ensure that every student takes courses in science and technology, and at least one overseas language. A target of one personal computer for every five students by 2001 in second-level should be adopted.
- 12. Links between education and enterprise should be strengthened in the following ways to promote a more flexible and adaptable response by education to the needs of the broad business community:
 - extending initiatives such as the IBEC Business-Education Links programme to all secondary schools.
 - the structured development and assessment in schools of soft skills such as communication, team-working, initiative, enterprise appreciation and time management skills;
 - the Transition Year is now available as an option to all schools, and schools should be encouraged to take the option and make it available to all students.
 - college/industry links should be promoted for Post Leaving Certificate courses within the national modular frameworkin place under the NationalCouncil for Vocation Award, with industry involvment in setting learning outcomes and performance and assesment criteria at national level;
 - individual third-level institutions should be invited to establish curriculum, development commities in co-operations with representatives of the broad business community;
 - exposure to the world of work should be a standard feature of third-level education programmes.
- 13. A national system of certification should be put in place immediately, covering as wide a range of skills as possible.

The department of Education and Science is responsible for these areas.

Meeting High Tech Skills Needs

- 14. The proposals of the Expert Group on Future Skills Needs should be implemented as quickly as possible.(Skills Implementation Group)
- 15. The Skills Awareness Programme, initiated by FÓrfas on a limited scale to encourage more Leaving Certificate students to enrol in science and technology courses, should be expanded.(Expert Group for Future Skills Needs).

Meeting Low-Medium Level Skill Requirements

- 16. The Expert Group on Future Skills Needs, in conjunction with the representatives of the social partners, should quantify the skill needs of the construction, retail and tourism industries and formulate responses.
- 17. The phased introduction of the National Traineeship Programme over the years to 2001, announced in the 1997 White Paper on Human Resource Development, should be accelerated to achieve the target of 5,000 as soon as possible (FÁS)
- 18. Urgent action should be taken to ensure adequate off-the-job training places for apprentices (FÁS and social partners)
- 19. FÁS should work more directly with companies and their representative associations to ensure that its courses are directly related to the needs of enterprise (FÁS)

Enterprise Investment in Training

- 20. The social partners, facilitated by the appropriate bodies in accordance with partnership 2000, should establish a mechanism that can ensure a business-led process is established to develop and implement training in partnership with employees representatives aimed at upgrading skill levels in business. In Particular consideration should be give to the following issues:
 - whether the White Paper initiatives on training awareness campaigns, training networks, and increased levels on traineeships and training support are leading to substantially increased levels of company based training or whether alternative or/and additional initiative need to be undertaken
 - the strategies needed to ensure a substantial increase in enterprise training within a short and defined timeframe;
 - in the context of the substantial increases in public funds already allocated, the scale of the resources required and possible funding sources for further investments;
 - the current usefulness of, and /or the changes needed, in the levy/grant system;
 - developing a benchmarking system which would set down the required benchamarks of achievement, such as specific number of off-the-job training days for existing employees, training budget as a percentage of sales, occupational skills relative to best practice competitors and the imapet of training on productivity.