Synthesis Report / Literature Review on Aspects of Training of those at Work in Ireland

Report

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for

Expert Group on Future Skills Needs

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Introduction

This report was commissioned in 2003 by FÁS, on behalf of National Training Advisory Committee (NTAC), in an attempt to provide a synthesis of the major findings of the numerous reports which have been written in relation to training of the employed in Ireland over the last 10 years.

According to the Terms of Reference, the report is intended to address the following six themes identified by the NTAC.

- The need to move skills up the value chain
- Retraining of workers in vulnerable industries or occupations
- The need for increased investment by SMEs in training
- The need for training to be relevant, flexible and adaptable to the needs of enterprises
- Ensuring an adequate training infrastructure for the delivery of in-company training
- The need for engagement between industry groups and the national qualifications framework to develop accreditation for in-company training, including recognition of prior learning in the workplace.

The report seeks to provide a good overview of the Irish literature on training policy for those in employment, but is not intended to be fully comprehensive. In a small number of cases, reference is also made to non-Irish documents. The report does not address pre-employment training or apprenticeship training.

Most of the documents referenced have been prepared and published by, or on behalf of, various arms of the Irish State, including government departments and state agencies. Prominent among these are the many sectoral studies published by FÁS, the various reports of the Expert Group on Future Skills Needs, reports by Forfás, reports by the ESRI and programme evaluations. In addition, reference is made to some relevant statements of government policy. Some very limited reference is made to relevant EU and OECD documents.

The report is structured around the above themes, as follows:

Chapter 1 – Introduction

Chapter 2 – *Drivers of Change*

Chapter 3 – Recent Shifts in Training Policy

Chapter 4 – Moving Skills Up the Value Chain

Chapter 5 – Retraining Workers in Vulnerable Industries and Occupations

Chapter 6 – Need for Increased Investment by SMEs

Chapter 7 – Qualifications and Workplace Training

Chapter 8 – Need for Training to be Relevant, Flexible and Adaptable

 $Chapter\ 9-\textit{Required Infrastructure}$

Chapter 10 – Other Issues

Chapter 11 – Key Issues Emerging from Literature Review

Chapters 2 and 3 are included to set the context for the recommendations, and to respond to the requirement in the Terms of Reference that the literature review should present a "comprehensible analysis". A "References" section at the end of the report details the documents reviewed.

Following the decision to merge the National Training Advisory Committee into the Expert Group on Future Skills Needs, the report was considered by the Expert Group at its meeting in June 2004 and was approved as a useful contribution in the area. It is being made available in hard copy and electronically on the Expert Group's website (www.skillsireland.ie).

Drivers of Change

2.1 Introduction

The skills of the workforce and their ability to adapt to the rapidly changing economic environment are a key source of competitive advantage (IBEC 2000, p.3). Training of the employed is key to achieving a flexible work force. In-work training has been defined as, "the range of activities that are provided by agreement between employers and employees, either at the workplace or financed by or through the workplace" (National Economic and Social Forum (NESF), 2003, p.47).

Over the last decade a number of factors, operating either concurrently or simultaneously, have been identified as driving Ireland's need to analyse and update the skills of its workforce. This chapter reviews the main drivers identified in reports through the decade, which have underpinned the arguments in favour of various interventions on the topics reviewed in this document.

2.2 Single European Market and EU Expansion

The Single European Market was introduced in 1993, increasing the ease with which business could be conducted between EU Member States. The removal of trade barriers and freedom of access to other countries led to increased levels of competition.

Countries throughout Europe are engaged in upskilling and retraining their workforces. Since the start of the 1990s researchers have identified the need for Ireland to participate in this upskilling race in order to remain competitive (Roche & Tansey, 1992, p.134). The continuing evolution of a single market within the EU was seen as increasing the need for the 'Irish Skills profile to mirror best European practice' (Roche & Tansey, 1992, p.151).

A series of sectoral studies was commissioned by FÁS over the course of the 1990s, driven initially by the need to identify training requirements emerging from participation in the Single Market. General themes emerging from these studies included a need for better skills in strategic management, better marketing skills and better operations management skills. A need to adopt new forms of work organisation, exemplified by programmes such as "World Class Manufacturing" and "Total Quality Management", also formed a theme, pointing to an increased demand for the development of 'soft skills', such as communication skills, cooperation, and interpersonal skills at all levels of the workforce.

In the early to mid-1990s, the incidence of formal off-the-job training in Ireland was considerably lower, and the duration significantly shorter, than our European counterparts (Roche & Tansey, 1992, p.141; Culliton, 1992, p.54; OECD Economic Survey, 1995, p.84; O'Connell & Lyons, 1995, p.1; National Competitiveness Council, 1998, p.16). In 1993, the NESC report, *Education and Training Policies for Economic and Social Development*, observed that Ireland had twice as many 'unqualified' workers as the Western German labour force¹. (NESC, 1993, p.56) (Later in the decade, average training activity improved, but remained behind the levels in many leading competitor economies.)

While competition from Central Europe was becoming significant by the mid-1990s in lower value-added industries such as clothing (FÁS Clothing Update Study), it has emerged as being significant in many of the technology sectors in which Ireland was most successful

¹ The share of Ireland's labour force without graduate, technician or craft level qualifications was found to be 196% of the share of the same group in Germany.

during the 1990s with the greater changes that have taken place since the fall of the Iron Curtain, and with EU expansion. This is seen, for example, in the forthcoming FÁS Software Industry Training Study (FÁS, 2004), as being one of the drivers leading to a need for higher levels of training, and for a need to address skills deficiencies in areas such as sales, marketing, product management, business strategy, software engineering and management of the software development process. These are analogous to the skills shortcomings identified in manufacturing sectors in earlier studies. Indeed, the study identifies improvement approaches analogous to World Class Manufacturing, including Software Process Improvement, as being important to the sector's future competitiveness.

2.3 Globalisation

The pressures of globalisation mean that, in order to remain competitive, the level of skills in Irish firms must also be comparable to, or better than, skill levels in competitor countries beyond the Single Market. In 1993, the Culliton Report revealed a distinct skills gap, between Ireland and other countries, in production skills, multi-skilling and management skills. Shaping Our Future (Forfás, 1996, p.158) suggested that, by 2011, it was likely that all of the developed world and a significant proportion of the developing world would pass Ireland in terms of skills, education and training if appropriate measures were not taken. International research indicates that Irish adults currently have low participation rates in continuing education and training in relation to other countries (Hannon; McCoy & Doyle, 2003, p.1, 43). Therefore education and training of the workforce has been identified as critical to ensuring Ireland's successful adaptation to the more competitive international environment (White Paper on Human Resource Development, 1997, p.111).

In a time of globalisation, upgrading the skills of the Irish workforce not only allows companies operating on a global scale to maintain competitiveness, but also encourages international companies to relocate to Ireland, thus increasing foreign investment into the economy (Roche & Tansey, 1992, p.134; Green Paper on Adult Education, 1998, p.13; National Competitiveness Council, 1998, p.3; OECD, 2003, p.11). Globalisation increases 'competition for mobile industrial investment' (Tansey, 2003, p.9) and therefore it is crucial to focus on factors, such as upskilling the workforce, that will raise Ireland's attractiveness as a location for new foreign direct investment.

Globalisation increases competition on a worldwide basis, allowing for unprecedented freedom of movement of goods, services and capital, with companies more willing to move operations to the most cost-effective locations (Labour Market Review, 2003, p.26). As a result, low skilled production jobs in certain sectors are being lost and there may be a need to retrain these workers to work in other sectors, e.g. as observed in the Clothing Industry through the 1990s, and latterly in electronics assembly.

In the early 90s the major threat of competition from beyond the EU was perceived to lie in the 'Dragon Economies' (Thailand, Malaysia, Singapore, Korea, Taiwan, Indonesia and the Philippines). While these have grown rapidly, owing in part to their commitment to, and investment in, upskilling their workforces, setbacks in the late 1990s and the emergence of China as a prospective world economic power have lessened this focus. Nonetheless Singapore is still perceived as a significant competitor for inward investment in some industries.

Today, the market economy of China is growing rapidly, posing a significant competitive challenge. India is also emerging as a major power in a range of services industries. These two major countries appear to be having a greater competitive impact on Europe and Ireland than the Dragon economies did. This is highlighted in recent training-related reports, such as the forthcoming FÁS Software Industry Training Study.

2.4 Structure of Irish Economy

It was reported in 1999 that approximately 98% of Irish businesses employed fewer than 50 people; 90% employed less than 10 (Annual Competitiveness Report, 1999).

The Irish economy tends to operate on a small business scale (Tansey, 2003, p.6) and therefore many of the problems inherent to a small business are inherent to the Irish economy as a whole.

Internationally, small businesses tend to train less, and to be less effective users of training that larger businesses. This is reflected in Irish studies that have looked at the volume of training undertaken by businesses of different sizes (Fox, 2001, p.10, p.26). Among the factors identified as contributing are a greater turnover of employees (EGFSN In-Company Training Study, 2000, p.17) and less expertise in the effective use of training. However, the EGFSN In-Company Training Study (2000, p.4) stated that there appeared to have been an improvement in the use of training by SMEs.

2.5 Basic Skills, Literacy Skills, Generic Skills, Soft Skills

Various reports have highlighted the importance of skills in the areas of literacy, numeracy, communications, problem solving, basic computer skills, interpersonal skills and other skills that are not specific to particular occupations. Skills within these areas tend to be known as basic skills or generic skills. "Soft skills" and literacy skills each form a part of the territory. Various reports have recognised that these skills are crucial to maintaining a flexible and adaptable workforce (e.g. White Paper on Adult Education, 2000, p.127; NTAC, 2002, 5.2; NESF 2003).

The OECD International Adult Literacy Survey (1997) found that 25% of the Irish population scored at the lowest level of literacy. Furthermore, those individuals with the lowest skill levels were found to be the least likely to participate in further education and training. Although the methodology of this survey has been questioned, the results are comparable to additional research carried out on adult literacy, for e.g. Green Paper on Adult Education, (1998, p.123). It is critical that basic skills are ensured in order to increase the probability that individuals will further develop and enhance their skills at a later stage. Basic Skills are a prerequisite for all further learning (Taskforce on Lifelong Learning, 2002, p.23).

Adult employee participation in education and training throughout the '90s has been, and still is, significantly below the EU average (O'Connell & Lyons, 1995, p.1; Labour Market Review, 2003, p.5). The prospect of an economic slowdown makes it imperative that many of those with low skills and low qualifications in the working population should be retrained and upskilled in order to ensure they can remain in employment.

The Fourth Report of the Expert Group on Future Skills Needs reports on research into the views of employers on soft skills (EGFSN, 2003, Chapter 10). The research defines soft skills as the inter-personal and intra-personal skills required to be effective in the workplace, which, it indicates, are becoming ever more important for organisational success. Interpersonal skills include the ability to work on a team; communication and influencing skills; and leadership and coaching skills. Intra-personal skills include self-management, orientation to learning, creativity and flexibility, motivation and perseverance and problem solving. According to the report, high performance work practices, the increasingly high educational level of a significant number of new entrants to the Irish labour force and their expectations of opportunity and development, the growth in employment in the services sector, and changes such as more family-friendly arrangements and intercultural diversity, have resulted in a greater emphasis on the need for soft skills in a successful work environment.

The main findings were as follows:

- In general, there was broad satisfaction with the current level of soft skills possessed by most employees, but it was recognised that such skills would become more important in the future;
- Occupational grades and levels require varying degrees of soft skills capability;
- Companies invest heavily in soft skills development;
- Soft skills were the most important differentiator of effectiveness in managing people;
- Good practice involves the use of a range of HR practices to instil and support a team-working culture; and
- Concerns were expressed with regard to the soft skills of new entrants to the labour market.

2.6 Knowledge Economy

At the 2000 Lisbon Summit of the European Council, it was agreed that Europe would aim to become "the most dynamic knowledge based economy in the world, leading to more and better jobs and greater social cohesion" (DETE 2002, p.24).

In the last decade, the need for high-level skills has risen in Ireland and comparatively the number of low skilled jobs has decreased (OECD Survey, 1995, p.54; Forfás, 1996, p.154; Task Force on Lifelong Learning, 2002, p.43; Labour Market Review 2003, p.3). It is estimated that the majority of new jobs created between 2003 and 2010 will be in high-skilled areas (Labour Market Review, 2003, p.2).

In order for Ireland to become a high skilled, knowledge based, global economy; the skills and knowledge of the workforce must be continuously upgraded and adapted (NTAC, 2002, 2.3; Fitzgerald, McCarthy, Morgenroth & O'Connell, 2003, p.50, 52, 175; National Employment Action Plan, 2003, Guideline 4).

2.7 Learning Economy

Since late 1994, the European Council has focused on the importance of training and education in increasing employment and competitiveness (White Paper on Human Resource Development, 1997, p.29). The emphasis on a 'Learning Economy' was reinforced in 1996 with the launch of the European Year of Lifelong Learning.

Ireland's long term vision is to become a 'high skills economy' and a learning society. This will depend on the supply of high-skilled people, which in turn will require a commitment to training and lifelong learning (White Paper on Human Resource Development, 1997, p.29; National Competitiveness Council (NCC), 2003, p.12). The challenge of transforming Ireland into a learning society requires not only an emphasis on business and technical skills but the 'soft' skills such as attitude to work, problem solving, communications, flexibility and learning to learn must also be updated on an ongoing basis to compare to best international practice (Doyle, 2000, p.38; White Paper on Adult Education, 2000, p.127). "For each firm the aim must be to become a 'Learning Organisation' that continuously develops its human resources" (White Paper on Human Resource Development, 1997, p.31).

2.8 Lifelong Learning

Developed economies are increasingly "placing emphasis on the ability to continuously acquire knowledge, skills and competencies in an environment of constant change. The concept of 'work for life' is increasingly supplanting that of 'job for life' " (Taskforce on Lifelong Learning, 2002, p.5). Life long learning has been defined as, "All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic and/or employment related perspective" (European Commission, 2000). Lifelong learning must be 'life-wide, lifelong and voluntary and self-motivated' (Green Paper on Adult Education, 1998, p.19).

The concept of lifelong learning has become increasingly topical throughout the last decade and is a significant factor underpinning initiatives to train and develop the skills of the workforce. While lifelong learning is relevant to all groups in the workforce, policy on lifelong learning often focuses particularly strongly on those with relatively low skills or qualifications, reflecting the greater likelihood that these will miss out on lifelong learning opportunities. (See, for example, White Paper on Adult Education, Department of Education & Science, 2000)

Lifelong learning forms a major strand of the EU Employment Strategy and was further strengthened by the emphasis on creating a knowledge society put forth at the Lisbon European Council Summit in 2000.

National reports have raised the profile of lifelong learning by highlighting the importance, from both an employee and enterprise perspective, of maintaining access to and participation in continuing education and training throughout life (Green Paper on Adult Education, 1998; White Paper on Adult Education 2000; Programme for Prosperity and Fairness, 2000); Task Force on Lifelong Learning, 2002). Lifelong learning is a process which can assist in maintaining the competitiveness of the economy in a rapidly changing world (Programme for Prosperity and Fairness, 2000, p.7).

According to the National Employment Action Plan (2003), the number of new entrants to the labour force is decreasing, from 6.3% growth in 1999, to 4.7% growth in 2001, to 1.4% growth in 2002. Similarly the number of school leavers is decreasing, and is expected to continue to decline over the coming years (NCC, 1998 p.13; McIver Consulting, 2003a). This decline in labour force growth due to demographic changes will increase pressure on industries to improve the productivity of current staff through further training. According to research in the latter half of the 1990s approximately 80% of the workforce of 2010 was working then (McIver Consulting, Vision 2010 Education & Training Study, 1995, p.135; National Competitiveness Council, 1998, p.6). (Similar claims are now being made for 2015.)

2.9 Changing Best Work Organisation Practices

There has been a growing need for Irish companies to move away from the traditional low training management approach to adopt a high training, strategic management approach (Forfás, 1996, p.159).

Current best management practices tend to focus on coaching and facilitating rather than traditional command and control style management. The increasing levels of responsibility requires workers to develop strong skills in a variety of areas (Forfás, 1996, p.154). Modern work practices require a new participatory management style involving more emphasis on 'soft' skills, such as communication, teamwork, multi-skilling, flexibility and self-management (FÁS Food, Drink & Tobacco Report, 1993, p. 17).

Since the mid-1980s, high performance work practices incorporating aspects such as 'Total Quality Management', World Class Manufacturing, 'learning organisation' and 'team

working', have emerged as being important in Irish industry. The approach of management to these work processes is important to determining their success. Management must have a full understanding and commitment to all aspects of these processes and the benefits they can yield (FÁS Textile Report, 1993, p.17).

An unpublished report for EGFSN on "High Performance Management Skills" (McIver Consulting, 2003b p.4) reviews High Performance Management, the current incarnation of these new management approaches, finding that it promotes updated thinking in three main areas — operations management, human resource management and the application of information & communications technologies. The report focuses on the skills implications of High Performance Management at all occupational levels — not just among managers. The set of management skills required for the implementation of High Performance Management is just a subset of the full set of management skills required to manage a company effectively.

2.10 Management Skills

Research suggests that, throughout the '90s, the skill capacity of managers at all levels has lagged behind best international practice (FÁS Sectoral Studies; Roche & Tansey 1992, p.151; NESC 1993, p.208; O'Connell & Lyons, 1995, p.31). Upgrading of management skills across all Irish industries has been recommended since the early '90s (Culliton, 1992, p.55; FÁS Food, Drink & Tobacco Report, 1993, p.17; FÁS Chemical Study, 1993, p.104, 128). Following the Culliton Report in 1992, it was a recognised that a new emphasis on management training was required (Irish Government Response, 1993, p.40).

Management must recognise the value of training to sustaining Ireland's competitive position (FÁS Engineering Report, 1993, 2-9, 2-21). If motivated, management can initiate and manage change and also harness and develop the skills of employees to maintain overall economic performance (O'Connell & Lyons, 1995, p.33). This cannot be achieved however if managers do not recognise and act on the need to upgrade their own skill base, 'management must recognise and accept its responsibility in strategic HRD' (EGFSN, Food Processing, 2003, p.9).

The report on e-business by the Expert Group on Future Skills Needs (EGFSN, 2001 p.8) revealed deficiencies in management skills related to e-business, thus demonstrating the need to upgrade managerial levels of IT literacy. Rapid changes in technology require managers to have a high level of proficiency in IT in order to compete in the new technologically-driven business environment. In addition to the valuable technological skills that IT graduates develop, they should also be given managerial skills training (Forfás, 1996, p.155).

The FÁS Software Training Study (nearing finalisation) has found significant management deficiencies in software SMEs, analogous to those found by FÁS studies of other sectors in the early to mid-1990s.

2.11 Shift in Sectoral Mix

Following from relative increases in labour costs, manufacturing industry is declining in importance, with a fall in employment being experienced in 2002 (EGFSN 4th Report, 2003, p.15). Where sectors have suffered from falling employment, most of those displaced appear to have been able to find alternative employment in other sectors, judging by the relatively modest increases in unemployment experienced. However, there may be an increased need for reskilling to allow workers to switch between industries.

A number of sectors have experienced considerable growth within Ireland in the last decade, such as the ICT sector; pharmaceuticals; construction; software; and medical devices. More recently, the *ICT sector* has experienced a downturn that has led to an excess of ICT graduates. It is expected that this excess of supply over demand for graduates will be a short-

term phenomenon and that the ICT sector will 'continue to be a major driver of growth in the Irish economy' (4TH Report EGFSN, 2003, p.3). In order to sustain the Irish ICT sector, education and training needs to be provided to those already working in the ICT sector in specific business areas, such as entrepreneurship and business strategy (EGFSN 4th Report, 2003, p.2,3).

In line with Ireland's vision to become a 'knowledge based economy', the *Biotechnology sector* is expected to grow substantially between 2004-2010 (EGFSN Biotechnology Report, 2003, p.8). According to the EGFSN Fourth Report (2003, p.4) the required skills to achieve this are currently missing in the labour force and there must be an injection of relevant skills to realise the full potential of this projected biotechnology expansion.

The ESRI Medium Term Review 2001-2007 noted that outputs of the *Food Processing sector* are expected to increase in the coming years, yet employment levels are expected to decline after 2005 (EGFSN 4th Report, 2003, p.64). Therefore the food industry must overcome the lack of investment in training that it has been previously characterised by, as the skills of the current labour force must be upgraded and adapted to cope with changes in this sector (EGFSN 4th Report, 2003, p.8).

The *Services sector* has emerged as a source of international trade and employment opportunity and employment continues to grow in this sector (White Paper on Human Resource Development, 1997, p.111; EGFSN 4th Report, 2003, p.15). The ESRI Medium Term Review 2003-2010 suggests that the majority of new jobs created between 2003 and 2010 will be in high skilled areas of the services and hi-tech sectors, while employment in agriculture and construction are expected to decline (Labour Market Review, 2003, p.24)

2.12 Technology

In recent years rapid technological advances, the use of the Internet, and the communications revolution, have all changed the skill requirements of the Irish workforce (NESC, 1993, P.199; McIver Consulting, Vision 2010 Education & Training Study, 1995, p.59, 60; EGFSN eBusiness Report, 2001, p.9; Ireland's Employment Action Plan 2002, p.33; Hannan, McCoy & Doyle, 2003, p.1). Research suggests that information technology is contributing to the reduction in repetitive, routine work and the introduction of the high skilled labour force requirements. As a result, the Irish workforce must be continuously renewed through upgrading and reskilling, in order to ensure that the labour force remains competitive and does not become a 'wasted asset' (White Paper on Human Resource Development, 1997, p.111; Green Paper on Adult Education, 1998, p.32; National Competitiveness Council, 1998, p.3; Programme for Prosperity and Fairness, 2000, p.66).

Recent Shifts in Training Policy

3.1 Introduction

There have been some significant changes in training policy in recent years, the impact of which cuts across the various different topics that this review is intended to address. Key changes are:

- Calls by policy advisory bodies to increase spending on training for those in employment;
- The establishment of the National Training Fund;
- A shift away from providing support to individual companies, in favour of various forms of support for programmes that meet the needs of groups of companies; and
- A shift in favour of choices on priorities in spending on continuing training for the employed being driven by strategic considerations.

Key initiatives undertaken that have changed the manner in which the State intervenes to promote training of the employed include the following.

- The FÁS Competency Development Programme
- Skillnets
- Integration of training support with other Enterprise Ireland capability development activities.

3.2 Calls to Increase Spending on Training of those in Employment

There has been a significant shift in enterprise training policy in recent years. An increased emphasis on training of the employed has been a feature of policy documents such as the White Paper on Human Resource Development (Department of Enterprise, Trade & Employment, 1997), the White Paper on Adult Education (Department of Education & Science, 2000, p.16), and the Report of the Task Force on Lifelong Learning (2002 p.8).

The strand of the Employment and Human Resources Development Operational Programme (EHRD-OP) 2000-2006 focusing on promoting a skilled, trained and adaptable workforce with the ability to respond successfully to changes in labour market needs emphasises further training, re-skilling, lifelong learning, and increased investment in education and training.

For clarity, it is well to note here that some potential for confusion arises in any discussion of training those in employment, from the inclusion of apprentice training under this heading in some documents. Except where noted otherwise, references to training of those in employment in this literature review should be taken to refer to continuing training for those in employment, and not to encompass initial training of apprentices.

An annex to the 2002 report of the National Training Advisory Committee on "Priorities for Training of People in Employment" (NTAC, 2002, Annex B, sections 4.2 and 4.3) noted that €187.7m was allocated to FÁS for Training the Unemployed in 2002, while approximately ⊕2m was to be spent on apprenticeship training within FÁS. Just €32m was available to organisations under the remit of the Department of Enterprise, Trade & Employment to

support people in employment through schemes "providing discretionary support to companies". The Committee argued that "funding priorities should follow developments in the labour market" (i.e. greatly reduced unemployment) "and should now reflect the need to up-skill those in employment".

In the "Irish Labour Market Review 2002-2003" (FÁS, 2003, p.5), FÁS proposed the following. "A greater emphasis on up-skilling the existing workforce, rather than the unemployed or new entrants, will be needed in the future. This will require a co-operative approach across the State sector as well as funding instruments that balance the needs and responsibilities of employers, individuals and the State. It will also require the rebalancing of education/training resources towards employees."

However, Tansey (2/2003 FÁS Labour Market Update, 2003, p.19) has noted that current State training policy still remains focused on unemployment and long-term unemployment, and argues that efforts must be made to redirect this focus towards training of those at work.

3.3 National Training Fund

The National Training Fund (NTF) was established under the National Training Fund Act (2000) to finance training for two groups – those in employment and those seeking employment. The fund is financed by a 0.7% levy on payroll (National Training Fund Act, 2000, Section 4, Subsection 1). The Minister for Enterprise, Trade and Employment makes payments from the Fund "of such amounts as are determined by him or her with the consent of the Minister for Finance" (National Training Fund Act, 2000, Section 7).

Under the National Training Fund Act (2000, Section 7), payments from the Fund can be made for three purposes:

- (a) "To raise the skills of those in employment, or
- (b) To provide training to those who wish to acquire skills for the purposes of taking up employment, or
- (c) To provide information in relation to existing, or likely future, requirements for skills in the economy."

Two main types of training are supported under the first of these purposes – initial training of apprentices and continuing training of those in employment. The majority of NTF funds allocated for training those in employment go to the former.

Various reports have proposed that the desired increase in public spending on training of those in employment (implicitly, continuing training, not initial apprentice training) should come, in part at least, from the Fund.

Looking forward to an anticipated surplus in the Fund, the Expert Group on Future Skills Needs Report on In-Company Training recommended the following in 2000, soon after the fund was established.

"When additional resources are available to the National Training Fund, the larger part of such additional resources should be made available for programmes supporting adaptation to industrial change and for enterprise training." (EGFSN, In-Company Training Report, 2000, p.26)

More recently, the 2002 Report of the National Training Advisory Committee (p.viii) proposed that,

'NTF funding is provided to schemes, which meet the training needs of those "in employment" and ensuring as far as possible that an adequate portion of the NTF surplus should be ring fenced to support new proposals in this area'.

Up to and including 2002, the Fund ran a substantial surplus. In 2003, however, there was a sharp increase in spending from the Fund on those seeking employment, and on apprenticeship training, apparently, in part, substituting for a fall in other exchequer funding to FÁS for these purposes. This trend has continued in the Estimates for 2004, eliminating the current surplus and eroding the capital accumulated from past surpluses. (Estimates of Expenditure, Department of Finance, various dates.)

3.4 Shift in Focus of Enterprise Training Policy – Networks and Joint Solutions

Since the latter half of the 1990s, there has been a significant shift in enterprise training policy, favouring support for initiatives based on networks of companies and on grouping companies for joint provision.

Previously, a substantial volume of training was subsidised at the level of the individual firm, particularly through the FÁS Training Support Scheme and through Enterprise Ireland Management Development grants. While EI still provides significant firm level funding as a part of its company development activities, the overall emphasis has shifted to interventions that address the needs of multiple companies, addressing agendas identified collectively by industry or by State agencies. Industry training programmes commissioned by FÁS and Enterprise Ireland form a part of this pattern, as does funding via Skillnets for industry training networks, or through County Enterprise Boards for PLATO networks and similar activities. The Chambers of Commerce PRISM initiative also formed a part of the pattern.

This shift towards interventions focusing on groups of companies is consistent with thinking on support for training in SMEs, seen elsewhere in this literature review, which emphasises networks and delivery of programmes to groups of companies. It is also consistent with the view that State support for training should focus on "general" training, applicable across multiple companies, rather than specialised training specific to the needs of a single company.

Relevant content from the literature includes the following.

- Training networks offer an innovative method of remaining competitive by developing joint solutions to problems, sharing best practice and combining resources to reduce the costs of training (Doyle, 2000, p.9, 31, 43; NESF, 2003, p.53).
- The Training Networks Programme operated by Skillnets has increased incompany training since 1999, should be further expanded and promoted (EGFSN, Food Processing, 2003, p.113; EGFSN, 4th Report, 2003, p.71).
- In his report for NESC, Cooke (1996) argued that in order to remain internationally competitive 'a more co-operative approach to training should be adopted among firms and among agencies and the Government should facilitate these alliances/networks at both national and international level' (Doyle, 2000, p.52).

Skillnets is the most prominent exemplar of this network-based approach to training policy. It was established in 1999, and is now financed from the National Training Fund. The following is drawn from www.skillnets.com.

- "The Skillnets approach is built around Training Networks where companies get together to decide what training they want, how it will be delivered and who will deliver it. The approach is particularly relevant to small companies, which can often lack the expertise, time or money to deliver effective training policies."
- "Skillnets does not specify the type or scope of training but supports the networks with resources and expertise."
- "Between 1999 and 2001 a total of 58 networks have been supported involving 4,000 companies and 13,000 employees." "The companies have contributed an average of 32% of the costs of training."

3.5 Increased Selectivity in Public Support

The White Paper on Human Resource Development (Dept. of Enterprise, Trade and Employment, 1997) and the National Employment Action Plan (Dept. of Enterprise, Trade and Employment, 2003, Guideline 4) both argued in favour of a strategic perspective on the opportunities available to the firm and the means to achieve them.

Changes in the programmes available to support training of those in employment since 1997 can be interpreted as supporting such a strategic perspective through greater selectivity in the application of supports.

The FÁS Training Support Scheme (TSS), which supported a company's own choice of training, has been discontinued. State supports now available are subject to a more strategic review of one sort or another.

- The FÁS Competency Development Programme, which was established in 2003 following the termination of the TSS (end of 2002), commissions or supports training programmes targeted on specific skills development goals.
- The transfer of responsibility for promotion of training for many companies from FÁS to Enterprise Ireland has led to fewer companies being eligible for support. El supports are targeted on companies with export growth potential.
- Skillnets training networks target skills development needs that have been identified as priorities by the members of each network.

FÁS now funds programmes targeted on skills needs that have been identified as priorities, providing funding to providers of these programmes rather than to individual participating companies or their employees. Conceptually, these interventions are now targeted on the skills of employees, rather than on the companies that employ them.

The FÁS Competency Development Programme (CDP) was established in 2003, following on the termination of the Training Support Scheme (TSS) at the end of 2002. Where the TSS provided funding for companies undertaking training, the CDP commissions training, or in some cases supports training available on the open market, from training organisations on the National Register of Trainers, to be made available at a subsidised cost to companies with 250 or fewer employees. FÁS had previously undertaken some training of this nature, particularly in response to studies of the training needs of various sectors.

"The aim of the Competency Development Programme (CDP) is to raise the competency level of targeted employees in particular occupations within specific sectors to ensure that the national stock of skills matches the national human resource requirements for continuous economic growth. The programme will provide a training subsidy to enhance the competency of specific members of the

company's workforce and enable those employees to cope with frequent and ongoing changes in work practices." (www.fas.ie, April 2004)

Enterprise Ireland also provides training-related supports for clients under a wide range of programmes, including (see www.enterprise-ireland.com):

- Funding for "business development clients" under six headings, one of which is "human resource development";
- Advice on HR and training strategy under the Mentor Programme;
- A number of management-related higher education courses in management, including the Masters and Diploma in Technology Management at UCD and the Diploma in Management Practice Consumer Foods at UCC; and
- A range of initiatives relating to innovation management, R&D and marketing.

3.6 NTAC & EGFSN

In 2001, the National Training Advisory Committee (NTAC) was established to identify best practice in enterprise training, both internationally and in Ireland, and to advise on all aspects of enterprise training.

The Expert Group on Future Skills Needs (EGFSN) was established in 1997 to develop national strategies to tackle the issues of skills needs, manpower forecasting and training for business and education in Ireland.

Since the current study was commissioned, the EGFSN has taken over responsibility for NTAC's remit.

3.7 National Trainers Registration

Since 2003 FÁS and Enterprise Ireland have operated a scheme to approve and register training providers. A range of recommendations have been made in this area by various reports.

- To ensure companies have easy access to a source of quality training providers, it has been recommended that a national centralised database of all accredited trainers and training providers should be introduced (EGFSN, Food Processing, 2003, p.111, 113).
- FÁS should provide a register of approved trainers (EGFSN In-Company Training Report, 2000, p.28; Taskforce on Lifelong Learning, 2002, p.48). The EGFSN 4th Report (2003, p.71) recommends that both Enterprise Ireland and Teagasc have a role in developing this register.

Moving Skills Up The Value Chain

4.1 Introduction

"Skill shortages both in terms of new entrants into the workforce as well as the skills of those already in the workforce are now a major barrier to the sustainable development of the Irish economy" (White Paper on Adult Education, 2000, p.17). This, along with the threat of globalisation and the aim to become a Europe of innovation and knowledge, all contribute to increasing the importance of skills and training.

In the mid to late 1990s strong economic growth resulted in large-scale job gains. Between 1998 and 2000 there were phenomenal increases in Irish employment growth (Labour Market Review, 2003, p.15).

In the last number of years the international economy has remained relatively weak, reducing the demand for Irish exports and in turn slowing growth in the Irish economy (Tansey, 2003, p.3, p.12). Consequently, labour force growth has decelerated. However, the labour market remained tight, with a 3% vacancy rate for 2001-2002 (EGFSN- 3rd Report, 2001, p.2, 3; EGFSN 4th report, 2003, p.1; Labour Market Review 2003, p.21). In a tight labour market, raising the productivity of a business through in-company training is of the utmost importance as it becomes increasingly difficult to recruit new employees.

Throughout the last decade various initiatives have been developed, agency strategies revised, investment in education and training increased, and Government policies amended all with an increased emphasis on education and training and on the importance of upskilling the labour force. Although the participation rate of employees in education and training has improved over the last decade (Fox, 2002b, p.62) it still remains somewhat below the EU average (Irish Labour Market Review, 2003, p.5).

The skills of the workforce can provide the competitive edge needed to remain successful in the new global economy. Training can not only give rise to increased productivity, but also adapt the skills of the workforce to satisfy labour market demands (Forfás, 1996, p.151; White Paper on Human Resource Development, 1997, p.111; Denny, Harmon & O'Connell, 2000, p.29; Doyle, 2000, p.37; IBEC Training Survey, 2000; NESF, 2000, P.26, 27; Enterprise 2010, 2000, p.34; National Employment Action Plan 2001; EGFSN, 1st Report, 4th Report 2003, p.23; NESF 2003, P.47). By upgrading the skills of the workforce to satisfy the needs of the high-tech knowledge economy that is developing throughout Europe and internationally, Ireland will attract innovation-orientated foreign direct investment (OECD Economic Survey, 2003, p.11).

It should be noted that almost every issue addressed in this literature review has some relevance to moving skills up the value chain. In preparing this chapter, it has been necessary to focus specifically on issues that do not also fall clearly under other headings in order to avoid excessive duplication. Within this limitation, major themes in the literature in relation to moving skills up the value chain include the following.

- Literacy and numeracy
- Training for employees with low skills and/or qualifications
- Training to underpin new forms of work organisation
- IT and e-Business skills
- Management Skills

- Advanced skills
- Adult education

4.2 Literacy and Numeracy

While shortcomings in literacy are of significant concern, they tend not to be addressed explicitly in the training literature. However, they attract significant attention in the adult education literature, particularly in the context of the establishment of the National Adult Literacy Agency (NALA) and the publication of the White Paper on Adult Education. The education dimension to moving skills up the value chain is addressed later.

The Taskforce on Lifelong Learning (2002), which brought together education and enterprise/training interests, proposed that an initiative should be taken under Skillnets to establish networks aimed at tackling basic skills and addressing workplace literacy.

While literacy issues are mostly not addressed explicitly in the training literature, they are addressed implicitly under the following broad areas.

- Training for employees with low skills and/or qualifications In many cases, the key skills deficiencies among employees in these categories relate to literacy and/or numeracy, although these deficiencies may be identified as relating to "communications skills" and "problem solving skills".
- Training for new forms of work organisation Where there are significant deficiencies in literacy, programmes to address these deficiencies sometimes form a significant part of the training interventions used to underpin changes to new forms of work organisation.
- Training of older employees One of the themes in the training literature is of a need to address skills deficiencies among older employees. On average, older employees are less well educated than younger employees, and the incidence of deficiencies in literacy is higher. This is a part of the reason why there is a need to focus on the skills of this group.

4.3 Training for Employees with Low Skills and/or Qualifications

It has been found that employees with lower educational levels or in lower level jobs are less likely to receive education or training (Fox, 2002a, p.21). Thus it has been recommended that training be provided free of charge, or at the least that additional funding support be provided, for those low-skilled, low-qualified employees to enable them to participate in training and education (Labour Market Review, 2003, p.5).

In addition, the opportunity for low-skilled, operative level employees to acquire skills should be improved through the development of initiatives co-ordinated by both social partners and education and training providers (EGFSN, In-Company Training Report, 2000, p.25; Labour Market Review, 2003, p.5).

A number of reports, including Shaping Our Future (Forfás, 1996, p.160), have proposed that those entering the workforce without any post-second level qualification should undergo a programme of training, while working, leading to the award of a vocational qualification.

4.4 Training to Underpin New Forms of Work Organisation

A wide range of reports, including most FÁS studies on industrial sectors, reports by the National Centre for Partnership and Performance (e.g. Achieving High Performance: Partnership Works – The International Evidence, 2003, NCPP, p.16), and the (unpublished) report for the EGFSN on High Performance Management skills, identify a need for a significant volume of training when a company moves from traditional forms of work organisation to new forms of work organisation.

The FÁS Software Industry Training Report, currently in draft form, sees a need for development in areas such as Software Process Improvement.

Areas where reports see a need for state intervention are as follows:

- Support for significant volumes of training for employees at all levels, preparing for change, and developing skills in areas such as communication, team working and problem solving.
- Support for developing appropriate operations management and supervisory/teamleading skills.

Various FÁS reports have recommended specific programmes to address these needs for specific industries.

The (unpublished) report for EGFSN on High Performance Management skills suggests that a "HPMnets" programme to support companies in adopting "High Performance Management" (new forms of work organisation) practices could be established along the lines of Skillnets.

4.5 IT and e-Business Skills

Various reports focus on the need to develop IT skills in the following main areas:

- IT user skills:
- Skills relating to the effective business use of IT; and
- Skills of IT professionals.

IT User Skills

It has been recommended that industry should make existing employees IT literate, at a proposed rate of 2% per annum (EGFSN – eBusiness Report, 2001, p.17). The Information Society Commission (2000) recommended that school facilities could be used by outside groups for IT training (EGFSN – eBusiness Report, 2001, p.38).

Effective Business Use of IT

The need to update management skills in relation to IT is being tackled by a number of organisations, such as Enterprise Ireland. It is crucial that this work continues and expands into all domestically traded industries (EGFSN – eBusiness Report, 2001, p.28). The EGFSN (2001, xii) also recommends that Skillnets should encourage the development of e-business training networks.

Skills of IT Professionals

In response to the rapid developments in technological change, initiatives should be developed to upskill IT workers (Taskforce on Lifelong Learning, 2002, p.27).

The draft FÁS Software Industry Training Study sees a major need for upskilling of software professionals through increased learning opportunities (including instructor-led training, self-learning, mentoring, continuing education, briefings and the building of more effective communities of practice). It makes recommendations about developing training linked to career landmarks and to major industry technology transitions; about supporting training associated with process improvement initiatives; about boosting the involvement of higher education institutions in continuing education and training; about developing the capabilities of software companies in management of learning; and about the development of professional groupings.

4.6 Management and Business Skills

The various FÁS sectoral studies mostly identified significant shortcomings in management skills, and in other business-related skills. A number of the studies recommended training programmes in business strategy, marketing and operations management. The skills issues are reported as relating primarily to SMEs.

The draft FÁS Software Industry Training Study highlights similar shortcomings, and also focuses on shortcomings in selling, sales management and product management. It recommends the provision of programmes to address these shortcomings.

The FÁS Food, Drink and Tobacco industry study (1993, P.19) recommended that FÁS, IBEC and the relevant State Agencies join forces to promote the expansion of the European Orientation Programme (EOP), now the Export Orientation Programme. This is a scheme for placing graduates with SMEs to undertake activities in export sales and marketing.

Tansey (2003, p.19) argues that "unless Irish small and medium-sized firms are infused with greater capability, both at general management and at functional discipline levels, their ability to escape from the low and low-medium technology quadrants will be severely circumscribed".

There is a study currently underway, commissioned by FÁS and Enterprise Ireland, on behalf of the EGFSN, on the management development needs of SMEs.

4.7 Skills

The EGFSN recommends investment in advanced skills training in order to increase the flexibility and adaptability of the current workforce to meet the predicted high skill requirements of the future labour market (Employment Action Plan, 2002, p.28).

Examples of advanced skills mentioned as being priorities for continuing education or training in various contexts include sales management, marketing, business strategy (Fourth Report of EGFSN, 2003, p.32), software engineering (forthcoming FÁS Software Training Study), biotechnology technician skills (Fourth Report of EGFSN, 2003, p.42), innovation management (Fourth Report of EGFSN, 2003, p.70).

4.8 Adult Education

Various reports highlight adult education as a means to address continuing learning needs of those in employment. Much of the literature (e.g. White Paper on Adult Education, 2000) focuses particularly on its role in overcoming the causes of disadvantage, such as shortcomings in literacy and low qualifications. The Back to Education Initiative, which operates primarily at further education level, was introduced in the White Paper on Adult Education (2000) to address these issues.

The International Adult Literacy Survey (1997) highlighted the fact that Ireland's labour force was lacking in basic skills in comparison to competitor countries. As a result, the provision of funding in the education sector for adult literacy has increased by €15.4 million (Employment Action Plan 2002). Under the National Development Plan (NDP) 2000-2006 €93.4 million has been committed to the area of adult literacy. However, the participation of adult workers in education and training still remains a little below the EU average (Irish Labour Market Review, 2003, p.5).

Adult education is a crucial component in the process of lifelong learning and all individuals should have access to adult education on a lifelong basis (The Green Paper on Adult Education 1998, p.17; White Paper on Adult Education, 2000, p.26; Programme for Prosperity and Fairness, 2000, p.113). The implementation of a 'Back to Education' Initiative has allocated a further 6000 part-time places on PLC courses since its inception, thus increasing the ease with which adults can participate in further education and training. The National Adult Literacy Agency's (NALA) 'Return to Learning' initiative, which tackles workplace literacy; and the setting up of the National Adult Learning Council (NALC), an executive agency of the Department of Education and Science, which co-ordinates activities in the provision of adult education, have both assisted in increasing access to training for the employed.

However, other parts of the literature also focus on the role of continuing education in developing higher-level skills among the employed. The Third and Fourth Reports of the EGFSN, for example, see continuing education making a greater contribution to the development of the ICT sector – both through developing technology skills and through developing management and business skills.

In recognition of the benefits that partnerships can offer in relation to education and training, the EGFSN Fourth Report (2003, p.71) recommends that the enterprise development agencies and educational institutions should come together and develop specific courses based on identified skill gaps in order to satisfy skill requirements in industry. Similarly, the Programme for Prosperity and Fairness (2000, p.106) highlights the need to 'deepen business-education linkages and co-operation, including in the context of curriculum formulation and resource allocation'. The FÁS Engineering Report (1993, 9-2) recommended that IBEC, in conjunction with the training and development agencies, should co-ordinate a plan to satisfy training needs in the industry.

There is a connection between research activity and continuing higher education. Staff who are research active in an area relevant to industry are more likely to be well equipped to teach those who are already in employment, and may be more likely to take on students from industry for part time research degrees (forthcoming FÁS Software Industry Training Study, 2004.

Retraining Workers in Vulnerable Industries and Occupations

5.1 Training Aimed at Upskilling in Vulnerable Industries and Occupations

Most of the Irish literature on training relating to vulnerable industries and occupations addresses the need for training to upskill employees, so as to underpin the competitiveness of the industries, and, in doing so, to minimise the need for workers to be retrained for other work. Examples include the FÁS Manpower and Training Study of the Clothing Sector (1991) and the Manpower and Training Study of the Textile Sector (1993), and their updates (1997 and 1998). The recommendations of these studies fit into the general shape described in the Chapter on Moving Skills Up the Value Chain.

More recently, the Programme for Prosperity and Fairness (2000, p.115) noted that the shortage of specific skills, especially in relation to those sectors experiencing particular difficulties, should continue to be addressed. In addition, the Second Report of the EGFSN recommended that Enterprise Ireland should support firms in vulnerable industries to enhance their productivity by developing skills in production methods that are used internationally.

5.2 Fragmentary Nature of Literature on Retraining

The literature on retraining for other work is fragmentary. This is probably because Ireland has not experienced major problems of unemployment among employees losing jobs in declining industries. Economic buoyancy has been sufficient to bring substantial numbers of the long term unemployed back into employment. In comparison, those seeking to move from one industry to another have been relatively advantaged in the labour market. The FÁS Update Study on the Clothing Sector (1998) found that clothing industry workers were very attractive to employers involved in electronics assembly, and in some service industries. The problem appeared to be more one of employee retention in the face of competing opportunities than of difficulties in finding suitable alternative employment.

There have been reports of training interventions undertaken under job task forces created in response to significant industry closures in regional areas with less-than-buoyant local labour markets. "These task forces are generally manned by representatives from the IDA, Enterprise Ireland, FAS, trade unions, community interests and sometimes, from the outgoing firm." (Irish Times, March 5th, 1999.)

5.3 Future Retraining Needs

Ireland has gone through a period of quite rapid industrial change since ICT sector employment reached a peak around 1999. There have been substantial job losses in electronics assembly operations, and among sub-suppliers to such operations. Closures in the textile and clothing sectors have continued, and there has been a more general increasing trend towards outsourcing manufacturing to locations with much lower labour costs than are now available in Ireland. There is a growing trend for companies to undertake various functions of production in less developed countries as the skill level of these countries improves (Labour Market Review, 2003, p.26). In addition, as constraints on global competition weaken and Ireland continues to compete on a more international basis, processes that do not add value to the economy and can be easily traded in low cost countries will no

longer be undertaken in Ireland, resulting in job losses in these sectors (Labour Market Review, 2003, p.26).

Despite this, unemployment increased fairly modestly in recent years, after reaching a minimum in Q4 2000. It fell by a seasonally adjusted 0.2% in the last quarter of 2003 to 4.5%. The long-term unemployment rate was still just 1.4%, up from a low of 1.2%. (Quarterly National Household Survey, Q4 2003)

However, there is some cause for concern. A proportion of those losing employment from vulnerable industries have low skills and/or qualifications. It appears likely that these will be more exposed to difficulties in obtaining other employment than those who are more skilled, or have better qualifications. For these, the key skill areas to target are generic skills that are transferable across industries.

There is a need for FÁS and the development agencies to introduce retraining programmes in generic, transferable skills to assist workers in declining sectors to move to other jobs in growth industries (Employment Action Plan, 2002; Labour Market Review, 2003, p.42) and thereby continue the task of addressing the shortage of specific skills, especially in relation to those sectors experiencing difficulties.

Need For Increased Investment by SMEs

6.1 Introduction

In 1999, approximately 98% of Irish businesses employed fewer than 50 people; 90% employed less than 10 (Annual Competitiveness Report, 1999). Ireland's indigenous SME sector (not including farming) grew from 160,000 small businesses in 1994 (Report of the Task Force on Small Business, 1994, page II) to 207,000 SMEs in 2002 (GEM Report, 2002).

Traditionally, SMEs have tended to invest less in education and training for their employees than larger companies (White Paper on Human Resource Development, 1997, p.49, 58; Continuing Vocational Survey 1999; Fox, 2001, p.16; Hannon, McCoy & Doyle, 2003, p.44). Considering the above figures combined with the expected decline in the number of new entrants into the labour force and the anticipated pressure on industries to engage in further training to survive (National Competitiveness Council, 1998, p.2, 3; National Training and Advisory Committee, 2002; Task Force on Lifelong Learning, 2002), there is a growing need for SMEs to invest in training. The OECD Survey 2003 (p.94) highlights the importance of investing in training to the Irish economy, therefore the lack of SME investment in training, and the difficulty in resolving the issue, raise concerns over the future of the Irish economy as a whole.

There is no market mechanism by which the Government can intervene and correct for the small scale of total industry in Ireland. The inadequate provision of training is in part a function of this small scale. It is impossible for the Government to rectify the fact that Irish industry structure is dominated by SMEs which, by their nature, tend to provide insufficient levels of in-company training (Roche & Tansey, 1992, p.137). However, policy responses to the need to upskill the workforce must recognise the fact that the majority of Irish industry is made up of SMEs (Labour Market Review 2003, p.40).

In recent years there is some evidence to suggest that a proportion of Irish SMEs have become aware of the need to upgrade the skills of their employees, with some suggestions that they might actually have been spending a higher percentage of the payroll on training than larger companies for a period (IBEC National Training Survey, 2000, p.20). In general, however, the evidence is still that smaller firms tend to invest less in training (Fox, 2001, p.8; OECD, 2003, p.94). SMEs must view investment in human capital as important as investment in other aspects of the business. It is only through a continuous state of learning and upgrading skills that the business remains competitive and the human capital does not become a 'wasted asset' (White Paper on Adult Education, 2000, p.127).

6.2 Barriers to Investing in Training

While deficiencies in the provision of training exist in all size companies across all sectors, these deficiencies tend to be more acute in SMEs. Research has identified a number of factors that pose specific barriers to SME investment in training:

• One of the main barriers to training is the fear that competitor companies will 'poach' staff unless skills developed are specific to the firm. SMEs are reluctant to invest in general training, as there is an increased possibility that their employees will be 'poached' by non-trainer firms who have not borne the cost of training and can afford to pay higher wages (O'Connell & Lyons, 1995, p.7; White Paper on Human Resource Development, 1997, p.113; EGFSN In-Company Training Report, 2000, p.17; Skillnets Review, 2001, p.26; EGFSN Food Processing report, 2003, p.65). Expenditure on firm specific training

- has tended to be more frequent because firms expect to capture the full return on such investments (Roche & Tansey, 1992).
- SMEs often experience difficulties in **financing** the costs of training, as they lack the resources to undertake such investments (White Paper on HRD, 1997, p.59; EGFSN In-Company Training Report, 2000, p.19; Doyle, 2000, p.42; IBEC, 2000, P.36).
- SMEs also suffer problems associated with **economies of scale**. Smaller firms have tended to endure a higher cost per employee for training than larger firms, as they cannot spread the cost of training over a large number of workers (O'Connell & Lyons, 1995, p.8). In addition smaller firms find it more difficult to release staff for training without **disrupting day-to-day activities** (O'Connell & Lyons, 1995, p.8, p.33; White Paper on Human Resource Development, 1997, p.58; EGFSN In-Company Training Report, 2000, p.17, p.19; IBEC, 2000, P.36; EGFSN 4th Report, 2003, p.66).
- SMEs tend to rely on **State support for training** in industry. Traditionally, the level of State investment in training of the employed has been minimal (NESF, 2003, p.48) and initiatives and policies have tended to focus more on the unemployed (White Paper on Human Resource Development, 1997, p.74, 76; IBEC Training Survey, 2000, p.3). In the last decade this has begun to improve with initiatives such as the Training Support Scheme (which has now been dissolved), Skillnets and the EHRD-OP.
- It has been argued that the criteria companies must meet to qualify for grant aid support tend to be numerous, and that the process for grant aid tends to be bureaucratic. These factors are argued to have acted as deterrents to training (EGFSN, Food Processing Report, 2003, p.64).
- **Information** regarding the benefits of training and investment in training is not sufficiently widely available (White Paper on HRD, 1997, p.33; EGFSN In-Company Training Report, 2000, p.19; EGFSN Food Processing Report, 2003, p.65; Labour Market Review, 2003, p.40).
- Lack of information on the **quality of training course**s, caused by the absence of a national accreditation process for all training course (EGFSN, Food Processing, 2003, p.63)
- SMEs tend to operate under a **flexible, informal work structure** and have short career ladders. As a result, not only do they not possess the internal structure necessary to focus on long-term personnel development, but also labour turnover is relatively high thus discouraging investment in education and training (O'Connell & Lyons, 1995, p.8; Doyle, 2000, p.39, 43).
- Similarly to the fear that staff will be 'poached' is the fear the confidential **information** will be 'leaked' to competitors on policies, products or prices (Doyle, 2000, p.97).
- There are issues with the **availability and accessibility** of suitable courses (EGFSN Food Processing, 2003, p.63; IBEC, 2000, P.36)
- A number of reports, including the FÁS report on Manpower and Training in the Food, Drink and Tobacco Sector (1993) and the draft FÁS Software Industry Training Study have found that SMEs have significant shortcomings in their management of training, which limit the return they get from the investment.

Together these factors inhibit the investment in training by SMEs. Fox (2002a, p.24) recommends that 'further efforts are needed to address the barriers facing small firms in providing training'. The challenge, according to Skillnets (2001), lies in demonstrating to SMEs that the benefits of training far outweigh any concerns they may have.

6.3 Networks and Joint Solutions – Relevance to SMEs

The concept of education/training/workplace networks, consortia or partnerships has been recommended as a method of increasing investment in training (White Paper on HRD, 1997, p.117; Green Paper on Adult Education, 1998, p.72; Doyle, 2000, p.9, 10, 52, 63, 77; EGFSN In-Company Training Report, 2000, p.20; White Paper on Adult Education, 2000, p.128). Larger companies can generally fund and provide for their own upskilling of employees whereas smaller firms can often lack the expertise, time, funding and infrastructure to support training systems and tend to rely on the external education and training sector (Forfás, 1996, p.156; Skillnets Review, 2001, p.26).

Tansey (2003, p.19) argues that "enterprises, and particularly SMEs, should be advised that two can train cheaper than one". He argues that training markets for SMEs function imperfectly, but that the resulting difficulties "can be overcome by co-operative and collective training provision through networks of enterprises operating in the same sector or geographic region".

Skillnets provides a framework within which such networks can be developed, and provides funding towards provision. Skillnets has had a significant impact on encouraging SMEs to invest in training. The programme provides funding to companies willing to operate as a network to facilitate employee training, thus reducing the cost of training to the individual company. The Skillnets approach acknowledges the time and people constraints of SMEs. It is an enterprise-led approach whereby companies can organise their training in such a way that they remain competitive whilst still upgrading the skills of the workforce (Skillnets Review, 2001, p.6). Skillnets also recognises that the solution to encouraging SMEs to share information and knowledge lies in building trust and confidence between members of the network over time (Doyle, 2000, p.10). Overall 'Skillnets is de-mystifying training for small companies by developing practical tools to analyse and meet training needs, quickly, locally and effectively' (Skillnets Review, 2001, p.26).

6.4 Grant Aids for SMEs in Traditional Industries

As there is a tendency for SMEs to undertrain to a greater extent than larger enterprises, and as this has an economic and social impact beyond the companies involved, there is a case for the use of supports to correct for the market failures that lead to undertraining. Grant aids/training subsidies could be introduced to assist SMEs in traditional industries that do not have the financial capabilities or willingness to participate in upskilling their employees (Roche & Tansey, 1992, p.139; O'Connell & Lyons, 1995, p.2).

6.5 Learning Organisation as a Solution

SMEs must recognise the need to adopt a continuous state of learning, in which skills are constantly refined and adapted, in order to respond to changing labour market requirements. The concept of the learning organisation, where each firm continuously develops its human resources, has been recommended as a possible solution to the SME problem (Doyle, 2000, p.40). The learning organisation has a number of characteristics that would be beneficial to increasing SME investment in education and training, including "It invests in its own future through education and training of all its people; it creates opportunities for its entire people in all its functions to reach their full potential; it integrates learning and work; and it is in a continuous state of learning so as to remain innovative and inventive" (Longworth & Davis (1996) in White Paper on Adult Education, 2000, p.127).

6.6 Broadening the Scope of Enterprise Training

According to Tansey (2003) the scope of enterprise training needs to be broadened to include capability building in SMEs. 'Unless Irish SMEs are infused with greater capability, both at general management and functional discipline levels, their ability to escape from the low and low-medium technology quadrants will be severely circumscribed' (Tansey, 2003, p.19)

Qualifications and Workplace Training

7.1 Introduction

The emphasis on lifelong learning demands that a formal accreditation system for in-company training is set up which recognises all employee training and skills development based on a certain national standard and thus promotes 'access, transfer and progression within a coherent overall framework' (Qualifications (Education & Training) Act, 1999). Formal assessment and certification procedures are important in ensuring the quality and transferability of training courses (Skillnets Review, 2001, p.18). Qualifications can act as 'a gateway to further learning' (Taskforce on Lifelong Learning, 2002, p.17). Formal assessment and qualification procedures such as a National Qualifications Framework would facilitate access to learning (NQAI, 2002, P.24) and promote labour mobility; reduce costs to employers who do not have to invest in their own testing system; set standards of achievement that can guide curriculum development; serve as criteria for monitoring the performance of training institutions (Middleton and Demsky, 1989 in NESC, 1993, P.125).

In the early '90s it was noted that a national system of accreditation would rectify the complexities involved in the certification system and bring all training up to a single formal standard (FÁS Textile Report, 1993, p.21). The NCVA has developed a model for accreditation that is 'modular, transparent, criterion based, using a variety of modes of assessment, is available to a variety of providers outside the formal education system and has been of benefit to the certification of adult learning' (Green Paper on Adult Education, 1998, p.100). However, gaps have continued to exist in relation to accreditation of employment-based training, and acknowledgement of differing awards amongst employers and educational institutions.

7.2 Necessary Elements of the Framework

According to NQAI (2001, P.21), there are a number of elements that the framework must possess. It must have clarity and be transparent and simple for its users; the standards adopted by the framework must be of a certain quality; when accounting for prior learning equality of opportunity must be promoted; it must be relevant to its users and relevant to an identified need; it must be comprehensive and inclusive; and it must be flexible and capable of incorporating changes into its structure when necessary. It will also be necessary to communicate the framework effectively and efficiently (NQAI, 2002, P.29).

7.3 European Mobility Requires Accreditation Framework

There is a need for an accreditation framework that will be acceptable internationally as well as nationally to promote the mobility of employees through the EU.

7.4 Employees With Low Educational Attainment

Recognition of prior learning is a vital component of the framework. Accreditation of prior learning enables those with low attainment levels to be included in the framework and offers the chance for them to enter into further educational and training programmes (NQAI, 2001, P.51).

7.5 Co-operation Between the Relevant Agencies

Cooperation between FETAC, HETAC, NQAI must occur to facilitate the development of the framework (NQAI, 2001, P.16).

7.6 National Qualification Systems

The National Framework should be able to integrate easily with all National Qualifications Systems (McIver Consulting, Vision 2010, 1995, p.159) and quality standards such as FÁS's Excellence through People should be promoted (White Paper on HRD, 1997, p.25).

7.7 Clarity on Exemptions must be Provided

In developing the framework, it must be recognised that accreditation of prior learning can differ significantly between providers. The framework must provide clarity in the area of exemptions from programme requirements as a result of prior learning (NQAI, 2001, P.38, 45, 50).

7.8 Learning Credits

Learning credits are essential to the process of lifelong learning and should also be incorporated into the framework (NQAI, 2001, P.37; Taskforce on Lifelong Learning, 2002, p.18); for example, the European Credit Transfer System.

7.9 Learning Assessors

NQAI and NALC should explore the possibility of developing a training programme aimed at providing highly qualified 'learning assessors' to support mechanisms for the accreditation of prior learning or work based learning (White Paper on Adult Education, 2000, p.189).

7.10 Recognition of Technical Skills Development

To establish and maintain a National Qualifications Framework, based on knowledge and skills developed outside traditional university education, is vitally important in recognising skills developed through in-company training (Green Paper on Adult Education, 1998, p.8; White Paper on Adult Education, 2000, p.132, 133). Accreditation of vocational skills and know-how, such as word processing and database manipulation, would prove beneficial in both recognising the technical skills acquired in the workplace, and encouraging employees to refine these skills, for e.g. 'personal skills cards' (EU Commission White Paper on Teaching and Learning, 1995, p.34, 54).

Need for Training to be Relevant, Flexible and Adaptable

8.1 Introduction

It has been recommended that the EGFSN examine the barriers to employee training and how training can be made more flexible and adaptable to the needs of the enterprise and the individual, perhaps taking advantage of advances in IT and technology-enabled training as a solution (Enterprise 2010, p.35). In line with EU action, Irish education and training systems must adjust their approach to learning to incorporate a diversity of demands (McIver Consulting, Vision 2010, 1995, p.148; White Paper on Adult Education, 2000, p.18, 19).

Current education and training systems do not satisfy the needs of a lifelong learning approach to training and development (National Employment Action Plan, 2002, p.36). To facilitate the diverse range of demands, from both companies and individual employees, educational and training systems must become more flexible (EU Commission White Paper on Teaching and Learning, 1995, p.36; Green Paper on Adult Education, 1998, p.9; National Employment Action Plan, 2002). There must be access to training throughout life. Rapid changes in the economic environment, which have been accompanied by equally dramatic technological advances, demand that employees have easy access to training (EU Commission White Paper on Teaching and Learning, 1995, p.36, 47). 'The volume, quality and relevance of workplace training for all in the enterprise sector' must be increased (Tansey, 2003, p.19).

8.2 An Improvement in Part-time Educational Opportunities

Part-time education opportunities for people at work are an important component of facilitating employee participation in adult education (Forfás, 1996, p.163; EGFSN – Biotechnology report, 2003, p.37; OECD, 2003, p.95). Adopting more flexible teaching patterns (including part-time education) (EGFSN Biotechnology Report, 2003, P.37) and increasing the numbers of part-time students in third level education is critical to developing Ireland's commitment to lifelong learning, thereby facilitating Ireland's strategy to reposition itself as a knowledge-based economy (NCC, 2003, P.14).

Part-time education can be instrumental in increasing participation in education and training (Labour Market Review, 2003, p.41). Part-time education provision has increased in recent years and educational institutions must continue to adopt more flexible learning arrangements (EGFSN, Biotechnology Report, 2003, p.37; NCC, 2003, P.14). It would be beneficial for the HEA and the Department of Education to introduce a yearly analysis on the extent of part-time education available in Ireland (EGFSN, In-Company Training Report, 2000, p.27).

Managers would benefit from increased investment in part time education courses in IT skills (EGFSN, 3rd Report, 2001 P.59).

8.3 Part Time Education Fees

The fact that part-time undergraduate courses still require fees whereas, in general, fees for full-time undergraduate courses have been abolished, has inhibited training and education

opportunities for certain employees (Taskforce on Lifelong Learning, 2002, p.38; NCC, 2033, P.14). It has been noted that most educational institutions are funded on the basis of full-time participants, thus explaining why they tend to offer courses that facilitate full-time rather than part-time education. Resource funding issues must be addressed to allow educational institutions to increase their ability to provide part-time courses (Taskforce on Lifelong Learning, 2002, p.38). It has been recommended that higher education fees should not apply to part-time students who satisfy a number of conditions, such as a residency clause and a means test (White Paper on Adult Education, 2000, p.19). Students who are over a certain age, attending publicly-funded institutions, completing certified programmes on a national framework of qualifications, and studying for a higher-level qualification than what they already possess, should also benefit from free part-time education (Taskforce on Lifelong Learning, 2002, p.38).

It has been recommended that the Ministers for Finance and Education and Science should come together to explore the possibility of reducing the financial burden on workers that are interested in upskilling through part-time education, by 'increasing the maximum level of spending on third level fees that is allowable for tax relief and making relief available at the higher rate of income tax' (NCC, 2003, p.14). In addition, the NCC (2003) argues that tax and grant schemes for education should interact in such a way as to ensure that employees at all organisational levels, particularly those that are low-paid, 'have adequate financial resources to re-skill through part-time education'.

8.4 Training Networks

In line with the partnership approach to learning, training networks, such as those supported by Skillnets, have emerged as a new method of increasing accessibility to training courses and offering flexibility in design of courses relevant to the companies engaged in the network (Skillnets Review 2000, p.6)

8.5 Open and Distance Learning

To encourage individuals to participate in upskilling, education and training institutions along with employers and State agencies should co-ordinate activities to facilitate an increase in distance learning (Forfás, Shaping Our Future, 1996, p.163).

In terms of agency action to increase participation in further education and training, FÁS should develop its NetCollege as an IT training tool for *all industries* (EGFSN, 2001, xii); and undertake greater responsibility for promoting e-business awareness to services industries to facilitate their access to IT skills training (EGFSN, 2001, p.38).

8.6 Industry and Education Partnership

Training and education programmes must continue to become increasingly flexible and affordable to satisfy the upskilling demands of the labour force. Partnerships among training/education/industry allow for flexible delivery of training and education, facilitating local developments within the context of a national framework (White Paper on Education, 2000), for example IBEC's Business-Education Links Programme. Industry and education should engage to ensure training provision is flexible and adaptable to the needs of individuals. For example, industry and education should come together to jointly agree timetables and modules for courses and also the possibility of increasing the delivery of courses in the workplace (White Paper on Adult Education, 2000, p.130; Taskforce on Lifelong Learning, 2002, p.40). According to the Programme for Prosperity and Fairness (2000, p.114) it is critical that 'dialogue and liaison between business and third level

institutions, aimed at ensuring flexible and appropriate learning provision for adults, is facilitated', e.g. the IBEC/CHIU and IBEC/IT Joint Councils.

To ensure that all employees have basic skill levels, literacy and numeracy initiatives should be set up for delivery in the workplace (EGFSN, In-company Training Report, 2000, p.25).

8.7 Structures Under White Paper on Adult Education

A part of the purpose of the structures set out in the White Paper on Adult Education is to promote local access to learning. The Local Adult Learning Boards set out in the White Paper are designed for this purpose. The National Adult Learning Council is intended to promote learning opportunities in the formal education sector, in the workplace and in community education, and to contribute to improving the coherence of the overall education and training system for adults (White Paper on Adult Education, 2000, p.185).

Required Infrastructure

9.1 Introduction

This chapter is set out in four parts.

- Schemes to balance responsibilities of Government, enterprises and individuals
- National structures
- Supporting activities
- Principles for state interventions

Relevant organisations, such as FÁS and the social partners, should undertake an analysis of the mechanisms in place to support training of the employed in Ireland. Particular focus should be given to increasing the levels of training and ensuring that training of the employed is distributed equally among all employees (Labour Market Review, 2003, p.42).

There is an increasing need for greater investment in supporting infrastructure, such as affordable childcare, to facilitate employee participation in training and education programmes (Green Paper on Adult Education, 1998, p.66, 81; Taskforce on Lifelong Learning, 2002, p.33). Support structures must be put in place to satisfy the work-life balance. The development of an Educational Adult Guidance and Counselling Service, offering easy access to information and help on all aspects of adult education, was also recommended as a necessary support service (White Paper on Adult Education, 2000, p.156, 157).

The Green Paper on Adult Education (1998, p.65) identifies a number of factors that must be taken into account when establishing new infrastructure to support training of the employed, including the lack of a single accreditation system; low levels of investment and a reliance on short-term EU funding; poor attention to adult education within the education system; and inflexibility in the system which inhibits it from meeting adult needs.

9.2 Schemes to Balance Responsibilities of Government, Enterprises and Individuals

9.2.1 Responsibilities of Government, Enterprises and Individuals

Various reports highlight responsibilities relating to continuing training that lie with the State, with enterprises and with individuals. A reasonable synthesis is that all have responsibilities in the area, and that policies and interventions should take account of this shared responsibility.

There are also occasional references to a role for trade unions (FAS Textile Report, 1993, p.19).

Government Roles

The Government has been identified as having an important support and promotion role in encouraging firms to invest in training systems (Forfás, 1996, p.163).

By devising a policy to 'enhance labour quality through education, training and in particular lifelong learning', Ireland's Employment Action Plan (2002, p.25) reinforces the aims of the 2001 Employment Action Plan and recognises the importance of ensuring that the skills of the workforce are flexible, adaptable and appropriate to the current requirements of the labour market. In addition, the Programme for Prosperity and Fairness (2000, p.106) maintains that it is crucial 'to grow competitiveness and employment by supporting increased productivity through enhanced skills development at all levels of the workplace'.

The Employment and Human Resources Development Operational Programme (EHRD-OP) 2000-2006 was devised as the investment plan for the development of Human Capital in Ireland in an attempt to achieve the policies set out in the Employment Action Plan. Further training, re-skilling, lifelong learning, and increased investment in education and training are emphasised as methods of achieving this goal.

Although policies have begun to direct their focus towards training of the employed, Tansey (2003, p.19) argues that, at present, State training policy continues to place 'too much emphasis on ...unemployment and long-term unemployment' and it must be refocused on the training of those at work.

Enterprise Role

According to Tansey (2003, p.19) 'responsibility for enterprise training is ultimately the responsibility of the enterprise sector'. The enterprise sector must be encouraged to take greater responsibility for training the workforce (Enterprise 2010, 2000, p.35).

Individual Role

Along with increased levels of Government and enterprise investment in training, individuals also should take a greater responsibility for their own lifelong learning. The realisation that in general there is no longer a 'job for life', should force individuals to take a greater responsibility for the development of their skills and adopt a more lifelong approach to learning (FÁS Food, Drink & Tobacco Report, 1993, p.15; Forfás, 1996, p.156; Labour Market Review, 2003, p.40, 41).

According to the OECD Employment Outlook (2003) 'a comprehensive policy strategy involving a combination of tax incentives, loan schemes, employee subsidy schemes, and payback employee contracts is needed' to increase investment in training, while also providing equality in access to training (Labour Market Review, 2003, p.41).

9.2.2 Reallocation of Funds

Roche & Tansey (1992, p.152) observed that public expenditure in the area of education and training has been relatively high and that funds should be reallocated to vocational training for the enterprise sector. IBEC (2000, P.3) also recommend that 'a reallocation of investment, within current resources, towards upskilling those in employment is a priority'. Fox (2002a, p.23) maintains that public intervention should be introduced to 'rebalance training investment decisions to promote greater access across the entire skills and occupational structure'. The NTAC (2002, viii) has proposed that National Training Fund surplus funds should be ring-fenced for training of the employed.

The FÁS Strategy 2002-2006 (FÁS, 2002, Section 7.3, Goal 2) envisages that FÁS will make a significant increase in the level of activity it provides in relation to employers and people in employment.

9.2.3 Tax Incentives

Companies should be further supported to encourage their employees to pursue third level qualifications and further education (EGFSN, 2nd Report, 2000, P.15), for example by reviewing the tax relief schemes for higher education (EGFSN, In-Company Training Report, 2000, p.26), or providing tax incentives/training grants (O'Connell & Lyons, 1995, p.10).

Tax incentives should be introduced which favour any method of sharing the costs of training among industries, institutions and individuals (Labour Market Review, 2003, p.40).

A number of EU Member States have developed initiatives such as learning leave entitlements, tax credits for investment in training, or training vouchers. It has been recommended that the Government introduce tax credits to individuals who fund their own training (Forfás, 1996, p.163).

Expenditure on training must be viewed as an investment in future growth and profitability rather than a current cost (White Paper on Human Resource Development, 1997; Green Paper, 1998). State policies should reflect the importance of education and training to the economy by providing tax-based incentives to companies that engage in continuous upgrading of their workforce (White Paper on Teaching and Learning, 1995, p.70; Green Paper, 1998)

9.2.4 Individual Learning Accounts

According to the Labour Market Review 2003 (p.40, 41), measures should be introduced to increase the incentive to invest in training and also increase the equity with which training is provided. Fiscal policies that favour a combination of Government, enterprise and employee cost sharing should be introduced, such as, for example, Individual Learning Accounts. Although further research on Individual Learning Accounts is required, in relation to the 'dead weight' costs associated with them, they have proved successful in increasing the participation rate in training (FÁS Labour Market Review 2003, p.41).

9.2.5 Statutory Paid Learning Leave

It has been recommended that commitments should be given to introduce statutory paid learning leave, the details of which should be developed with the social partners (Taskforce on Lifelong Learning, 2002, p.48, 49; NESF, 2003, p.49). The introduction of a 'learning leave' entitlement, underpinned by statute, would be likely to prove beneficial in increasing the number of employees engaged in training (Green Paper on Adult Education, 1998, p.9; Taskforce on Lifelong Learning, 2002, p.49). The possibility of introducing paid learning leave should be thoroughly examined (EGFSN, In-company Training Report, 2000, p.27).

9.2.6 Government Focus on General Training

To develop industry and encourage companies to engage in general skills training, it has been recommended that Government should provide training options and increased financial support to companies wishing to undertake 'general' training of their employees (Industrial Policy Review Group, 1992; Roche & Tansey, 1992, p.138). As companies are likely to undertake training to address their specialised needs, but less certain to undertake training to develop skills that may ultimately benefit another employer, a focus on general training may limit the impact of deadweight of Government interventions.

9.3 National Structures

9.3.1 Introduction

Various reports have proposed that national level structures should be put in place, or changed, in order to promote lifelong learning in general, or continuing training in particular. Viewed together, the recommendations suggest a divergence of views as to the extent that agencies of the Department of Enterprise, Trade and Employment should fit into the same framework as organisations funded by the Department of Education and Science.

However, there is a need for co-ordination. Historically, the level of engagement between educational institutions and industry to encourage upskilling has been more limited than in many other countries. Denmark and Finland have demonstrated best practice in their education and industry partnerships to identify skill needs and develop appropriate courses to satisfy these needs (EGFSN Food Processing, 2003, p.92, 99). Therefore, to compete in the rapidly changing international market place, Ireland must mirror best practice. Educational/training institutions and industry must co-operate and co-ordinate their activities to increase the levels of training of the employed (Government Response to Culliton Report, 1993, p.40; FÁS Food, Drink & Tobacco Report, 1993, p.19; White Paper on Teaching and Learning, 1995, p.57; Forfás, 1996, p.164; Green Paper on Adult Education, 1998, p.9; White Paper on Adult Education, 2000, p.128; EGFSN 3rd Report 2001, p.29, 69; OECD, 2003, p.6).

9.3.2 Green Paper on Adult Education

According to the Green Paper on Adult Education (Department of Education, 1998, p.115), any solution aimed at developing a structure for Adult Education should possess the following characteristics: Seek integration while celebrating diversity; be locally responsive within a national framework of objectives; focus on adult education in line with lifelong learning objectives; allow both the employee and the employer to be involved in decision making; seek complementarity rather than uniformity; and ensure a focus on targeted and effective programmes.

9.3.3 White Paper on Adult Education

The White Paper on Adult Education (Department of Education & Science, 2000, p.185) proposed the establishment of the National Adult Learning Council (NALC). The Council has a membership that spans virtually the whole of public and community post-second level education and training provision, as well as employers and trade unions. A large part of its remit is to improve integration between these on the provision of adult education, at policy level, at inter-agency level and at operational level. In the NALC context, "adult education" effectively refers to all post-second level education and training provision other than apprenticeships and full time higher education for school leavers. NALC will operate through an executive that has not yet been appointed.

The White Paper sees NALC having a Workplace Learning Unit, whose role will be (p.189) to:

- "Support the establishment of education/training/workplace consortia through the work of the Local Adult Learning Boards";
- "Promote innovative approaches to workplace learning, particularly in the application of ICT and distance education";

- "Explore with the National Qualifications Authority of Ireland the feasibility of establishing a panel of Learning Assessors and Designated Assessment Centres for purposes of APL³ and WBL⁴, and to support the quality of provision in this area:
- "Promote opportunities for poorly qualified labour market entrants to upgrade their skills":
- "Promote the capacity of the Adult Education system to address skills needs in the workplace, particularly in relation to new technology, foreign languages and areas where shortages have been highlighted by the Expert Group on Future Skills Needs".

9.3.4 Strategic Framework for the Implementation of Taskforce on Lifelong Learning

Lifelong learning plays a role in increasing the flexibility of firms to adapt to changing labour market demands, thus ensuring the sustainable development of the Irish economy (White Paper on Human Resource Development 1997; National Employment Action Plan 2002, p.33; Programme for Prosperity & Fairness, 2000, p.132; Labour Market Review, 2003, p.52).

Under the Programme for Prosperity and Fairness (2000) a Taskforce on Lifelong Learning was established, which developed a strategic framework to assist in realising Ireland's goal of becoming a 'high skill economy'. The development of a strategic framework to facilitate a culture of lifelong learning is seen as critical to achieving Europe's goal of becoming "the most dynamic knowledge based economy in the world". Investment in education and training should be focused more on continuous, lifelong learning (Forfás, 1996, p.151).

The framework established by the Taskforce on Lifelong Learning (2002) consisted of a number of elements focusing on continuous education and training. The Taskforce made a number of recommendations on lifelong learning in the workplace, which have been reinforced in subsequent reports.

According to NESF (2003, P.49) the development of a strategic framework to facilitate the implementation of these recommendations is a matter of priority for the Department of Enterprise, Trade and Employment in conjunction with EGFSN.

Although Skillnets has proved successful in increasing participation rates in training throughout various sectors of Irish industry, there is no sustainable infrastructure in place capable of maintaining these group-based training schemes and mainstreaming them into national policy and practice (NQAI, 2002, P.18). It has been recommended that the Department of Enterprise, Trade and Employment in conjunction with NTAC establish a national framework for the delivery of work-based training, specifying clearly the individual roles of FÁS, Enterprise Ireland and Skillnets (NESF, 2003, p.14).

The current social partnership agreement 'Sustaining Progress' has re-iterated the commitment to actively promote lifelong learning over the entire lifespan. It states:

"The Government and the Social Partners agree that those recommendations of the *Report of the Taskforce on Lifelong Learning* as agreed by the social partners, together with the *White Paper on Adult Education*, now provide the strategic framework within which lifelong

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³ Accreditation of Prior Learning

⁴ Work-Based Learning

learning should be progressed. Work on implementing the recommendations of the Task Force will be progressed as a strategic priority as resources permit, overseen by a Steering Committee chaired by the Department of Enterprise, Trade and Employment. The National Adult Learning Council provides a mechanism for social partner participation in this policy area.

When the new framework of national qualifications is developed and initiated, the National Qualifications Authority of Ireland and the awarding councils will prioritise implementation of policies and mechanisms to validate workplace learning. Priority will be given to implementing flexible part-time access to education and training, to addressing the needs of those who are most disadvantaged and at risk of poverty, particularly travellers, lone parents, people with disabilities, older adults, the unemployed and those with the lowest educational and skill levels, building on the work of the Educational Equality and similar initiatives and developing an integrated web enabled database of adult learning options." (Sustaining Progress, P 51.)

9.4 Supporting Activities

9.4.1 Introduction

This section summarises specific actions recommended by various reports, grouped as follows:

- Awareness campaigns
- Company-level training survey
- Training of trainers

9.4.2 Awareness Campaigns

It has been recommended that IBEC and ICTU should join forces to provide an awareness campaign on the benefits of training and accreditation to employees (EGFSN, Food Processing, 2003, p.106; EGFSN 4th Report, 2003, p.68).

As a further measure to raise awareness of the benefits of training, Enterprise Ireland, FÁS and IBEC should develop a coordinated approach to communicate the importance of training to the overall economic development of the company (EGFSN, Food Processing, 2003, p.105).

Not only should actions be taken to promote the importance of training in general, but awareness campaigns should also be developed to reflect the importance of senior management training in companies in increasing their flexibility to respond to the changing skill requirements of the labour force (EGFSN, Food Processing, 2003, p.105).

9.4.3 Promotion of Initiatives

FÁS should promote their training and development programmes to a wider audience (FÁS Food, Drink & Tobacco Report, 1993, p.16, 312) and the Department of Enterprise, Trade and Employment should promote the Skillnets Initiative and the benefits that have resulted from it (EGFSN, 4th Report, 2003, p.71).

9.4.4 Company Level Training Survey

In order to provide a greater insight into the training needs of companies and thus reduce the risk of investing in training that would take place without an injection of funds, FÁS, Enterprise Ireland and Forfás, should establish the best method to undertake a regular company-level survey of training (NESF, 2003, p.14). A regular company level survey on incompany training should be introduced, along with a yearly analysis on the extent of part-time education available in Ireland (EGFSN, In-Company Training Report, 2000, p.27).

A company-level survey of training would be beneficial in not only tightening the focus on training to avoid 'dead weight cost' (OECD, 2001, p.83), but would also raise awareness of the importance of training. This in turn would move investment in training and upskilling employees 'up the value chain' within companies.

9.4.5 Training of Trainers

To ensure that trainers continue to update their skills to match the rapidly changing skill requirements of industry, the Department of Enterprise, Trade and Employment should build on the ADAPT Initiative to promote the training of trainers (Taskforce on Lifelong Learning, 2002, p.52). The Train the Trainer programme in the meat industry should be rolled out to other food sectors (EGFSN 4th Report, 2003, p.70)

9.4.6 Proactive Agency Role in Identifying Training Needs

Agencies and industry representative bodies should take a more proactive role in identifying training needs. For example, Enterprise Ireland should develop a mechanism for identifying and supporting the skill needs of its client companies (Taskforce on Lifelong Learning, 2002, p.51). FÁS and EI developmental advisors should undertake a specific training programme to assist them in their ability to identify training needs (EGFSN 4th Report, 2003, p.71).

9.4.7 Analysis of Training Provision Using State Aids

FÁS, Enterprise Ireland and IBEC should provide an evaluation of the effectiveness, relevance and quality of in-service training programmes which have been carried out using State grants (EGFSN, Food Processing, 2003, p.113).

9.4.8 The Application Process for Grant Aid

Enterprise Ireland should review the application process for grant aid to make it less bureaucratic and confusing, and to encourage greater participation in training (EGFSN, Food Processing, 2003, p.113).

9.4.9 Delivery of Training

There are inadequacies in the way training for the employed has been organised and delivered. Not only are there minimal resources available for training of the employed, but also the lack of a co-ordinated approach among training providers and State Agencies has resulted in duplicated courses rather than a variety of courses which will satisfy industry needs (NESF, 2003, p.54).

9.5 Principles for State Interventions

9.5.1 Introduction

Various documents indicate that it is important that state interventions should:

- Be cost effective; and
- Seek to develop best international practice.

9.5.2 Cost Effective State Interventions

It should be ensured that State interventions are delivered efficiently and cost-effectively, thus maximising the benefits to the firm (White Paper on HRD, 1997, p.114, 115).

9.5.3 Best International Practice and the Benefits of Training

The benefits of training should be emphasised by focusing on best international practice in enterprise training and the positive returns on investment in human capital (O'Connell & Lyons, 1995, p.4; White Paper on HRD, 1997, p.51; NTAC, 2002, 10.1). FÁS should highlight those firms that have benefited from investment in training and organise a series of half-day workshops to communicate these benefits (FÁS Food, Drink & Tobacco Report, 1993, p.19).

State Agencies should benchmark training against international best practice in order to remain competitive (Government Response to Culliton Report, 1993, p.40; FÁS Food, Drink & Tobacco Report, 1998, xv).

Part 10

Other Major Themes

10.1 Introduction

Other significant themes addressed in the literature include:

- Training for older workers; and
- Management of training.
- The Returns to Investment in Human Resources

10.2 Training of Older Workers

10.2.1 Introduction

Between 1994-2002, Ireland experienced a significant rise (7.4%) in the employment rate of 55-64 year olds (Labour Market Review, 2003, p.36). The population of the EU is ageing; the numbers of older people are expected to rise by 76% between 1996 and 2026 (NESF no.26, 2003). At the EU Council in Lisbon, it was recognised that the skills of older workers should be addressed. People aged 55-64 were identified by the EU as a potential source of increased labour supply (Labour Market Review, 2003, p.36).

The OECD International Adult Literacy Survey (1997) highlighted the high proportion of older people that have low levels of basic numeracy and literacy skills (White Paper on Adult Education, 2000, p.34). This could be a function of the low level of educational achievement among older workers. In addition, older workers train less than younger workers (EGFSN Labour Participation Rates of the Over 55s, 2001, p.40; Fox, 2002a, p.21).

10.2.2 Specifically Designed Training Programmes

Older workers need training programmes designed specifically for them (NESF No.26, 2003), incorporating characteristics such as provision of sufficient personal and financial motivation, alternative work arrangements (part-time/flexi-time), a non-classroom learning environment (EGFSN, Labour Participation Rates of Over 55s in Ireland, 2001, p.41). The National Employment Action Plan (2001, p.15) also maintains that 'the retention of older people is linked to the need for updated skills, flexibility in work arrangements and reconciliation between work and family life.'

10.2.3 Work Based Training Package

NESF (2003, P.14) recommends that a work-based training package that takes into account the specific needs of older workers should be developed. This package could be funded by any surplus of the National Training Fund.

10.2.4 Benefits of a National Framework

In developing a National Framework of Qualifications that incorporates accreditation of prior learning, older workers could be given an increased chance of improving their skills base by pursuing further education/training (NESF No.26, 2003).

10.2.5 Raise Awareness of Age Discrimination

Employer attitudes to older workers can act as an inhibitor to the participation of older workers in training. It is necessary to raise awareness of age discrimination in the workplace (EGFSN, Labour Force Participation of the Over 55's in Ireland, 2001, p.40; NESF No.26, 2003).

10.2.6 ICT Skills Training

In attempting to address the low level of IT skills, the Programme for Prosperity and Fairness (2000, p.110) recommended introducing a basic adult ICT skills training programme specifically designed for those individuals with less than basic second level education, which would include the large number of older workers with low educational attainment. The Taskforce on Lifelong Learning (2002, p.27) supports this aim to include older people in ICT skills training. NESF (2003, P.15) further recommended that the development of this programme or alternatively an expansion of the Fast Track into Technology (FIT) Initiative should be a priority.

10.2.7 The Role of ICT

ICT could be an effective means of enabling training among older workers (White Paper on Adult Education, 2000, p.99), by increasing the flexibility with which training is provided and providing quality training to local areas.

10.3 Management of Training

There appears to be a significant issue with the capability of companies, particularly SMEs, to manage training effectively. Shaping Our Future (Forfás, 1996, p.159) saw a need to move from a low training approach to work organisation to a high training approach. FÁS has since introduced a model of good training management practice, embodied in the assessment tool behind its "Excellence through People" award.

The FÁS Software Training Study, currently in draft form, has found significant deficiencies in training management in the software sector, particularly among SMEs.

10. 4 The Returns to Investment in Human Resources

One of the barriers to investment in human resources has always been the difficulty in measuring and capturing the returns on that investment. For individuals, companies and society as a whole the product of HR investment is intangible. Furthermore, the value of the investment is uncertain as it may turn out not to be as useful as hoped for. A further problem may be that the company may not gain all the return; it may benefit other persons. For all these reasons, it is often considered that a 'laissez-faire' approach will lead to less investment in HR than desirable.

The report by De la Fuente published by the European Commission in 2003 is generally regarded as the most comprehensive, recent, analysis of the impact of HR investment. De la Fuente estimates that an additional year of average school attendance in the EU raises

productivity by 6.2% on impact, and by a further 3.1% in the long run through its contribution to faster technological progress. Taking account of increases in participation and employment rates, the social return to schooling is estimated at 9.7%. De la Fuente makes the point that this a higher rate than that for physical investment and would, all things being equal, suggest a reallocation of investment from physical to human capital. De la Fuente's report estimates the private rate of return on schooling in Ireland at 9.5%, a little above the average.

In late 2003 a consortium led by the ESRI published an evaluation of the National Development Plan. Part of this evaluation examined the impact of the investment in human resources under the Plan on Ireland's economic development. The most obvious benefit of education/training is to increase the productivity of employees and hence value-added and competitiveness. However, the ESRI introduces two other important effects into the analysis. Firstly, the initial impact of increased education/training of the population is to reduce the supply of persons with low education levels. This leads to an increase in wage rates for low-skill jobs which, in turn, provides an incentive for the unemployed and inactive to seek and obtain employment. Thus, total labour supply is increased. The second factor relates to higher skill jobs. The increased supply of educated labour reduces wage pressures in these jobs and this, in turn, improves competitiveness.

Introducing the three factors of increased productivity, increased participation and reduced wages into the ESRI's macro-economic model, the ESRI estimates the overall impact of the NDP's investment in human resources on GDP. The overall productivity increase is estimated at around 0.6 per cent. This productivity increase is applied to the manufacturing and market services parts of the model and it is found that GDP is 1% - 1.5% higher over the period from 2004 to 2014 because of the investment. This is, in 2004 terms, a value of €1.4 billion - €2.1 billion p.a. compared to an OP EHRD expenditure in 2000-2002 of €5.96 billion. The higher level of GDP also leads to a higher level of employment (50,000 etc.) in the long-run.

In summary, the recent research in Ireland has confirmed the importance of HR investment in improving the productivity of the economy and hence economic and employment growth. Indeed, the ESRI comments that the results show higher than previously estimated benefits from investment in HRD. It has also shown that HR investments can affect the distribution of income, and participation rates of different groups in society. It thus also has important equity and social inclusion impacts (Fitzgerald et al, 2003, Section 3.4)

Chapter 11

Key Issues Emerging from Literature Review

11.1 Introduction

This chapter sets out key issues emerging from the literature review.

11.2 Need for Increased Employee Training

There are strong economic and social imperatives to boost the level of employee training. Failure to do so will be harmful to the economy, and will undermine future competitiveness.

11.3 Responsibility for Increasing the Level of Employee Training

The responsibility for increasing the level of employee training rests with three main groups

- The Government and its agencies;
- Employers; and
- Individual employees.

11.4 Need for Increased Public Resources

To play its role effectively, there is a need for the Government to substantially increase the level of resources it devotes to promoting training of employees. Parts of the literature suggest that this can be achieved to some extent by a reallocation of resources from other areas, such as training of those seeking employment. Parts of the literature argue that a portion of the National Training Fund should be ringfenced for the support of continuing training of those in employment.

11.5 Priority Areas of Skill Deficiency

Priority areas of skill deficiency to be addressed include the following.

- There is a need to boost the skills of employees with low skills and/or low
 qualifications. In some cases this includes a need to address shortcomings in
 literacy and numeracy. In many cases it includes a need to boost other generic
 skills in areas such as problem solving and communication skills.
- Deficiencies in management and business skills in SMEs have been identified by many studies. Key areas of deficiency include business strategy, marketing and operations management.
- There is a need for increased investment in developing more advanced skills among people who are already qualified and in employment. The skills areas where this is required are diverse but include, for example, software engineering and sales management.
- There is a need for upskilling in the effective business use of information technology, and in IT user skills.

- Shortcomings in skills development are common in SMEs, and so there is a particular need to boost training in such companies.
- Older workers commonly have skills deficiencies (often associated with low qualifications), and there is a need for targeted interventions to address these deficiencies.
- Companies, particularly SMEs, commonly have deficiencies in their capability to manage training and learning effectively. As addressing these deficiencies allows companies to address their other skills deficiencies more effectively, addressing them should be a policy priority.

11.6 Other Priorities for Training

There would be significant benefits to more widespread adoption of new forms of work organisation, whether denoted "High Performance Management", "Partnership" or any other of the many other titles by which such initiatives may be known. As adoption of such practices is typically training-intensive, measures to facilitate training for new forms of work organisation should be a priority.

Much of the literature takes the view that only "general" training, applicable across multiple companies, should be supported with public funds, arguing that companies are likely to undertake sufficient company-specific training.

11.7 Key Levers for Improving Training

Key levers to be used in improving training may include the following.

- Approaches to boosting training based on networks of companies, and on
 provision of targeted programmes to groups of individuals from similar
 companies, have been successful. Similar interventions should form a major
 theme of future initiatives to boost training activity. Such interventions are
 already supported by FÁS, Enterprise Ireland and Skillnets amongst other bodies.
- There is a need for much greater involvement by the education sector in the provision of learning opportunities for those in employment. This is the case at all levels, from adult literacy education to provision of part-time postgraduate degrees. To facilitate this, an increased level of partnership between industry and the education sector is required.
- Many documents make a case for changes to the framework of rules and incentives within which training takes place, changing the ground rules in a manner favourable to increased training activity. Proposals include tax incentives, individual learning accounts and systems of paid learning leave.
- The White Paper on Adult Education proposes the establishment of the National Adult Learning Council (NALC) to coordinate the many bodies with an interest in adult learning (including "workplace learning"), and to provide a range of support services for adult learning providers. While the NALC Council has been created, its executive arm has not yet been appointed. Once appointed, the NALC executive could play a leading role in the development of continuing learning among those in employment.
- Certification may have a significant role in the development of learning in the sector. Effective and accessible systems of accreditation of prior learning will be necessary if this is to become a reality.

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