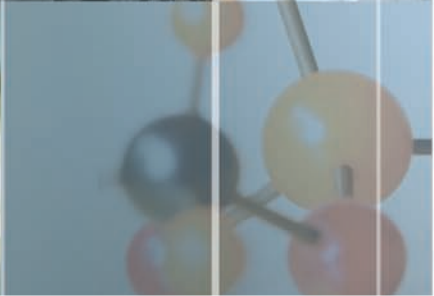


chapter 9



Human Capital Priority

Human Capital Priority

Objective of Priority

Investment under the Human Capital Priority of NDP 2007-2013 is indicatively estimated at €25.8 billion. The investment and funding source by Programme is set out below.

Human Capital Priority

Programme	All figures in € million current prices					
	Exchequer	PPP	Local Auth.	State Bodies	NTF*	Total
Training & Skills Development	4,785	0	0	104	2,829	7,718
Schools Modernisation & Development	4,521	540	0	0	0	5,061
Higher Education	12,422	595	0	0	0	13,017
Human Capital Total	21,727	1,135	0	104	2,829	25,796

*National Training Fund.

Lifelong Learning is the guiding principle for education and training policy in the context of the Lisbon Agenda. The major outputs under this Priority will be:

- To upskill the workforce through promoting access to appropriate training and lifelong learning;
- To implement the National Skills Strategy with the goal of increasing the skill levels of a significant proportion of those at work in support of Ireland's aims of improved competitiveness and moving jobs quality up the value chain;
- To expand the workforce through the activation of groups such as the unemployed, people with disabilities, lone parents, Travellers, ex-offenders, women and older people as well as the implementation of an appropriate skills based migration policy;
- Continued high investment levels in third level infrastructure — 35 large scale priority projects will be delivered by the end of 2010 in addition to significantly increased investment in the further modernisation and expansion of higher education infrastructure;
- To drive the reform and modernisation of the third level sector by enabling institutions to align their strategies with national priorities through the implementation of the new funding arrangements and the impact of major investment under the Strategic Innovation Fund;
- To significantly increase the numbers of high quality graduates as well as widening participation in third level education;
- To provide sufficient school capacity at first and second levels in light of the growing school population;
- To provide the teachers and accommodation needed for improvements in special education provision;

- To provide for the modernisation of subjects at post-primary level;
- to provide for investment in Information and Communications Technology in schools; and
- To provide for curriculum reform and the National Framework of Qualifications.

It should be noted that there are also Human Capital Priority elements in the Sub-Programmes under the Marine Development Programme and in the Údarás na Gaeltachta Sub-Programme in the Enterprise, Science and Innovation Priority.

With regard to the potential for North/South co-operation, work is underway to enhance the efficiency of the island's labour market and to ensure that sufficient and appropriate skills are in place to encourage sustained growth.

Role of Human Resources

Investment in education, training and upskilling, broadly termed as investment in human capital, has played a very important role in Ireland's successful economic performance. It has provided a well skilled and flexible labour force and thereby helped make Ireland a major attraction for domestic and foreign enterprises. Ireland was particularly successful in harnessing European Social Fund (ESF) receipts to very good effect. Human Capital funding in the Plan 2007-2013 will be domestically generated but the objective will still be to ensure access to a very good standard of education and training for all and, in particular, to provide the labour force with the skills and adaptability to meet the challenges of the future. There are also strong linkages between the availability and quality of human capital and the competitiveness of Irish regions. Investment in human capital will have an important role in promoting the development and competitiveness of the regions over the period of this Plan.

Accordingly, continued high levels of investment will be necessary under this Plan in the areas of Labour Force Development, Higher Education and School Modernisation. The level of investment proposed under this Priority reflects the importance Government attaches to maintaining an educated, skilled and adaptable labour force in Ireland.

The competitiveness of the Irish economy depends on a well-functioning labour market. In line with the Lisbon Agenda, the overall policy objective is the development of our economy into one that is knowledge-based, innovation-driven and inclusive. Labour market and education policies will play a significant role in achieving this goal.

Ireland's labour market situation is currently very favourable with forecast 2006 employment growth of 4.4% and an unemployment rate of just 4.4%¹. In the second quarter of 2006, total employment exceeded 2 million for the first time in the history of the State. For the year as a whole, total employment in 2006 is estimated at 2.039 million compared to 1.614 million in 1999. This equates to an annual average growth rate of 3.4% over the period and far exceeds the 2% annual growth projection forecast in the previous NDP.

Over the period of this Plan, Ireland will continue to implement policies which will support higher levels of employment, improve the quality and productivity of work and enhance social cohesion. Delivering on these challenges will require focused and flexible policies and measures that are monitored and evaluated on an ongoing basis, to ensure their continued relevance and impact. In addition a number of interventions under this Priority are closely related to measures in the Social Inclusion Priority and close liaison will be maintained to ensure optimal use of all resources in this area.

¹ Department of Finance, Budget 2007.

Ireland has moved from being a country of emigration to one of immigration in a remarkably short period. In 1986, the unemployment rate was over 17% and almost 45,000 people emigrated. Twenty years later, the Irish economy has undergone a major transformation and we now have significant inward migration. Over the period of the Plan, a skills-based migration policy will operate, made up of returning Irish nationals, workers from the European Economic Area — including the new accession States, non-EEA nationals and also considerable numbers of students.

The Enterprise Strategy Group Report and the Government's Action Plan to implement it has set the overall context for labour force development policy in the context of enterprise development, with the objective being the development of our economy into one that is both knowledge-based and innovation-driven.

The Enterprise Strategy Group Report identified two critical areas of focus for skills development and life-long learning:

- Continuing efforts to expand the workforce, with an appropriate skills-based immigration strategy; and
- Introducing formalised approaches to lifelong learning with priority policy interventions for low-skilled workers in order to foster the continual acquisition of the knowledge, skills and competencies required to meet the demands of an economic environment of constant change.

To achieve this, labour force development policy will focus on two key areas:

1. Ensuring an adequate supply of labour to meet the needs of the economy and to sustain economic growth. Labour will be supplied through a number of sources: the underlying population increase; increased female participation rates; increased participation by the unemployed and those outside the labour force; and inward migration; and
2. Ensuring the development of a high skilled, adaptable workforce through continued emphasis on lifelong learning and training of those in employment.

Having met the 50% EU employment rate target for older workers and the 60% participation rate for females, Ireland will strive to reach and, if possible, exceed the other target for 2010 of 70% for the overall employment rate.

Training and Skills Development Programme

Programme Objective

Investment under this Programme will amount to €7.7 billion broken down between the Sub-Programme for Upskilling the Workforce (€2.8 billion) and the Sub-Programme for the Activation and Participation of Groups outside the Workforce (€4.9 billion).

Sub-Programme for Upskilling the Workforce

This Sub-Programme will encompass some €2.8 billion over the period of the Plan. The Sub-Programme has four themes. These are to improve training for people in employment, help upskill those affected or likely to be affected by industrial restructuring, improve and enlarge the apprenticeship system and provide progression opportunities for school-leavers.

Training for those in Employment

The private sector will always play the greatest role in the training of those in employment. However, the public sector does have a role in encouraging and providing guidance for that investment and in providing training in cases of market failure, such as for the low and unskilled and for those working in the SME sector.

Additional funding has recently been provided for this training which is being channeled through FAS (sectoral training initiatives, the Competency Development Programme and Excellence Through People programmes), business-led skills networks and other agencies. Continued training in this area will be supported under the Plan over the next seven years. The Workplace Basic Education Fund will also continue to be supported to provide literacy/numeracy training initiatives in the workplace.

National Skills Strategy

The Enterprise Strategy Group (ESG) Report stated that Ireland needs to pursue a knowledge-based, innovation-driven economy in order to maintain competitiveness into the future. A key input in the coming years will be the National Skills Strategy based on the findings of the Expert Group on Future Skills Needs report, entitled *Towards a National Skills Strategy*. Investment under this sub-programme will be informed by the Strategy. The objective is to ensure that we have, over the period to 2020, the skills required to achieve the ESG'S objective and to remain competitive in the global marketplace.

The Expert Group on Future Skills Needs has articulated a vision where 48% of the labour force would have qualifications at NFQ (National Framework for Qualifications) Levels 6 to 10 (post-Leaving Certificate to PhD levels), 45% would have qualifications at levels 4 & 5 (Leaving Certificate) and the remaining 7% would have qualifications at levels 1 to 3 (Level 3 is Junior Certificate) by 2020. This would be achieved by both improvements in the education of young people coming through the education system and improved training of those of working age. Within this objective, Ireland would build capability at fourth level and double its PhD output (Level 10) by 2013, approximately 172,000 additional people would be upskilled to levels 6 to 10 of the NFQ, and 300,000 additional workers would be trained up to Leaving Certificate level or equivalent.

This vision would require maximising the skills of the resident population through both education and training and at the same time continuing to attract a highly skilled migrant cohort.

These skills needs would be met by maximising the use of the National Training Fund resources, existing capacity in educational institutions and the private sector contribution to training and education, in order to raise skill levels in the labour force and protect competitiveness.

Lifelong Learning

The Government is committed to the implementation of a Lifelong Learning policy and to the modernisation of the workplace. Under *Towards 2016*, it was agreed that one of the high level objectives to be reached is to drive the lifelong learning agenda by enhancing access to training, the development of new skills, the acquisition of recognised qualifications and progression to higher level qualifications. The frameworks for the development of these policies were set out in the White Paper on Adult Education — “Learning for Life” — published in 2000, the Taskforce on Lifelong Learning Report and in the Report of the Forum on the Workplace of the Future and these frameworks will inform policy over the period of the Plan. The continued implementation of policy in these areas will be supported through providing second chance education and training for those with low skills and addressing access barriers through a strengthening of supports, guidance, counselling and childcare services and increased flexibility of provision.

Industrial Restructuring

As well as the broader challenges posed by globalisation, there are more specific areas that are under threat from industrial restructuring and competition from lower cost economies. For example, traditional low

technology manufacturing and production employment is under threat and the sectors most affected need targeted measures to assist the workers in these industries in obtaining the necessary skills and education levels to enable them to become re-employed as quickly as possible. This requires actions to upskill the employed as well as the unemployed and to seek new and innovative policies and delivery mechanisms. Support from this Sub-Programme will be available for the retraining and education of those affected by industrial restructuring and global competition.

Apprenticeships

Provision by FÁS of the statutory based apprentice training system will be supported. FÁS will continue to review the curricula, assessment process and delivery mechanisms for apprenticeships. In addition, FÁS is developing 5 additional occupations in consultation with stakeholders and is considering a further 2 occupations for designation.

Progression for School Leavers

The policy in this area will be to seek to ensure that persons with little or no education/skills are not isolated and vulnerable to potential economic downturn. This will be delivered through measures which address early school leaving through combining education with labour market participation and upskilling. Ireland supports the European Youth Pact which identifies the need to provide education and training to address the labour market challenges facing young people.

The success of programmes dedicated to preparing participants for employment has been maintained. In 2005, 95% of students who completed Post Leaving Certificate courses progressed to employment or further education. In the case of Youthreach, the figure was 75% and for VTOS (Vocational Training Opportunities Scheme) it was also 75%. FÁS will continue to work in partnership with Community Training Centres to provide early school leavers with basic skills and work experience and to aid progress towards further training or employment.

Sub-Programme for Activation and Participation of Groups outside the Workforce

This Sub-Programme will encompass investment of almost €4.9 billion over the period of the Plan. The key objective of this Sub-Programme will be to provide targeted training and services to groups outside the workforce such as the unemployed, people with disabilities, lone parents, Travellers, prisoners as well as encouraging the increased participation of women, older workers, part-time workers and migrants in the workforce.

Activation: Unemployed

In general, the priority for this measure is to help the unemployed to find or return to employment as quickly as possible, thereby ensuring that the numbers unemployed are as low as possible over the period of the Plan. The measure will be implemented through the continued operation of:

- The National Employment Service, which is comprised of FÁS Employment Services and the Local Employment Services;
- The Employment Action Plan (EAP), under which intensive support is given to help people on the live register access the labour market; and
- Existing training and employment programmes.

These processes and programmes will increasingly focus on the long-term unemployed, unemployed 16-23 year olds with labour market access difficulties (such as early school leavers) and 'non-progression ready' unemployed.

The EAP process is currently being extended on the following basis:

- Reducing the engagement threshold from 6 to 3 months; and
- Extending the process to 55-64 year olds. This will complement the phasing out of the Pre-Retirement Allowance, where older workers were not required to be available for work.

In addition, as outlined in *Towards 2016*, increased emphasis will also be on engaging with lone parents and people with disabilities in a systematic way as currently occurs for persons on the live register. This will include increased expenditure on training and education for these groups and the outcome should see an enhanced labour supply and participation rates from these groups.

There will be an increasing focus on greater provision of training for the unemployed and an increase in the training provision on employment programmes. The Social Partnership Group on Labour Market Issues will continue to provide a forum for dialogue between the social partners and the Government on a broad range of labour market issues.

Activation: People with Disabilities

The implementation of sectoral plans under the Disability Act 2005 will be supported, thereby assisting in the mainstreaming of services for the disabled and the increase of labour market participation by people with disabilities.

In relation to the labour market programmes, the policy emphasis will be to ensure that disabled people have an equal opportunity to participate in mainstream employment and training programmes. Where this is not possible, there are a number of training and employment supports targeted specifically at people with a disability which will continue to be provided, including vocational training by Specialist Training Providers and the Supported Employment Programme. In addition, policy also aims to raise awareness amongst employers of the contribution disabled employees can make. The Equality Authority is currently reviewing the implementation of the Government's mainstreaming policy in relation to the training and employment of disabled people, and further developments will be considered on foot of this review.

The implementation of the Wage Subsidy Scheme, with other initiatives such as the Employee Retention Grant Scheme, Work Equipment and Adaptation Grant, etc., that help people with disabilities make the transition into mainstream employment will also continue to be supported. The Wage Subsidy Scheme provides financial support to employers employing individuals with a disability who work 20 hours plus per week.

Activation: Lone Parents

Following the consultation process on the Government's Discussion Paper on Proposals for Supporting Lone Parents and Parents on Low Income, proposals will be brought forward aimed at supporting the movement of lone parents and lone parents on low income into employment. This will involve reform of social welfare payments and address supports such as access to childcare, flexible training and education programmes. Priority consideration will be given to extending the National Employment Action Plan referral process to include lone parents and parents on low income and funding for the Community Services programme, which targets lone parents among others, is to be increased.

Activation: Travellers

The *Report and Recommendations for a Traveller Education Strategy* has been prepared by the Advisory Committee on Traveller Education and was launched by the Minister for Education and Science in November 2006. The report covers aspects of Traveller education from pre-school right through to further and higher education within a lifelong learning context and includes recommendations across the education spectrum for parents, pre-schools, primary, post-primary, further, higher education and other areas. The

implementation of the Committee's recommendations will be assisted under this Sub-Programme, as appropriate.

Activation: Ex-offenders

Support will be provided for the work of the Irish Prison Service to review and update work and training activities and courses to ensure that ex-offenders can access marketable skills and vocational qualifications to improve their prospects of employability in the labour market on their release.

Participation: Women

Measures to encourage greater female participation in the workforce will also be supported. These measures will take into account the National Women's Strategy which is being prepared by an inter-Departmental group chaired by the Department of Justice, Equality and Law Reform and supported by a social partnership consultative group. This is intended to provide a framework within which the outstanding gaps in the position of women in Irish society are addressed over a 10-year period.

The measures supported will include those which are part of the Government's Childcare Strategy and Investment Programme. FÁS's Expanding the Workforce (ETW) process which assists women to return to the labour market will also be continued. In this regard, specific attention is being given to lone parents, the majority of whom are women.

The implementation of a range of Government policies (including childcare, equality legislation, education, tax reform and employment rights) aimed at reducing the gender pay gap and occupational segregation will also be pursued. Future policy directions with regard to gender mainstreaming will be supported as part of the development of the National Women's Strategy.

Participation: Older Workers

It is Government policy to facilitate those who wish to extend their working lives to do so. In the past decade the employment rate for those aged 55-64 has increased by 10%. The average exit age from the workforce has also been increasing, with Eurostat data for 2004 indicating that the exit age in Ireland is 62.8 years, somewhat higher than the EU average of 60.7.

Part of meeting the challenge of an ageing society will be to consider encouraging older workers to remain in employment where appropriate. In this regard, a range of issues may be considered, including:

- Providing for flexibility in the retirement age;
- Creating incentives for workers who want to remain in or return to the labour market after age 65;
- Facilitating a gradual move into retirement through changed working arrangements;
- Tightening the conditions for early retirement; and
- Increasing the contributions required for full pensions.

Participation: Part-Time Workers

Another area in which there is potentially significant scope for increased labour force participation is that of part-time workers. An increase in the involvement in the labour market of part-time workers would increase labour market supply and the scope for this will be explored.

Participation: Migrants

As previously noted, the transformation of Ireland, from being a country of emigration 20 years ago to being one with significant inward migration today, has been dramatic. It is estimated that the number of migrants

in employment in 2006 was some 200,000. These employees are making a very significant contribution to the economy and the challenge will be to ensure that the labour force migration policy continues to be one which makes a positive contribution.

Our own recent experience teaches us that economic migration policy must be responsive to different stages of economic development and to labour market conditions. Economic migration policy for nationals from outside the EEA will be vacancy-driven rather than based on quotas or points. That means that the core of the policy is the offer of a job. Policy will be transparent and have the potential to react to changing labour market conditions as well as provide protections for migrant workers from potential abuse by unscrupulous employers.

The Government has introduced a new framework for this area through the enactment of the Employment Permits Act that provides a framework within which there is the flexibility to adapt and use different migration policy instruments to respond to changes in both the economy and the labour market as they arise. The Act establishes a statutory foundation that will be built upon to implement an active and managed economic migration policy. The three pillars of this employment permit policy will be Green Cards, an Intra-Company Transfer Scheme and a revised Work Permits system. It also provides a number of new and important protections for migrant workers in the Irish labour force.

Schools Modernisation and Development Programme

Programme Objective

Nearly €5.1 billion will be invested in the three Sub-Programmes in this Programme: Schools Infrastructure; Schools Development; and Information and Communications Technology in Schools. The first will deal with the need to update the physical fabric of existing facilities at first and second level as well as providing additional facilities to meet new demands. The second will be concerned with continuing the improvements in the level of education provided as well as attuning it to the needs of a modern knowledge-driven economy. The third concerns the implementation of an ICT strategy in schools.

Schools Infrastructure Sub-Programme

The Schools Infrastructure Sub-Programme will invest €4,490 million in the nation's first and second level schools over the next seven years.

Strategic Context 2007-2013

In recent years, a sustained Government drive to tackle an acknowledged historic educational infrastructural deficit across all sectors has produced a marked improvement in the quality of educational facilities across the country. As already noted, educational infrastructure, including schools infrastructure has been a central plank of Plan 2000-2006 where the measure performed very satisfactorily. Significant inroads were made in tackling the historic deficit within the schools sectors whilst continuing to meet emerging needs. The emerging needs lie in rapidly developing areas, reflecting major demographic changes on the one hand and an increasingly complex, rapidly changing social and cultural landscape on the other. These two distinct requirements emphasise the need for diversity in the delivery of education. The innovative methodologies, introduced under NDP 2000-2006, aimed at expediting the delivery of accommodation while adhering to core principles of value for money and public procurement investment, will be continued and enhanced as appropriate. These methodologies include Public Private Partnerships (PPPs), design and build contracts, the use of generic designs which allow a quick response and reduce expenditure on the repeat design of schools and the increased devolution of responsibility to school level in order to progress projects speedily.

It is projected that the primary school-going population will increase by approximately 100,000 over the lifetime of the Plan. The actual number of classrooms required for this period will depend on such factors as the spread of the additional pupils and the capacity, or otherwise, of existing schools to meet this demand. Schools will be built to high standards to ensure that they are sufficiently robust to pass the test of time, cater for new and developing needs and ensure the achievement of commitments made under *Towards 2016*. The Sub-Programme will aim to:

- Provide new schools in rapidly developing areas;
- Provide appropriate facilities to teach all subjects within the revised Primary Curriculum particularly Science and Physical Education;
- Provide accommodation for additional teachers made available by improvements in special education provision, language support and reduced class sizes;
- Provide for the introduction of revised subjects at post-primary level such as Technology and Art that have specialist IT and equipment requirements; and
- Provide improved facilities for the practical work required by the post-primary science syllabus and support the completion and assessment of practical coursework in the Leaving Certificate examination.

The main focus will be on the provision of additional school places in rapidly developing areas. The Department's strategies to deliver this include:

- Pro-active planning by close and regular engagement with local authorities;
- The implementation of a partnership approach with local authorities to deliver community facilities in tandem with new schools;
- The active participation where possible of school management authorities;
- Early involvement in education provision in strategic development zones;
- Publication and implementation of area development plans; and
- Use of Generic Repeat Designs and Design & Build contracts for new primary and post-primary schools and an openness to the delivery of schools by innovative methods intended to reduce waiting times for permanent school accommodation.

The level of work being done under the schools building programme is at an all-time high and is transforming school accommodation throughout the country. While increased investment is a central reason for this — €500 million in 2006 alone — radical changes in how projects are planned and managed have also made a major difference in ensuring that, in the majority of cases, provision will be delivered in line with demand and in line with the Department's prioritisation criteria.

Schools Development Sub-Programme

This sub-programme will cover curriculum reform and professional development and the National Qualifications Framework. €318 million will be invested in these actions over the lifetime of the Plan.

Curriculum Reform and Professional Development

This measure will provide for investment in curricular reform and teacher professional development to ensure that the provision of first and second level education maintains high quality and relevance to emerging social and economic needs. It covers such costs as equipment, in-service and pre-service training, and diversification of languages in schools.

Strategic Context and Objectives

The need for Ireland's economy to move up the value chain depends on the availability of a well trained and skilled workforce. This in turn depends, as does the effectiveness of the major programmes of investment in R&D, in large part on the foundation of knowledge, skills and interests nurtured in students in the first and second levels of the system. The education system in Ireland is already undergoing rapid change. A new Primary Curriculum is being implemented on a phased basis over the period to 2007. While the evaluation of implementation to date has been positive, key areas requiring further attention relate to school and classroom planning, assessment for learning, promoting active teaching and learning approaches, nurturing of higher order thinking skills, embedding ICT across the subjects, and supporting engagement with parents. Ensuring appropriate strategies for the inclusion of pupils with special needs, promoting interculturalism and anti-racism, addressing disadvantage and ensuring literacy and numeracy are also important priorities at primary level.

The ongoing relevance of curricula to changing social and economic needs, allied with the quality and effectiveness of teaching and learning, are key factors in ensuring that young people are equipped with the skills for participation in the knowledge society and for active citizenship. They are also central to addressing social inclusion issues and ensuring optimum completion rates in upper second level education.

At post primary level, important objectives are to strengthen the technical and vocational dimensions of curricula, to embed key skills such as learning to learn and ICT, to develop higher order thinking skills, to diversify and strengthen language learning, to modernise the technology subjects at senior cycle, and to increase the take up of the physical sciences at senior cycle. Achieving these will require:

- Strengthening language learning by, for example, increasing emphasis on oral competence in syllabuses and in the certificate examinations, and diversifying language learning where appropriate;
- Modernising the technology subjects at senior cycle;
- Increasing the uptake of the physical sciences at senior cycle and building on the hand-on investigative approaches, which are a feature of the revised Junior Certificate Science syllabus;
- Reforming approaches to post primary mathematics teaching and learning; and
- Broadening the range of assessment approaches.

Assessment has been identified in evaluations as a specific area where primary teachers need very significant professional development. A major programme for assessment for learning is being introduced by the National Council for Curriculum and Assessment, and standardised testing is being mainstreamed in literacy and numeracy at primary level.

The *Report of the Expert Group on Future Skills Needs "Languages and Enterprise — The Demand and Supply of Foreign Language Skills in the Enterprise Sector"* published in June 2005 points to back office supports as a key area for development and expansion which could be met by Irish workers with languages. In these cases near native proficiency is not required, but good language skills allied with a higher professional or technical qualification are needed. Accordingly, an important goal is to continue to invest, as appropriate, in language learning, building on the success of the primary and post primary modern language initiatives. In this regard the development and implementation of an integrated language policy as recommended in the Council for Europe Language review (final report due in early 2007) will be a priority.

In addition to the above, the need for a reformed model of professional development for teachers has been identified, which will:

- Provide for regionalised access to a full spread of curriculum expertise for schools;
- Provide for more intensive training, school focused where possible, to enhance pedagogical skills, classroom management, assessment and the ability to become reflective practitioners;

- Provide a continuum from pre-service training through induction to continuing professional development, adapting and rebalancing training programmes as needed; and
- Provide enhanced opportunities for accreditation, the development of mentor programmes and school focused supports.

The objective is to progressively increase strategic investment in curricular reform and professional development to enhance the quality and relevance of education to a level in keeping with best international practice on a phased basis.

National Framework of Qualifications

This measure covers the operational costs of the National Qualifications Authority of Ireland (NQAI), the Further Education and Training Awards Council (FETAC), and the Higher Education and Training Awards Council (HETAC). The framework was funded in NDP 2000-2006. The three bodies were established in 2001 under the Qualifications (Education and Training) Act 1999. The main functions of NQAI are to develop a national framework of qualifications and policies and criteria for the framework, evaluate the functioning of the Awards Councils (FETAC and HETAC), ensure compliance with policies and criteria for access, promote transfer and progression for learners by DIT and Universities and review the operation of the framework.

The main functions of the Awards Councils (FETAC and HETAC) are to determine standards for awards, develop criteria for quality assurance and validation of awards, accredit awards on the basis of compliance with criteria and undertake regular reviews of providers whose awards are accredited. The main concerns of the Awards Councils are that providers have: satisfactory quality assurance arrangements that comply with the criteria; adequate support and protection for learners; internal and external evaluation with learner feedback; assessment procedures which are fair and consistent; and information for learners on access.

Strategic Context and Objectives

The OECD report "*Moving Mountains — How can Qualifications Systems promote lifelong learning?*" highlights the key role of national qualifications systems in promoting learner access, transfer and progression, mobility and quality, and in supporting responsiveness and flexibility in adapting to changing needs.

The National Framework of Qualifications can play a key role in facilitating flexibility and access, through its placement of education and training awards at a variety of levels on the framework, its focus on learning outcomes irrespective of duration or the learning site, its increased emphasis on progression, and its inbuilt capacity for the accumulation of credits over time towards the achievement of an award. It provides for the recognition of awards in formal education and training centres, in the non-formal sector and in workplace and community settings. It supports enhanced quality in keeping with international standards. In addition, the developments in terms of the recognition of international awards and the evolution of the European Qualifications Framework (EQF) provide new opportunities for mobility of learners, researchers and workers. This is seen to be a critical part of the Lisbon Agenda to support competitiveness.

The National Framework of Qualifications will continue to play a vital role in promoting international recognition and mobility. The quality of education and training systems has been identified as an important factor in encouraging inward investment, employment growth and competitiveness, which are an essential foundation for social cohesion.

ICT in Schools Sub-Programme

Investment of the order of €252 million will be made in ICT for schools over the period of the Plan. A detailed ICT strategy will be published by the Department of Education and Science in 2007. In summary, this

strategy will deal with: developing an e-Learning culture in schools that will ensure that ICT usage is embedded in teaching and learning across the curriculum; teacher professional development; the maintenance of a national broadband network for schools; the upgrading and renewal of hardware; and the provision of software and digital content for learning. The planned investment will also address maintenance and support requirements.

In order to benefit from the investment, individual schools will be required to prepare and implement an eLearning strategy for the school as an integral part of whole school planning and development. Resource allocation will be directly related to, and contingent on, the degree to which the school is able to demonstrate concrete actions and strategies for utilising and embedding ICT in teaching and learning practice in the school. The school's eLearning plan must be persuasive as regards the potential usage levels arising as a result of the investment and must clearly indicate how Value for Money will be achieved by addressing the expected outcomes and achievements for students along with indications as to how these outcomes and achievements will be measured. In that regard, evaluation of eLearning outcomes will be integral to the school self-evaluation commitments required from schools and teachers under the *Towards 2016* agreement.

Higher Education Programme

Programme Objective

€13.0 billion will be invested in this Programme over the life of the Plan. This encompasses the indicative estimate of all expenditure of the higher education system. It has been decided to include the totality of expenditure because of the significance of the higher education sector and the major reform agenda that is being undertaken there. The Programme has three Sub-Programmes: Higher Education Infrastructure, Higher Education Development and the Strategic Innovation Fund.

Strategic Context

While the primary purpose of education is to enable people to reach their full potential as individuals and as active citizens, the critical role that higher education plays in fostering economic prosperity and a dynamic cohesive society is widely acknowledged. The higher education sector (which includes not only the third level sector, but also the increasingly important fourth level sector) has assisted Ireland to position itself to meet the challenges of a rapidly changing global economic environment. The sector continues to produce graduates and post-graduates of a very high standard to meet identified skills needs in the market place as well as assisting the upskilling of professionals. Ireland's capacity to attract mobile international inward investment against an increasingly competitive background can be attributed in large measure to the success and strength of the higher education system. The sector's continuing work in fostering innovation and promoting research is enabling Ireland to optimise the development of a knowledge-based society.

At third level there has been a sustained expansion in the number of places. Over 30,000 places have been created in the last nine years bringing the overall number of full time third level students in the 2005/06 academic year to almost 136,000. This increase has assisted the widening of access to groups in society traditionally under-represented at this level. Third level participation rates have increased substantially in recent years, rising from 44% in 1997 to 55% in 2004 and they are expected to further increase throughout the lifetime of the Plan.

The OECD *Review of Irish Higher Education* makes a series of far-reaching recommendations for reform and development of the sector. This Report is the catalyst for the major reform and modernisation agenda being undertaken in the Universities and Third Level Institutions as set out in this Chapter. The Government

approved the broad reform agenda outlined by the OECD. This in turn has been used as a basis for extensive consultation and policy formulation that will drive the reform agenda throughout the sector.

In implementing the strategic investment in higher education over the next seven years, the following development needs must be addressed:

- Increased participation and improved access;
- Encourage a greater flexibility of course offerings to meet diverse student population needs in a lifelong learning context;
- Promote the quality of teaching and learning;
- Significantly increase PhD numbers and research activity;
- Effective technology transfer; and
- Safeguard and re-enforce the many roles of higher education in providing independent intellectual insights and in contributing to our broader social, human and cultural understanding.

Higher Education Infrastructure Sub-Programme

The Higher Education Infrastructure Sub-Programme will see investment of some €1,975 million over the next seven years. This level of investment reflects the immense significance that the Government attaches to higher education at all levels and indicates the critical role that higher education will continue to play in sustaining economic growth and promoting social cohesion. The investment will assist Higher Education institutions plan for continuing growth in participation rates. It is estimated that 62% of net new jobs which employers are expected to create in 2010 are likely to require third level education, compared with less than 30% of existing jobs in 2001. The investment will assist Ireland develop from being a technology-importing, low cost economy to an innovation-based, technology-generating society with research and innovative indigenous enterprises becoming the new drivers of economic development and of the country's international competitiveness.

In terms of specific details, the investment will ensure that identified key priority projects that are necessary to support the skills needs and innovation requirements of the economy will be delivered. In this regard, projects in areas such as engineering, architecture, digital media, information technology, teacher training, catering and tourism will be delivered. Institutions delivering large scale capital projects will be required to develop and implement the design and delivery of these projects in a manner that delivers on the change agenda in Third Level institutions and which supports the development of Fourth Level education. Ongoing commitments in respect of research infrastructure made under NDP 2000-2006 will also be funded under this Sub-Programme. Overall the investment will allow Institutions addressing both third and fourth levels in Ireland to continue to compete internationally and to maintain the quality of Irish graduates at its current high level.

The investment will also be targeted on meeting new and emerging priorities in the context of overall national strategy, including the Strategy for Science, Technology and Innovation and the National Skills Strategy. Projects will be delivered either by conventional procurement involving direct exchequer funding or will be procured under the Public Private Partnership (PPP) initiative. The projects selected will be consistent with the Regional Development Strategy set out in Chapter 3. In this context, over the period of the NDP, a major project which will see the development of a large site in Grangegorman, Dublin as a location for education, health and other facilities will be progressed. The site will house the new Dublin Institute of Technology Community Campus.

Higher Education Development Sub-Programme

Over the period of the Plan, expenditure will amount to some €10.5 billion. It should be noted that some €1.5 billion of this complements the Science, Technology and Innovation Programme under the Enterprise, Science and Technology Priority.

The 2005 European Commission paper entitled “Mobilising the Brainpower of Europe: enabling Universities to make their full contribution to the Lisbon Strategy” concluded that:

- Europe’s economic structure will change fundamentally over the next 20 years as its manufacturing base continues to shrink;
- Future growth and social welfare will rely increasingly on knowledge-intensive industries and services, and ever more jobs will require a higher education qualification; and
- European Universities, which have to be the motors of this new, knowledge-based paradigm, are not in a position to deliver their full potential contribution to the re-launched Lisbon Strategy.

The document went on to state that:

“Europe must strengthen the three poles of its knowledge triangle: education, research and innovation. Universities are essential in all three. Investing more and better in the modernisation and quality of universities is a direct investment in the future of Europe and Europeans”²

In its *Review of Higher Education in Ireland* published in September 2004, the OECD said that “Ireland was one of the first European countries to grasp the economic importance of education and economists suggest that this upskilling of the labour force accounts for almost 1% per annum of additional output over the last decade or so”.

The future capacity and quality of Ireland’s higher education system is vital to our social, cultural and economic well-being. The Higher Education system requires clear national strategic goals set in the international context and against EU objectives. The reform and modernisation agenda at third level needs to be driven to provide for the creation of an expanded fourth level to transform the research landscape further and allow Ireland to be among the leaders of a global knowledge economy.

At third level, there are five broad strategic goals each incorporating a number of objectives. There is a high level of interdependency among these goals and each needs to be progressed to achieve a unified strategy for the system overall. Appropriate targeted capital expenditure as provided under the Higher Education Infrastructure Sub-Programme above will also be critical to the development of the sector. The five strategic goals to be advanced through actions funded with the Sub-Programme allocation are as follows:

- (a) To widen participation and increase student and graduate numbers at third level
- (b) To reform and modernise programme delivery;
- (c) To achieve world-class quality in higher education;
- (d) To advance institutional and structural reform at third level; and
- (e) To reform the public funding framework to ensure that institutional strategies pursued by Higher Education institutions are aligned with national priorities.

² Mobilising the Brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy Communication from the Commission April 2005. Universities are taken to mean all institutes of higher education in the document.

To widen participation and increase student and graduate numbers at third level.

An increase in student numbers and participation rates is crucial in terms of improvement of individual quality of life and for social inclusion purposes. An increase is also necessary to feed an expanded fourth level demand for post-graduates and to satisfy the demands of the 21st Century workplace and this has been identified in a number of recent studies³. Although a general expansion in numbers is required, there will also need to be targeted strategic expansion in student numbers and places to ensure a steady skills supply to areas identified in the national interest by the Expert Skills Group and specific reports.⁴ It will also be critical to future development to target recruitment into science and technology courses at all levels. The following measures will be implemented to ensure the expansion necessary to offset this predicted deficit:

- Lifelong learning and upskilling will be facilitated;
- Access for disadvantaged and under-represented groups will be widened;
- Student retention rates will be improved;
- Recruitment into science and technology courses at all levels will be actively targeted;
- Recruitment of international students into Irish higher education institutions will be promoted;
- An adequate skills supply will be ensured with reference to the findings of the Expert Group on Future Skills Needs and other working groups reporting on national skills requirements such as the undergraduate medical education and training working group;
- Strong links between business and industry and higher education will continually be developed and strengthened to ensure the provision of necessary skills for the 21st century workplace.

Medical Education and Training

There will be substantial investment over the period of the Plan in the area of medical education and training. The health service is dependent on both the quality and quantity of doctors trained in Ireland. It is important that enough doctors are suitably trained to meet the requirements of the Irish health reform programme and that optimum Value for Money is achieved. At postgraduate level, the Department of Health and Children holds responsibility for medical education and training, while at undergraduate level, responsibility lies with the Department of Education and Science. Two Working Groups, one for each area, were established in 2003 and reported to Government in early 2006^{4,5}. The broad thrust of their recommendations was accepted and as a result, significant investment has been committed to the reform of medical education and training in Ireland during the period of the Plan.

On the undergraduate side, the measures to be implemented include an increase in the numbers of EU medical students, changes to the entry criteria for medical courses, the introduction of graduate entry to medicine and curricular reform. On the post-graduate side, the measures include the introduction of robust governance structures, graduate retention measures, addressing skills deficits in the area of training and measures to safeguard training during the implementation of the European Working Time Directive. An Inter-Departmental Policy Steering Group is responsible for the ongoing development of strategy and policy on undergraduate and postgraduate medical education in accordance with Government policy.

To reform and modernise programme delivery

Critical to educational provision for a wider diversity of students is reform and innovation of programme delivery assisted by the following measures:

³ "Ahead of the Curve", Report of the Enterprise Strategy Group ESRI Mid Term Review.

⁴ "Medical Education in Ireland, a New Direction", Report of the Working Group on Undergraduate Medical Education and Training (Fottrell Report)

⁵ "Preparing Ireland's Doctors to meet the Health Needs of the 21st Century", Report of the Post Graduate Medical Education and Training Group (Buttimer Report).

- Support and development of models of part-time programme delivery and modularisation;
- Development of innovative models of course delivery including use of ICT, e-learning and distance learning;
- Promotion of access, transfer and progression and incentivising of stronger inter-institutional collaboration in the development and delivery of programmes; and
- Providing student access to innovative courses that will specifically prepare them for a working life in the knowledge economy.

To achieve world class quality in higher education

As referred to previously, the achievement of world class quality in higher education has been identified as one of the primary challenges for European higher education⁶. A recent review of quality assurance in Irish Universities has pointed the way forward to develop further the quality assurance process here⁷. Closely allied to this is the need to co-ordinate policies through the Bologna Process at a European level to establish the European Higher Education Area by 2010.⁸ Supports need also to be put in place in terms of teaching and learning to enable the reform of programme and course delivery. The following actions will be undertaken:

- The achievement of standards of excellence in teaching and learning;
- The introduction of teaching and learning reforms including enhanced teaching methods, programme restructuring, modularisation and e-learning;
- Providing for improved performance management systems;
- Provision of staff training and support requirements associated with the reform of structures;
- Linking of quality assurance outputs to strategic management of higher education institutions;
- Support of quality improvement initiatives aimed at excellence; and
- Development of European and national frameworks for qualifications.

To advance institutional and structural reform at third level

The OECD *Review of Higher Education* in Ireland referred to earlier made a compelling case for the rationalisation and reform of the higher education system.⁹ The report recommends the retention of continuing distinct roles for the University and Institutes of Technology sectors with a clear differentiation of mission. Current Government policy endorses this view and the strategy is to allow each of our existing Universities and Institutes of Technology to be supported in developing and enhancing their roles according to their existing strengths as part of a unified higher education system that aspires to world class standards. Key structural reform is required in the arrangements for strategic objective setting, oversight and funding allocation for the sector. Reform of institutional governance, internal structures and systems, decision-making processes and human resource policies, together with significant overall investment, is called for to achieve the national objective for Ireland's higher education system to be at the front-rank of performance within the OECD. Achievement of the objectives set out below will facilitate this process:

- To complete the process of creating a unified system by bringing the Institutes of Technology under the remit of the Higher Education Authority;
- To develop any necessary legislation for structural reform of the sector;

⁶ Mobilising the Brainpower of Europe: enabling universities to make their full contribution to the Lisbon Strategy.

⁷ "Review of Quality Assurance in Irish Universities" Report of the European University Association April 2005

⁸ "The European Higher Education Area — Achieving the Goals", Bergen Communiqué, May 2005.

⁹ Review of Higher Education in Ireland, Examiners Report, September 2004.

- To incentivise and reward internal restructuring and rationalisation efforts at an institutional level;
- To promote good governance and accountability in the higher education institutions; and
- To encourage collaboration between Institutions to ensure that the strengths of each Institution are fully exploited.

To reform the public funding framework to ensure that institutional strategies pursued by Higher Education Institutions are aligned with national priorities

Underpinning all of the above strategic goals will be the reform of the current funding allocation model. The Higher Education Authority (HEA) is currently phasing in a new funding system for the higher education sector. The new funding system will place a very strong emphasis on strategic planning in the institutional context.

This will be complemented by a Strategic Innovation Fund (see below), which will support and incentivise internal restructuring and rationalisation efforts at an institutional level, lending state support to the Higher Education institutions that have demonstrably embarked on a process of major reform. Future objectives to achieve this goal will be

- To complete the introduction of the new funding system with HEA; and
- To encourage institutions to access diversified funding sources including private investment.

Strategic Innovation Fund Sub-Programme

The Strategic Innovation Fund (SIF) will amount to €510 million between 2007 and 2013 and is designed to promote innovation and restructuring in the third level sector.

SIF Objectives

The objectives and priorities of the Fund reflect and support the reform and modernisation agenda that is being pursued at both a national and a European level. There is a growing recognition that the strength of the Irish Higher Education System, which consists of a relatively large number of institutions with diverse missions, will only be fully realised through inter-institutional collaboration. The Irish Higher Education System aims to build world class quality and capacity and it is intended that this Fund will allow institutions to draw on their considerable respective strengths and form strong partnerships across sectoral and other barriers.

The key objectives of the SIF are:

- To enhance the delivery of core activities of education and research, through effective and creative institutional and inter-institutional collaboration and including, where necessary, appropriate internal restructuring and rationalisation efforts;
- To support enabling measures to prepare for the expansion and development of post-graduate education (including expansion and development of graduate schools), including both intra- and inter-institutional collaboration;
- To support innovation and quality improvement in teaching and learning, including enhanced teaching methods, programme restructuring, modularisation and e-learning; and
- To support access, retention and progression both at individual institutional level and through inter-institutional, sectoral and inter-sectoral collaboration.

As a competitive Fund linked to performance outcomes, institutions must compete with each other through ambitious yet attainable plans for the future to secure additional funding. Annual reviews of the fund will

provide accountability on the spending and the outcomes achieved. Furthermore, the fund should be seen in tandem with the reform of the public funding framework for the Higher Education institutions to ensure that their institutional strategies are aligned with national priorities.

The impact of the Strategic Innovation Fund will be critically reviewed in 2010 to inform the assessment of policy in this area thereafter and the €225 million funding for the years 2011-2013 is therefore provisional and dependent on the satisfactory outcome of that review. The review will feed into the overall mid-term review of the NDP in the same year.