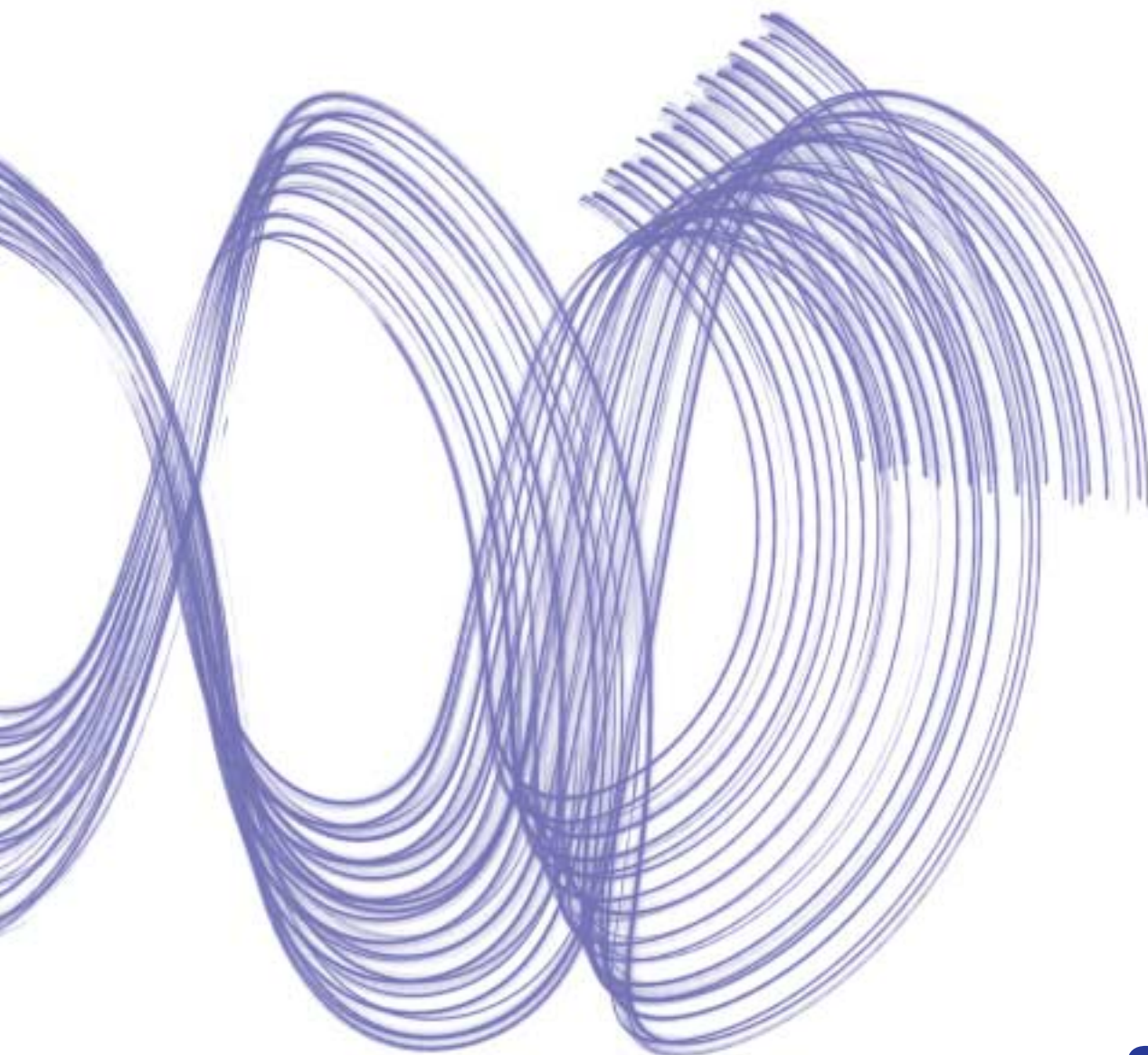


SKILLS ABROAD:
A COMPARATIVE ASSESSMENT OF
INTERNATIONAL POLICY APPROACHES TO
SKILLS LEADING TO THE DEVELOPMENT OF
POLICY RECOMMENDATIONS FOR THE UK

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Skills Abroad: A Comparative Assessment of International Policy Approaches to Skills Leading to the Development of Policy Recommendations for the UK

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Sector Skills Development Agency: Research Series

Foreword

In October 2002 the Department for Education and Skills formally launched Skills for Business (SfB), a new UK-wide network of employer-led Sector Skills Councils (SSCs), supported and directed by the Sector Skills Development Agency (SSDA). The purpose of SfB is to bring employers more centre stage in articulating their skill needs and delivering skills-based productivity improvements that can enhance UK competitiveness and the effectiveness of public services. The remit of the SSDA includes establishing and progressing the network of SSCs, supporting the SSCs in the development of their own capacity and providing a range of core services. Additionally the SSDA has responsibility for representing sectors not covered by an SSC and co-ordinating action on generic issues.

Research, and developing a sound evidence base, are central to the SSDA and to Skills for Business as a whole. It is crucial in: analysing productivity and skill needs; identifying priorities for action; and improving the evolving policy and skills agenda. It is vital that the SSDA research team works closely with partners already involved in skills and related research to generally drive up the quality of sectoral labour market analysis in the UK and to develop a more shared understanding of UK-wide sector priorities.

The SSDA is undertaking a variety of activities to develop the analytical capacity of the Network and enhance its evidence base. This involves: developing a substantial programme of new research and evaluation, including international research; synthesizing existing research; developing a common skills and labour market intelligence framework; taking part in partnership research projects across the UK; and setting up an expert panel drawing on the knowledge of leading academics, consultants and researchers in the field of labour market studies. Members of this panel will feed into specific research projects and peer review the outputs; be invited to participate in seminars and consultation events on specific research and policy issues; and will be asked to contribute to an annual research conference.

The SSDA takes the dissemination of research findings seriously. As such it has developed this dedicated research series to publish all research sponsored by the SSDA and results are being made available in both hard copy and electronically on the SSDA website.

Lesley Giles

Head of Research at the SSDA

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Section One: Executive Summary

Executive Summary

Using a case study approach, this project reviews and evaluates sectoral approaches in a number of mainly OECD countries outside the UK. These case studies consist of formal sectoral systems as well as national training systems that have aspects of the sectoral approach or which may provide additional learning.

In these case studies, we examine the different ways of engaging employers in raising their demand for skills, financing methods, sectoral system features, important issues for future developments, stakeholder roles and the relationship between sectoral bodies and vocational training and education (VET) providers.

Before presenting the case studies, the report outlines a number of themes and issues common amongst the case studies. These include:

- ❖ Incentivising skills training and raising employers' demand for skills;
- ❖ Sectoral system effectiveness and political governance;
- ❖ Social partners involvement;
- ❖ Sectoral systems and economic development;
- ❖ Performance monitoring;
- ❖ Research capacity and the changing roles of sector bodies;
- ❖ Relationships with skills providers and national qualifications systems.

These themes provide a useful framework to contrast the diverse sectoral practices and challenges from the case studies. The discussions within these themes lead to the following conclusions.

Structural Effectiveness

When designing incentives for greater sectoral training, it is vital that these are aligned with other components of the overall system for the maximum impact to be achieved. The case studies also demonstrate that sufficient consideration may need to be given to developing partnership and collaboration to ensure that sector bodies are not sidelined by, or competing with, more powerful and well-funded partners in the system. This may require wider government review and reform of the system as a whole in order to create balance between the different stakeholders, rather than relying on individual effort at the level of the SSCs.

Sectoral Incentives

It has been shown that using financial mechanisms to increase investment in training can take a range of different forms and have quite different outcomes. The Dutch system, for example, demonstrates the powerful effect of fiscal incentives in driving up employers' investment in skills training. However, the effects of such incentives are always related to the structure of the wider system. While levies may be less popular in the UK when compared with other countries, there are nevertheless worthy overseas examples and lessons to be learned that may be particularly relevant to some sectors in the UK because of similar sectoral conditions and collective needs for training. Such sectors in the UK were interviewed but not included in this report because of the external focus of this research.

Industry Skill Needs and the Learning Culture

Financial incentives are important, but there are other drivers for higher demand for skills. Establishing a learning culture within the sector is one of these additional drivers. For example, some sectoral bodies have successfully created a learning culture that leads to greater career development among the workforce. In turn, this creates greater demand for higher learning and skills. In the UK, the SSCs might usefully explore the range of levers they have at their disposal, or which they can create, in order to develop a learning culture within their sector.

National Governance and Sectoral Systems

Another important aspect that was evident from this study was the impact of national governance on the kind of work that sectoral systems can do and the success that they can have. Sectoral systems located within two-tier governance have very different issues to tackle compared with sectoral systems located in one-tier governance. Their constraints and opportunities are very different too. This could impact on the effectiveness of the sectoral bodies. As the UK moves toward a devolved system of government, there may be important lessons to be taken on board if these problems are not to occur in the UK.

Importance of Stakeholder Involvement

The case studies show that the involvement of stakeholders is not a matter of who should be involved, but what strategy is most effective in involving those particular stakeholders. Some of the important lessons learned in other systems are that it is vital for the sector bodies or initiatives to focus on a small number of issues that are highly relevant to their sector as a whole, and to ensure that the major stakeholders are on board in tackling them. Equally, however, it is important to ensure good representation and that smaller enterprises do not feel disenfranchised. There are no readymade answers to the problem of SME engagement. However, a strategy appropriate to the sector in order to deal with this issue is crucial to make progress.

Value-chain and Sector Formation

Some sectoral bodies are naturally related to each other within the same value-chain. Sectoral bodies can work synergistically together in order to leverage greater impact within those sectors (e.g. the forestry and furniture sectors in New Zealand). Such vertical, or indeed horizontal, linkage means that skills development programmes in related sectors could benefit by working together. Equally the SSDA can play a crucial role in ensuring that SSCs' coverage remains sensitive to changes in the global economy. International experience shows that, for the sectoral system to maintain effective support for employers and employees, especially those operating in global markets, it will be important to continue to identify new and emergent sectors.

Performance Monitoring

Governments in a number of countries use performance monitoring for sectoral activities. Performance monitoring can be used to measure different areas of the sectoral system's work, and can have positive benefits in terms of accountability and ensuring the most effective use of public and private funds. Where performance is closely aligned with funding, some good practices show that sectoral training can be better integrated with the national skills strategy and specific impacts can be evaluated (e.g. New Zealand and the USA). However, recognition must be given to the amount of time and resources allocated to this

monitoring system. In some cases, this can be counterproductive because there is more emphasis on audit than on action and engagement.

Strategic Leadership Role

Leadership was raised as an important and emerging issue in the different national systems. This took a number of different forms, and was often an aspiration rather than reality at this point. In the UK, each SSC may need to review its role and identify what type of leadership the SSCs should and could provide within their sector. Some may see themselves as having an information role for the sector. Others may see themselves as working alongside a larger sector body, such as an employers association, in order to represent the skills element of the wider vision for the sector. The crucial point here is that most sectoral systems have recognised that influencing skill training is useful as an immediate activity, but any progress has to be embedded within a wider vision for the sector as a whole.

Research and Labour Market Intelligence Capability

The information role of sector bodies often links closely to their research capacity. This affects sectoral bodies' ability to coordinate future activities strategically. The different national sector approaches incorporate different views of the research role of sectoral bodies. The SSDA and SSCs may want to review whether the existing balance between national and sector research capacity is the most appropriate for the UK situation and also any potential overlap and wastage.

Industry Skills Needs and National Qualifications Frameworks

Sectoral approaches can provide a key means for employers to engage with national qualifications frameworks (NQF), and to influence the supply-side of VET. The UK SSCs currently have differing linkages with the UK NQF, with some maintaining the role they had previously as Lead Bodies, and some having little linkage with standards and qualifications. While different sector bodies will need to take different approaches, according to the demands and needs of their sector, a strong linkage with the qualification framework can be a useful means to engage employers, ensuring that supply meets demand.

Section Two: Introduction to the Study

Introduction to the Study

This project, commissioned by the Sector Skills Development Agency, involves a review and evaluation of sectoral approaches to skills development within a number of mainly OECD countries outside the UK. One of the objectives of the study is to provide international intelligence and facilitation to support the activities of the Skills for Business Network (SfBn), which consists of the SSDA and the network of Sector Skills Councils (SSCs). Particular areas in which this research aims to support the SfBn are in considering potential directions for the future of sectoral skills policies and councils, and how they may influence future government skills policy in the UK.

The case studies in this report are intended to provide inspiration for policy makers and to illustrate a wide range of issues, including best practice, problems encountered and the social and political dynamics of different national policy and practice frameworks. One particular emphasis of this research is to examine the nature of demand-led sectoral approaches and the role of employers within such systems.

Whilst it is useful to examine other systems, it is important to recognise that not all the cases are exemplary in every aspect. Furthermore, it is also important to bear in mind that policies and national systems are a reflection of the social, political and historical context in which they were developed. Very few national systems can be transferred directly to another country with the same outcomes (Ashton *et al*, 2000; Keep, 1999; Noble, 1997; Ryan, 1991).

The outcomes of the project are reported in Sections Three and Four. Section Three deals with the overarching themes and issues relevant to the discussion of sectoral approaches to skills development. This is intended to inform researchers and policy makers when drawing policy lessons from abroad. Section Four documents the details of nine country case studies. Where the sectoral approach has been formally adopted. These case studies enable us to map out and evaluate the sectoral approach of each country and their policy instruments within their specific political, social, historical and geographical context. Notably, not all of the case studies have a formal sectoral skills development model. Other case studies may have only aspects of the sectoral approach to skills development, but they have been included for additional sources of ideas. For example, Singapore does not have a national sectoral system, but practices in some sectors provide inspiration for high skills development.

Section Five provides a policy matrix, facilitating comparison across selected countries according to key criteria.

How Much Do We Know About Sectoral Approaches?

Apart from an extensive literature on vocational education and training (VET) systems, little has been written specifically about sectoral approaches. For example, there is an extensive literature on youth transitions from school to work, adult education, apprenticeships, vocational training and further education systems, lifelong learning and qualification frameworks in the last twenty years. Although this literature is relevant to the understanding of sectoral systems, it has been primarily written from an educational and social perspective. This means that descriptions and evaluations of national systems may be inadequate in informing the current project, especially in the following areas:

- ❖ The frequent omission of the role of the employer because of the learner-centred emphasis in much of the existing VET studies;

- ❖ The links among skills training, the role of training providers (private and public), employers' skills demands, and industrial policy are often patchy or unclear;
- ❖ The frequent supply-side emphasis means that it is difficult to identify the existence and the extent to which a demand-led skills component is driving the system;
- ❖ There are difficulties in establishing the nature of relationships between the sectoral system and other relevant stakeholder bodies - e.g. trade unions, professional bodies, economic development agencies and federal/state departments.

As a result of the above shortcomings, we find that in many existing studies, employers and sector bodies are only mentioned in passing. There is little discussion of their role in the system, how they are organised, or what key issues or new developments are emerging in the relationships amongst the various stakeholders.

The lack of specific research and discussion on sectoral systems was less of a problem in the past, since many national skill systems had a supply-side emphasis and were dominated by voluntary participation by employers. In many countries, skills policy has been designed to ensure a good supply of well-educated and appropriately skilled workers to the labour market. More recently, however, the emergence of the knowledge economy, high skills agendas and the recognition of the need for lifelong learning for individuals have started to shift the policy focus from the supply-side to encompass both a supply and demand-side component.

This shift in policy emphasis seeks to ensure that education and training meets current employer demands, whilst at the same time encouraging employers to actively engage in higher levels of training provision and raising skill levels. This development has also been linked to the growth of a more demand-led approach to skills training, leading towards a more corporatist approach (i.e. involving employers, worker representatives and public policy makers) to achieve a higher position along the global value-chain (Ashton, *et al*, 2000).

What little literature there is available on specifically sectoral approaches tends to be dated. For example, some of the literature pre-dates the concern with the growth of knowledge-intensive and service-oriented sectors, and the spread of ICT. Not surprisingly, we are beginning to see some of these changes reflected in a shift of policy concerns towards the need for both supply and demand-side measures, together with an increasing awareness of the need to support growth in specific knowledge-intensive sectors. These policy changes could provide ideas and knowledge to support the work of sectoral policy-makers and practitioners. However, they have not been mapped out in the research literature to date. For example, Gunderson and Sharpe (eds, 1998) provide a very useful and detailed study of the history and development of the Canadian Sector Council Program. When the sectoral system was set up in the late 1980s to facilitate structural change in heavy industries (e.g. steel), the Canadian Sector Councils were intended to provide a tripartite and federal arrangement for workforce redeployment; namely supporting industrial relations at a time of fundamental change. However, the aims of Canadian sectoral system have changed quite considerably over time and since this study was written.

The remaining literature suffers from other problems. For example, evaluations of sectoral approaches to skills development are often government documents that are not publicly available due to confidentiality or the highly sensitive nature of such reviews. Furthermore, in the rare cases where sectoral systems appear in the research literature, the researchers' emphasis is often on other related elements of the VET system. This means that the sectoral elements of the system are masked within the discussion of these other elements. For

example, a recent study by Otero and McCoshan (2004), gives a substantive discussion and outline of what are essentially sectoral approaches. However, the sectoral nature of these systems and the role of employers are masked by the author's emphasis on, and remit to study, 'provider specialisation'. Thus, the research focuses on 'occupational' (Germany), 'regional' (the Netherlands) and 'further education' (New Zealand) specialisation within colleges or vocational training, such as colleges that focus on sciences, or on training for a specific sector. Ironically, because of the 'provider specialisation' emphasis, readers would not have been aware that they are reading about some of the foremost sectoral skills development systems in the world.

All of the above difficulties mean that, in order to capture important information about sectoral approaches, a more 'grounded' approach was required in the current research. This involved conducting primary research, contacting the key stakeholders in countries in which different sectoral approaches have been implemented, gathering - where available - readings, policy and evaluation documents, and organising interviews and fact-finding meetings with key players in person or by telephone. Telephone or in-person interviews and meetings were also conducted with a number of SSCs in the UK in order to explore some of the issues that they are facing and the context in which they operate. This was done in order to ensure that the project met its aims of supporting the work of the SfBn and providing useful information for the UK context.

As the research has progressed, policy forums have been held with the SSDA and members of the SSCs in order to share key findings and to explore some of the initiatives and frameworks that may provide further policy options or inspiration.

Scope of the Investigation

More than 190 people have been consulted worldwide in order to gather information, collect documents, locate useful and appropriate contacts, and conduct interviews. The research team consulted key personnel within a range of organisations and at different levels. This included consultations with international agencies (e.g. the International Labour Organisation), national strategic bodies (e.g. a range of government departments), and operational bodies (e.g. sector bodies), as well as national academic researchers involved in debates around the area of skills development and policy more widely.

The countries covered by this project include Canada, the USA, the Netherlands, France, Germany, South Africa, Australia, New Zealand and Singapore.

These countries were selected within an initial list of primarily OECD countries that might have provided useful policy lessons and through discussions with the SSDA. There were a number of additional countries in the initial tentative list. However, these were later removed from the main research activity and report for a number of reasons. For example, while sectoral approaches are being discussed informally among Korean researchers, and government policy visits have been made to other countries, firm policy directions have yet to be taken. In other cases, a lower level of sectoral emphasis in certain countries meant that the information would be less relevant to this current study, such as in Switzerland. However, in order to both map the progress that was made in all of the countries, and to facilitate any future research, a full list of countries is provided in Appendix 1, with an indication of areas that might be followed up in future studies.

Before moving on to discuss the findings of the case studies, we will first outline the current situation in the UK skills policy context and some of the important issues this raises. This will perform the following functions:

- ❖ Provide a basis for comparison with approaches in other countries;
- ❖ Provide a starting point for reflection on future directions in which the UK policy could move;
- ❖ Help to identify lessons from other countries that are particularly relevant to the UK context, and
- ❖ Provide awareness of the current issues being tackled through the UK sectoral approach to skills development.

Setting the Scene: the Current UK Approach to Sectoral Skills Development

The Development of the Sector Skills Councils

The United Kingdom has a long history of sectoral approaches to skills development, stemming historically from union and employer involvement in regulation of the apprenticeship system in a number of industries. However, the extent to which this approach 'took root' varied widely between industries and over time. Some sectors, such as construction and engineering, have a long history of employer-led involvement, whereas others such as banking, retail and hospitality did not have a strong tradition, while the newer industries such as media developed their sectoral bodies outside the established training framework.

As a result, some industries were able to respond rapidly and effectively to the new government initiative launched to form a UK-wide network of sectoral representative organisations, the Sector Skills Councils (SSCs). Industries such as construction and engineering already had a strong institutional basis from which build their role as SSCs. Thus, the CITB see Construction Skills as a very small, integrated part of what they do, since their primary funding is from employers via a levy. For other industries such as the financial services industries, this involved bringing together a number of different bodies and partners to establish agreement on the framework for working as an SSC. The result is that the current system of Sector Skills Councils, at this point in time (2005), is uneven in terms of the establishment of the individual councils and the institutional base on which they are building. Indeed, the experience of the countries researched in this study would tell us that this uneven development is very likely to persist over time.

Another distinguishing feature of the SSCs is that they have been established with a UK remit just at the time when the UK political system is moving towards increasing devolution of political power to regional assemblies and parliaments of Scotland, Wales and Northern Ireland. Each of these has, to varying degrees, its own educational system, vocational qualifications, associated government agencies and stakeholders¹. This political devolution means that the individual SSCs have to operate across very different institutional structures. In many respects, this is a unique situation because other countries with a two-tier system of governance tend to have a clear separation between the national or federal organisation of skills councils, and the local or regional bodies that deliver training. In these systems the national or federal sector body tends to provide a forum to share good practice and identify trends, while the delivery of the programmes is the remit of the local or regional organisations². In the UK, the situation is different in that there is one national or federal agency (SSC), which also delivers at the local or regional level. This arrangement has pros and cons. On the one hand, it creates a more complex web of relations which have to be

¹ See for example 'A Smart, Successful Scotland: Strategic Direction to the Enterprise Networks and Enterprise Strategy for Scotland' and Welsh Assembly Government (2005) Skills and Employment Action Plan for Wales, 2005'.

² However, there are some exceptions. For example, in Canada there is evidence of overlap between the two levels while in Australia the communication between the federal and state bodies is 'weak'.

managed in each nation and region but, on the other hand, it does offer the opportunity for more effective action at the national or federal level across the whole economy.

There is further evidence of the complexity of the relationships which have to be managed by the SSCs and Sector Skills Development Agency (SSDA) in another distinguishing feature of the UK system; namely, the insertion of the SSCs into a pre-existing set of government agencies and other institutions that already had a remit to cover aspects of industrial training and skills development. In England, we are referring primarily to the Learning and Skills Councils (LSCs) responsible for post-16 education and initial training, Regional Development Agencies (RDAs) responsible for funding continuing training, and the Modern Apprenticeship programme that delivers initial training. In addition, there are the newly created Foundation Degrees, focusing on widening participation in higher education and more recently, the National Employer Training Programme to deliver free, flexible training for vocational qualifications to the equivalent of 5 good GCSEs. Not only has the Skills for Business network to negotiate their role with these institutions, but also to repeat the exercise with their corresponding bodies in Scotland, Wales and Northern Ireland. Highland and Islands Enterprise and Scottish Enterprise are Scotland's two economic development agencies. They each provide leadership to a network of Local Enterprise Companies (LECs) which, among other things, are responsible for skills and workforce development and providing funding for learning and training programmes such as Modern Apprenticeships, Skillseekers, Adult Training for Work and Get Ready for Work. There is also the Scottish Funding Council responsible for providing a strategic overview of further and higher education. For Wales these roles are performed by the Welsh Assembly Government and Education and Learning Wales (ELWa). There is also the Welsh Development Agency responsible for its economic development. The Department for Employment and Learning, Northern Ireland (DELNI) is responsible for the administration and funding of FE, HE, workplace learning and sector sponsorship.

With the prior establishment of various learning/training related agencies, the SSDA and SSCs were inserted with a remit to create employer-led bodies. These would be capable of: identifying the skills needs of their sectors; driving up the demand for skills in their sectors; acting as a powerful voice to government and its various agencies; and putting forward their distinctive sectoral needs and concerns. This political legacy means that the SSCs have to work alongside a range of government agencies to ensure that these distinctive sectoral concerns are represented in the creation of an employer-led system of training and skill formation. Before looking at the current SSCs, it is therefore important to understand the major institutional structures and conditions within which SSCs have to work. These institutional structures shape the constraints and opportunities that face the individual SSCs. These are mapped out in the following section.

The Institutional Conditions Facing the SSCs

Further Education

The responsibility for further education (FE) and skills policy in England is that of the Secretary of State for Education and Skills. The Learning and Skills Council (LSC) with its 47 local branches is the main institution through which those policies are delivered in England. They are responsible for the planning and funding of post-compulsory learning (including that provided by schools). In Wales, responsibility lies with the Minister for Education and Lifelong Learning. ELWa was established by the Welsh Assembly Government to cover further education, government supported training, adult community learning and school sixth form provision and in April 2006 ELWa, the Welsh Assembly Government and the Welsh

Development Agency will merge. The Scottish Funding Council under direction from the Scottish Executive covers FE in Scotland and in Northern Ireland it is DELNI.

The main institutions through which post-16 training is delivered are the FE colleges. These represent the main interface with employers. Of special interest in the context of the environment of the SSCs in England are the Centres of Vocational Excellence (CoVes). These specialise in the delivery of training in specific areas. They are one of the means of relating state funded training to labour market and employer skill needs. They engage in collaboration with employers. Currently there are over 200 CoVes working with local employers, with plans to increase the number to 400 by 2006. They currently focus on delivering Level 3 skills and qualifications.

More recently, the government has announced two new measures in England. The first is the creation of specialist academies, intended to provide an employer-led focus for the training of young people for specific sectors. This includes the Fashion Retail Academy and the Automotive Academy, with others planned to follow. These are co-funded with employers. The second measure is the launch of Union Academies to build on the success of the Union Learning Fund programme. IN Northern Ireland the recent 'FE means business' strategy produced by DELNI tasks the FE college network to take a greater role in economic development.

The quality of provision in the field of training is monitored by the Adult Learning Inspectorate (ALI), responsible for those aged 19+ in further education, and for work-based training for all ages. The Office for Standards in Education is responsible for the 16-19 year olds in further education. Equivalent roles in Wales and Northern Ireland are performed by Estyn and the Education and Training Inspectorate respectively. In Scotland the arrangement is more complex. Inspection is carried out by Her Majesty's Inspectorate of Education, the Scottish Funding Council and via the Scottish Quality Management System depending on what type of institution is being assessed.

Development Agencies

As their name implies, Development Agencies are concerned with the economic development of the geographical area for which they are responsible, whether this be Wales (Welsh development Agency), Scotland (Highlands and Islands Enterprise and Scottish Enterprise along with their LECs) Northern Ireland (invest Northern Ireland) or one of the 9 English regions. Part of their remit is to fund skills provision, specifically in the field of continuing training and lifelong learning, although the Welsh Development Agency is the exception to this. In Scotland the Development Agencies focus on funding Skillseekers and Get Ready for Work schemes. In England there has recently been some movement of funds from the LSCs to the 9 Regional Development Agencies (RDAs) for continuing training. The RDAs are instrumental in developing Frameworks for Regional Employment and Skills Action (FRESAs) which are expected to identify regional skill needs and aid with student progression. In addition, the RDAs work with the LSCs, and Jobcentre Plus, together with the SSCs and other partners, on the Regional Skills Partnerships (RSPs). However, the RDAs, Jobcentre Plus and the LSCs are the main fund holders. The RSPs provide a venue for collaboration between the agencies to facilitate the use of their funds to lever up the quality of skill provision within the region.

Other private providers also have some influence over the provision and delivery of skills in the labour market. These include independent private providers, which deliver 38.5% of government funded training, and groups of employers, who provide 23.3% of such training. Both of these have a larger share of the market than FE colleges, responsible for 19.1% of government-funded training (Gospel and Foreman. 2005). Other providers include voluntary

groups, community groups, and Ufi/Learndirect covering England, Wales and Northern Ireland. learndirect Scotland is a broker rather than a provider of training.

Apprenticeships

The two other major institutions that shape the framework within which the SSCs operate are the Modern Apprenticeship programmes and the National Qualifications Framework. Apprenticeships are a UK-wide system, but with some national variations, e.g. Wales has its own adult apprenticeship scheme. However, unlike many of our European competitors, employers in the UK have a relatively low input into the design of the apprenticeship scheme and the take-up of apprenticeships in the UK is relatively low, although this is now increasing with 270,000 young people currently enrolled, representing approximately 25% of the 14-19 age group. In Scotland the take-up rate is different and higher. The issue of relatively low take-up is further compounded by the variable and low completion rates (about 40% of work-based learning participants). These programmes have so far failed to improve the widespread problem of the low stock of intermediate level skills that characterises the UK labour market. The funding for these programmes is controlled by the LSCs, ELWa, Scottish Enterprise/Highlands and Islands Enterprise and DELNI.

National Qualification Frameworks

In the UK, training is certified by a wide range of bodies. This creates potential problems for employers when they recruit, as they may not have knowledge of the value of all the qualifications on the market. To some extent this problem has been addressed by the Qualifications and Curriculum Authority in England and the sister authorities Scottish Qualifications Authority, (SQA), The Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) and QCA in Northern Ireland. These bodies provide a framework for all qualifications and a national occupational standard for a system of National Vocational Qualifications. In Scotland this is based around the Scottish Credit and Qualifications Framework and Scottish Vocational Qualifications. These competence-based vocational qualifications have had a variable take-up by employers, with many employers preferring to use their own standards. Nevertheless, as we shall see below, this is one area where some SSCs have more influence in reforming their formulation and use.

The New UK Sectoral Approach to Skills Development

Within this broad web of UK institutions, there are currently 24 SSCs which operate on a 5-year licence, with a further 1 SSC in development. A full list of all the SSCs is given in Appendix 7. These are all employer-led bodies that involve unions, professions and other stakeholders to varying degrees. Within their own sector, their key goals are to reduce skill gaps and deficiencies, increase skill demand and productivity, ensure access to skills for all, and improve learning supply. As mentioned above, SSCs differ from each other in terms of their maturity, previous experience and institutional capacity. Some of these are drawn from pre-existing bodies with a strong tradition of delivering sector-based training for employers, such as construction. Some are an amalgamation of former Industry Training Organisations, whereas others are new creations to ensure a comprehensive coverage of the UK labour market.

The SSSA oversees the development and licensing of SSCs. Once the licence is granted, the SSSA remains responsible for overseeing the delivery of the relevant Sector Skills Agreement (SSA). The SSSA also provides leadership, co-ordination, research and labour market intelligence functions. In the future, it is envisaged that the SSSA will further shift its role and become "the co-ordinator and champion of a Network of strong, enterprising SSCs operating through peer support and self-regulation." (DfES, 2005, Part 2: 20).

Other than working with licensed and developing SSCs, the SSDA is also responsible for the skills needs of those remaining sectors not covered by SSCs, and for cross-sectoral skills needs. The Sector Skills Agreements are designed to address priority skills needs that will drive up business performance, identify actions that will meet these needs, and demonstrate how the SSC will work with providers to ensure an adequate supply of skills to employers in the sector. It is worth noting that the SSC remit to drive up the demand for skills is quite a departure from the role of the original Industry Training Organisations, which were primarily focused on training places and standards. A specific and clearly-stated remit to drive up demand for skills is somewhat unique to the UK. Nevertheless, this is something many of the governments overseas aspire to, or are starting to develop at this time. Indeed, the shift from a focus on training towards a focus on skills can be observed in many of the countries studied in this research.

While this is a subtle shift in discourse and emphasis, in policy and practice terms it signals a renewed focus away from training as the immediate response to labour and skills shortages or issues, towards a wider vision of the range of responses that might be appropriate within any given sector. Training may not be the first response in order to raise levels of skills, or to fill skills gaps. What may be required might involve working with employers to build a learning culture (as in New Zealand), building a firm labour market intelligence base from which to advise the sector (e.g. Australia and France), or promoting the sector and occupations amongst young people and those traditionally under-represented in the sector, such as women and ethnic minorities (e.g. Canada, Australia, The Netherlands and USA). As such, some sectoral bodies may have a relatively small role in training beyond promotion of the kinds of jobs available in their sector and information on how to access them.

The SSDA and SSCs are financed through public funds, but some SSCs such as Construction Skills and SEMTA have additional funding through a levy imposed with the agreement of employers. While these levies provide significant resources for a small number of sectoral bodies, others are more heavily reliant on their public funds. Together, the SSDA and the SSCs form the Skills for Business network (SfBn). The network covers approximately 85% of the UK workforce.

The 2005 White Paper *Skills: Getting on in Business, Getting on at Work*, reinforces the importance of the SSCs in giving employers a stronger voice in shaping the supply of training through the Sector Skills Agreements, the new Skills Academies and the RSPs. Although the SSCs will not be the main vehicle for channelling public funds into training, they are expected to provide employers with a powerful role in shaping the demand for and supply of training. Thus, SSAs identify employers' priorities for spending public funds on training via higher education institutions, funders of FE and RSPs at the regional level. They are also to have the primary role in designing new forms of learning for young people (apprenticeships) and adults.

The 2005 White Paper also announced a new second strand in its employer-led approach to training in England, namely the National Employer Training Programme, described as a "...powerful, demand-led mechanism for changing the way in which training for adults is delivered. What makes this programme distinctive is that training is built up from the employers' business needs, and delivered in the workplace to suit their operational requirements" (DfES, 2005, Part 1: 11). Although it is envisaged that the new programme will be delivered in accordance with the priorities established in the SSAs, this programme is delivered outside the remit of the SSCs, potentially adding another layer of institutional complexity to their environment.

Despite their recent creation, it is already clear that the UK SSCs are functioning in different ways. As one would expect, those built on institutions with a history of involvement in

apprenticeship, such as Construction Skills and SEMTA, are making full use of the government sponsored programmes of apprenticeship. Others such as Skillset representing the media industry, with a history of involvement in NVQs, are seeking alternative routes to ensure the supply of appropriately trained labour and experimenting with new forms of apprenticeships. The SSCs are also differentiated by virtue of the markets in which their employers are located, some such as Cogent are primarily involved in highly competitive international markets where the impact on the change in skill demands is rapid, whereas others such as GoSkills are concerned with domestic markets which create different demands on skills. Some SSCs are in industries dominated by large firms, whilst others have a membership of mostly SMEs. Given these differences in the make up of the industry, the size of firms, and the type of markets in which the employers operate, it is inevitable that the demands on the SSCs and their responses are going to be very different.

Evaluation, Challenges and Issues

The effectiveness of the SSCs will largely be a product of the achievement of their SSAs within a broader set of institutional networks. There are a number of potential issues concerning effectiveness. Firstly, the training delivered by the FE sector tends to be determined by government targets rather than the needs of the local and national market. While the UK government target has been Level 2, many industries require higher level skills as a minimum, although the White Paper suggested this would be extended to Level 3. Thus, in spite of initiatives such as CoVes, this has led to a perception that the FE sector is unresponsive to the needs and skills demands of employers. It is not surprising, therefore, that the new SSCs are also experiencing this tension between the skills demands of their own employers (for example for higher level skills) and the requirements of public funding which, in many cases, only provides for meeting government targets and the delivery of lower level skills.

A second constraint on the SSCs is the academic bias of the VET system, which has led to perceptions of the work-based training route being inferior to the academic route, contributing to the low level of intermediate skills in the UK. One consequence of this is that the low level of skills produced by the UK work-based training system reinforces the low value-added strategy adopted by many employers in the UK. Together, these provide a different set of constraints, which make it more difficult for the SSCs to raise the level of skills demanded by employers, especially for those employers operating in domestic markets.

A further set of challenges faced by the SSCs in the UK is their lack of control over the funding of training. Some of the more successful sector skills approaches abroad are characterised by a financial system that provides the councils with more direct control over the funding of training. In the absence of such control, the SSCs have a more indirect role in influencing the supply of training, having to rely on the SSAs to exert their influence over providers. This lack of control over funding also limits their abilities to develop broader strategies aimed at enhancing the demand for skills in their sector, as has been possible for ITOs in New Zealand (see later case study).

In the area of qualifications, the legacy of some SSCs as lead bodies means that they have more influence via occupational standards. This places them in a position to shape the demand for, and supply of, skills within their sectors. The 2005 White Paper sees SSCs as having a key role in setting the National Occupational Standards to be used by the Qualifications and Curriculum Authority (QCA) in designing the new credit-based Framework for Achievement. Already 133 new occupational standards have been developed (DfES, 2005, Part 2: 18).

In spite of these challenges, many of the SSCs have already established a strong profile in their respective industries. Many are already at the forefront of workforce development initiatives, both within their own sector and nationally.

The following section now provides a discussion of the findings from the different international approaches to sectoral skills development.

Section Three: Themes and Discussion

Themes and Discussion

The consultations carried out for this research project provided a wealth of information, data and additional local publications. This not only clarifies the role of employers, sectors, sector bodies and relevant stakeholders within the different national systems, but also provides some interesting policy options to consider.

Some of the key themes and issues raised within different country's experiences include the following:

- ❖ Incentivising skill training and raising employers' demand for skills;
- ❖ Sectoral system effectiveness and political governance;
- ❖ Social partners involvement;
- ❖ Sectoral systems and economic development;
- ❖ Performance monitoring;
- ❖ Research capacity and the changing roles of sector bodies;
- ❖ Relationships with skills providers and national qualifications systems.

We now discuss each of these key themes in more detail. The aim of this section is to draw out some of the common lessons to be learned from the experience of sectoral approaches in the different countries. Brief examples are drawn from the different countries in order to illustrate some of the key contrasts and comparisons. These themes tend to be more cross-cutting issues identified across the case studies. However, these themes are by no means the only lessons worth examining. Specific issues that are evident in particular countries are highlighted within the detailed case studies found in Section Four.

Incentivising Skill Training and Raising Employers' Demand for Skills

In all of the case studies covered in this research, there is clear evidence that an incentive system can be an important element in driving up the demand for skills and training places. Smith et al (2001) argue that the costs of training and the incentives provided are as important as, if not more important than, recognising industry skills needs and training responses. However, in the following section, we will argue that the evidence from the case studies suggests that financial incentives are only one of the devices that may drive up demand for skills training. In order to be effective, financial incentives have to fit into the overall design of the sectoral training system. In addition, besides financial incentives, there are other system-related factors that may also enhance employers' and employees' engagement in skills development.

Financial Incentives

The argument that market failure leads to an under-investment in skills training is well known. Employers may be averse to training for higher skills in fear of employees being poached. Similarly, individuals cannot rationalise their future skills needs because of a lack of information or other circumstances. As a result, it is evident that financial incentives are an important part of many sectoral systems in rectifying the demand for skills training. However, it is clear from the countries studied that financial incentives have been used in a variety of ways. The exact form of financial incentive is often a product of the sectoral system's overall design.

Thus, in the Netherlands, where the sectoral system is built upon a tripartite arrangement with a strong tradition of employer and union involvement, the sectoral system aims to create a 'total' involvement of employers in taking part in and providing training. Financial incentive is in the form of a significant tax advantage. Thus, employers can benefit from a 15% tax rebate to set against trainee's wages (when on a workplace training contract). This creates a massive cost differential between those who train and those who do not³. In contrast, the sectoral system in New Zealand aims to create incentives for individuals to acquire new skills. Financial incentives are used to subsidise training places irrespective of whether the training is work-based, school-based or a combination of both. To support this, the training fund is also used to accredit workplace training.

In the minority of cases, such as the workforce development partnerships in the USA, where employer investment in skill training is the foremost objective, sectoral funding (under the High Job Growth Training Initiative) is used only to 'seed' the formation of partnerships, but not the running of training activities.

Levies might also be considered a form of financial incentive, since they are generally returned or waived when there is evidence of employer investment in training. However, the non-voluntary nature of levies means they are viewed by some as a disincentive, or merely paid as a tax. However, specific impacts can be identified and these are explored in greater detail in a later section.

There is a common misperception that any form of financial incentive, e.g. tax advantages or subsidies, will inevitably encourage employers to engage in higher levels of training. The evidence in our case studies shows that financial incentives on their own form only one element of the motivation for employers to take full advantage of training and skills development. An important lesson is how different national frameworks manage to create synergy between the financial incentives and other elements of the system. For example, if employers' own training activities are recognised and integrated into the qualification structure, financial incentives have a greater impact on employers' involvement than is otherwise the case.

Making the Links Between Incentives and Training, Employment and Desired Skills in the Workplace

On their own, and divorced from a wider system to support skills development, financial incentives may be insufficient to generate genuine employer demand for skills. Linking incentives to the broader workings of the system, however, can bring about this engagement. This is clearly highlighted in the Netherlands, where a combination of financial incentives to employers and a strong link between employers' needs and VET provision, mean that employers will make use of the VET system in order to recruit and train entry-level employees. This has enhanced the usefulness and the popularity of the VET system among employers. In particular, young employees see the VET training route as the normal pathway to gain employment and the necessary training. Indeed, one of the major successes of this system is that all parties benefit. Employers gain by developing the skilled employees they need, whilst attracting a subsidy for providing up to 80% of the training in the workplace. Employees/trainees receive a work contract plus skills training that combines training in the workplace with theoretical grounding through training in one of the regional VET colleges.

Employers must be accredited by the sectoral bodies in order to provide training places (and to gain the 15% tax refund). This means that trainees are assured of the quality of training,

³ The reader is reminded that examples used in this section are necessarily brief. For details, the reader needs to refer to all the case studies in Section Four.

and that they will be trained to industry standards. In addition, college-based training is organised specifically to support the needs of employers, the learners and their work-based training via a joint effort among all the stakeholders. This is defined by an employer-led competency framework. This arrangement increases the involvement and ownership of the employers and, as a result, the incentives are more effective in making the sectoral system employer-led.

One of the key lessons from the Netherlands approach is that the employers must be closely and continuously involved in the development and maintenance of the competency framework that drives the VET system. Once that is the case, the subsidies and the training act as reinforcing complements to each other within the normal conditions of employment. Equally, when employers are engaged in the above manner as a collective force, the solid commitment to training potentially reduces the extent of poaching, as the system potentially imposes a level playing field on all employers.

Creating a Sector-wide Culture of Learning

Another form of incentive is the engagement of employers and learners within a culture of learning. Most of the sectoral systems investigated in this research have demonstrated that employers' commitment to training has gone up as a result of the adoption of sectoral approaches. This higher level of employer commitment can be generalised in terms of time, effort and resource investment into employee training. This pattern of commitment is observed in all the case studies.

However, this commitment to skill training can be leveraged to a higher level of performance when a sectoral body is able to change the attitudes of employers and learners towards skills and training in the longer term. The chain of events here is that once the first step has been made by employers and learners with a lower level training programme or accreditation, interest in training and skills is raised. This means that the benefits of training are seen, and that there is great potential that both employers and learners consider moving to the next level of development. The task of a sectoral body is to be able to identify and build on these related events.

For example, a number of sectoral systems are being used in conjunction with an employer-led competency framework with pathway certification in order to build a learning culture, provide consistent VET for younger learners and, in many cases, give accreditation to more established workers. This is the case in South Africa, New Zealand and Australia.

Sectoral bodies in New Zealand, for example, have been able to entice employers by providing recognition of employees' current skills and experience and, later, to build upon higher levels of skill for business models. This has transformed the way staff are trained in the retail sector and employee commitment to the industry. The original Retail Industry Training Organisation (ITO) failed to engage employers with their focus on increasing and improving in-house provision of training among employers. Some employers felt that they were already providing this, and larger employers saw themselves as having a well-established and recognised training culture. When the new Retail ITO was set up, the approach was to recognise rather than chastise the training that employers were already doing. The result was that rather than looking to provide training places, the Retail ITO engaged with employers to provide accreditation in the workplace for the knowledge and skills that employees had developed.

This was a particularly successful strategy because employers saw training as their responsibility and cost, but felt accreditation was an unnecessary expenditure. Thus, the ITO funds the accreditation of training already carried out. Employees benefit by gaining

nationally-recognised certification for their current skills. Moreover, employees and employers benefit from the establishment of a kind of career pathway that had not previously existed in the sector. The Retail ITO's motto, 'Proud to be Qualified', has helped to develop a culture of learning and development, and a sense of career pathway and industry skill profile. Such a learning culture is reflected by the display of skill certificates that are frequently seen on the walls of high street retail shops and the smallest convenience stores.

In practice, the impact of the skill pathway strategy goes beyond building a culture. It reduces turnover rates in an industry well known for staff attrition. Employee commitment is enhanced. All these encourage employers to take advantage and to invest in the sectoral system. The essence of this particular approach is to recognise where the sector already is and to engage employers and employees on these terms. Building a learning culture is just the first step as a catalyst leading to further demand and investment by employers and employees.

Sharing Best Practice

Another means of driving up demand for skills may come through the sharing of best practice within the sector. Where global competition is particularly intense, a sectoral body is one of the most effective platforms to promote best practice sharing. In Singapore, in particular, many of the performance drivers are based upon a combination of skills training and adoption of best practice. Although there are still very few formal sectoral bodies in Singapore, many sectors have been encouraged to use 'structured' on-the-job training to minimise the chance elements in on-the-job training. Importantly, they do so by using a practice of 'blueprints' to specify the content of on-the-job training in the most performing companies in their relevant sectors. These blueprints are intended to improve the quality of training through learning from the very best companies, and they also act as a means of certifying the skills acquired through the National Skills Recognition System (NSRS).

Creating a Level Playing Field - the Use of Training Levies

Levies have been used to impose a sector-wide level playing field to tackle 'market failure'. However, the effects of a levy vary from one country to the next and across different sectors and social groups. In general, evidence seems to suggest that levies can 'stimulate' the level of training activities among employers (Senker, 1995; Greenhalgh, 1999, World Bank, 2004). Among the current case studies, it is evident that levies can cultivate the acceptance of a training culture among employers. It can also introduce a more systematic approach to training on a national basis. The key example of this is that by requiring employers to develop training plans, as in France, South Africa and Québec (Canada), recognition of the need for, and benefits of, training can potentially become an embedded practice. Indeed, this is supported in South Africa with the requirement for employers to recruit a Skills Development Facilitator (attracting a rebate of a percentage of their levy). Thus, even if a particular company does not have the knowledge or resources required to put together a systematic and feasible training plan, they are facilitated and incentivised to do so through the help of a training levy.

(a) Overcoming Resistance to the Levy

There can be initial resistance to the idea of a levy since this can be seen as an additional tax burden imposed by the government, rather than being an investment in training. This has certainly led to the demise of national levies in many countries (e.g. Australia, UK and New Zealand). However, as an investment in skills and training, the levy imposed is generally small in real terms (e.g. 1.6% of wage bill in France for private organisations with 10 or more employees), and many sectors invest well beyond this level in reality.

While this is the case, one notable area of resistance is among the smaller employers, as seen in the cases of France and Québec. The resistance of small and medium-sized enterprises (SMEs) to levies is also noted by the World Bank (World Bank, 2004). In Québec, SMEs complained that the levy system was overly bureaucratic and involved too much paperwork. The paperwork has now been streamlined to two sides of A4, which are kept by the employer for 6 years, rather than being submitted to the government. Despite this adaptation, a recent change in government (to one that is less inclined towards levies) accompanied a change in the legislation which means that SMEs are now exempt from the levy. Nevertheless, SMEs remain a key focus of Québec government's calls for the need to raise employer investment in training, which is seen as particularly problematic for SMEs. Indeed, SMEs are expected to benefit from programmes funded by a percentage of the levy payments of larger organisations.

In France, smaller companies in particular, but not singularly, have similarly argued that the levy system is bureaucratic and the paperwork burdensome. The paperwork has been reduced considerably and, contrary to the situation in Québec, smaller employers have now shown their commitment to the levy system by increasing their payments. This was collectively agreed. A particular driver for this renewed commitment to the system appears to be the difficulty of recruiting good staff. It seems that SMEs view a commitment to training as a more cost effective means of recruiting and retaining staff than raising wages.

Some of the initial resistance to a levy system appears to be overcome through the obligatory nature of the levy - there is no opt out. However, over a number of years, resistance may also lower as the benefits of increased or collectivised investment in training become clear. In France, for example, sectoral and profession-based collection agencies have been established as a central collection and administration point for levy payments. As can be seen in the French case study, this collective approach can stimulate sector buy-in and develop not only a collection point, but also a basis for collective agreement of sector-wide skills strategies. Moreover, smaller enterprises can particularly benefit from these kinds of agreements, which often include a mutualised fund to finance sector-wide priorities and training activities, and to support companies with fewer resources.

This collective buy-in is vital to the success of the system. Indeed, the long-term viability of levies and their impact on skills depend on a wide range of factors. For example, Senker (1995) argues that the viability of the French levy system depends on the existence of other practices, such as social partnerships, collective agreements and workplace consultation. These, in turn, create the necessary consensus for employers to take advantage of the training levies.

(b) The Impact of Levies

In terms of impact, levies have not necessarily had a uniform impact on skills training. In the case of Québec, the administration required meant that many SMEs simply paid the 'tax' as a penalty and did not provide training or claim back their levy payment. This means that it is the larger organisations that have benefited from the levy, although, as noted, this situation may be reversed in future. On the other hand, SMEs in France can benefit from the mutualised funds that operate in some sectors and professions, although it remains larger organisations that have invested well beyond the required levy amount. In South Africa, the sectoral levy is directly supporting training within the formal sector, whilst the informal economy makes up a significant part of the economy and employment - 18% of the employed workforce (Statistics South Africa, 2004). Nevertheless, the Sector Education and Training Authorities' (SETAs) discretionary initiatives may impact on the informal sector. This is currently becoming a new focus for the SETAs, although it remains to be seen how this will work in practice.

While the intended outcome of a levy is a level playing field to engage training for all, evidence suggests that the impacts of a levy tend to be differential. This is not only among different sectors and sizes of organisation, but in their impact on levels of training for different groups of staff, as is seen in the French case.

(c) Levies Can Be More Effective When Localised Within a Particular Sector

Previous discussion suggests that there are reservations about the use of levies and outcomes vary when levies are used economy-wide. In the countries covered in this research, there are instances in which levies are positively received and utilised when they are particularly relevant to the needs of a particular sector. For example, the construction sector bodies in most of the countries covered see levies as a fundamental element of their sector training system. Indeed, the UK construction industry is one of the few to have retained its levy when the national levy system was abandoned.

The Netherlands' sectoral system also includes a small (about 0.2% to 0.5% of wages) levy in the form of the Sectoral Training Fund. Separate from the sectoral training bodies, this is collected through collective agreements within each sector. It is designed to support specific projects to meet pressing needs within a given sector and has found good support among employers who want specific projects to provide a skills-related solution. Similarly, the use of sectoral and profession-based collection agencies (OPCAs) in France has meant that, alongside individual enterprise training, there is collective agreement to support sectoral initiatives. For example, the sector-based levy has enabled training for job seekers to make transition from one industry to another.

Sectoral System Effectiveness and Political Governance

It is important to consider where sectoral approaches sit within their given national context. In any system, complex relationships need to be forged in order for a sectoral approach to succeed, e.g. between government, employers, sectoral bodies, national, regional and local bodies, education and training providers, voluntary organisations, trainees etc. The difficulty of this process can be exacerbated by multiple layers of government and by having many disparate partners in the system.

Problems Encountered with Two-tier Sectoral Systems

We mentioned in earlier discussions that sectoral approaches to skills development can be problematic in countries that have a two-tier government system. In Canada, for example, the federal government does not have jurisdiction in the areas of education and training, which is the domain of the provincial governments. This is the case in order to protect the social, cultural and linguistic interests of the diverse provinces. For this reason, it can be difficult to introduce and coordinate a national sectoral skills policy, or even for the national Sector Councils to operate on a truly pan-Canadian level.

In Canada, national initiatives such as the Sector Council Program may encounter difficulties when trying to operate across the provinces. Indeed, the province of Québec has its own autonomous Sector Committees. These fulfil a similar remit to the national Sector Councils but on a provincial level, and appear to have little linkage with national sector bodies. In general, the national Sector Councils try to promote national standards and training activities among the provinces, but they have no direct power to influence what may take place at the provincial level, e.g. what courses are provided at colleges in a particular province. A related impact of this diversity across provinces is that certification from one state may not be recognised in another state. Engineers in Canada, for example, may be licensed to practice in one province and not another. This is one gap where sector bodies can do good work. The

sector-like professional body, Canadian Council of Professional Engineers (CCPE) has developed a professional certificate that is nationally recognised as a licence to practice.

In Australia, the Commonwealth and State/Territorial governments face similar issues. The National Qualifications Framework and the Industry Skills Councils (until recently known as the Industry Training Advisory Boards or ITABs) were developed as a means of ensuring shared standards and recognised qualifications across states/territories. Whilst this has been successful to a certain degree, the Australian experience shows that the delivery of sectoral training may become problematic when a national competency framework has to be delivered through diverse state legislation and provision. For example, a commonly agreed national standard on a particular qualification may have to be delivered under state systems which have different funding arrangements. Each state/territory has its own legislation about the number of hours of training that can be funded per trainee/student. State funding differences may mean that the training provided in some states, albeit making use of the same national competency framework, may not cover the entirety of the standards. Moreover, whilst the ISCs are responsible for compiling the industry competency standards, they are not responsible for funding, delivering or for ensuring the quality of delivery. These are the responsibilities of the state. Also, the delivery via the Technical and Further Education (TAFE) colleges and private sector Registered Training Organisations (RTOs) has meant that national standards can be interpreted in different ways.

Indeed, the question of the 'power' of sector bodies vis-à-vis other stakeholders and agencies is an important one, whether regionally or nationally. Having too many 'players' within a national skills system may reduce the amount of funding available as well as the relative power of sector bodies. However, the relative effectiveness of a sectoral body does not just depend on the amount of funding, but also the way in which the funding is channelled. The latter point refers to the structural position of a sectoral body within the wider skill system. For example, in Australia the role of ISCs can be overlooked within the broader education and training framework, and the funding arrangement clearly reflects this. Much of the funding for training is channelled to the TAFE system via the state government. Employers in a particular state may therefore deal direct with the local TAFE colleges. The role of the ISC can sometimes be reduced to just the creation and maintenance of the 'training packages', i.e. the competency standards.

In strong contrast, a unitary system may have some advantage over the two-tier systems. For example, the sectoral bodies in the Netherlands - *Kenniscentra* or the 'Knowledge Centres' - are in a pivotal position in leading industrial skills training. They receive significant funding from the central government depending on the number of training places, the number of workplaces accredited, and the number of competency standards that they maintain. For all industrial skills training, the first step is to start from the Knowledge Centres. The VET system is there to support the standards that the Knowledge Centres create and the trainees that the Knowledge Centres recruit. This means that arguably much of the funding for the Netherlands' VET system is in effect supporting the sectoral system.

In essence, the issue here is not about the advantages and disadvantages of the one and two-tier systems. It is about the complexity of coordination and funding. They matter fundamentally to the effectiveness of the sectoral system.

Involvement of Social Partners – Effectiveness, Funding and Equity

Involving many different stakeholders within sectoral approaches is a major challenge for all of the systems studied and this is organised in a range of different ways.

The Importance of Involving all the Stakeholders

An important feature of sectoral systems worldwide is the way in which they involve different stakeholders to develop sectoral needs. How far the relevant stakeholders are involved and engaged is seen in all cases as a key indicator of the success of the system and the individual sector bodies.

From the case studies, it is clear that there is no one single formulation for stakeholder memberships. In all cases, sectoral systems are bipartite (employers and workers) or tripartite (employers, workers and government representatives). By default, sectoral bodies must have the support of employers. However, it is clear from the case studies that the nature of employer involvement varies from sector to sector, and across sectoral systems. Some are 'employer-consulted'; some are 'employer-driven', and some are almost 'employer-owned'. The varying nature of employer involvement matters fundamentally to the existence and effectiveness of a sectoral body.

Worker representation is also important, but it does not always involve trade unions. Some may include government representatives and professional bodies. Some sectoral bodies may work very closely with the educational sector. The wider political context also influences the range of stakeholders as well as the nature of employer involvement, e.g. a corporatist arrangement differs greatly from a voluntarist arrangement⁴.

The case studies also show that stakeholder involvement is crucial, but it is not about 'inclusiveness'. It is more about relevancy in delivering two objectives, both of which underpin the success of a sectoral body: (a) the workforce development needs of employers; and (b) the skill development needs of the workers.

Employer Engagement

Where an individual sector body has less impact than it ought to, there are often signs that it has been less successful in engaging employers and has, as a result, faced a number of insurmountable challenges. For example, a failure to engage employers may be reflected by a lack of 'take-up' within a specific sector where employers feel that the sector body is not 'talking their language'. If, for example, a major sector employer withdraws from - or does not sign up to - the relevant sector body. This can send negative signals to other employers in the sector, as well as having an impact on the wider public perception of sectoral approaches to skills development.

Inevitably, it is always a difficult task to represent the specific needs of all organisations. This may therefore involve striking a balance between general and specific needs, and between the demands of larger and more powerful organisations of the sector and the equitable representation of small and large organisations. Indeed, those organisations with vast resources may decide to develop their own training programmes and strategies rather than get involved in bodies that represent the general issues of the sector. This delicate balance between different interests represents a strategic dilemma for most sectoral bodies. On the one hand, the non-participation of a large and significant employer may create a major setback for the sectoral body and the industry as a whole. On the other hand, since larger companies are well resourced, sector bodies in this situation may be better able to focus on smaller organisations that have a greater need of support to develop skills.

⁴ The main difference between the two is that the former arrangement derives its action from institutional consensus which generally involves the participation of government officials and stake-holders. The latter aims at minimising state involvement as far as possible.

Another factor that can impact negatively on a sector body is the feeling among employers that the sector body is approaching them in a castigatory manner, for example, to suggest that they are not training employees and need to change their practice.

On a system-wide level, some of the most evident challenges for involving relevant stakeholders are seen in those countries where there is a two-tier system, as already discussed. However, these kinds of challenges can also be seen in larger countries, or where there is very limited funding for sectoral initiatives. For example, the difficulties of working across a large country like South Africa are compounded by the fact the sectoral framework is bringing these dispersed stakeholders together for the first time, as well as trying to engage participants in the informal economy. Stakeholder engagement in these cases is the single most important factor for success, almost arguably more important than skills training itself.

In Canada, as previously touched upon, historically defined relationships between the federal government and provinces can make it difficult for relatively small sectoral bodies (often with a few members of staff) with a limited budget to engage with all stakeholders across a large, politically, socially, and linguistically diverse country. For example, all sector councils in Canada need to provide information in both English and French, to work within diverse provinces as well as on a pan-Canadian level, and to reach out to many provincial government agencies and local educational providers. The lesson is that if all stakeholders are to be involved, the effectiveness of the sectoral body will depend on the resources available.

SME Engagement

While SMEs make up a major part of all economies and most sectors, engaging SMEs is one area in which sectoral systems have yet to make any significant progress. In engaging and representing the interests of employers, it can be challenging to ensure that those employers that are involved do fully represent their sector. Where the main employer representatives are dominated by large, powerful organisations, this can lead SMEs to feel disenfranchised. In Australia, for example, it was felt that certain large, powerful organisations were able to lobby the government in a way that smaller organisations simply could not, and large organisations tended to dominate not only employer organisations, but also engagement with the sectoral Industry Skills Councils. Likewise, when it comes to participation in training, as previously mentioned, SMEs can face difficulty in taking advantage of sectoral training initiatives and levy systems.

In some cases where SMEs form the vast majority of employers (e.g. in creative industries), the problem is not so much seen as engaging SMEs as engaging employers more generally. In most cases, however, engaging SMEs is considered as one of the major challenges.

Despite the undesirable effects of large organisation dominance, there may be strategic advantages in engaging large employers first and smaller employers subsequently. In the early years of setting up sector bodies, there can be a tendency to focus on larger employers and - equally importantly - the more accessible geographical areas. In Australia, Canada and New Zealand, geographical location was recognised as an issue, with employers in the more developed areas having been easier to engage than those in rural and remote areas. In these countries, once a sector body becomes more established and gains recognition among larger employers in more urbanised areas, they start to expand their work to reach out to smaller and more remote parts of the sector. This sequence of events may facilitate the establishment of a sectoral body more rapidly than otherwise is the case.

Since the continued funding and support of sectoral systems relies on successes and clear engagement of industry (see discussion on 'Performance Monitoring' below), this sequential

focus is perhaps inevitable. Indeed, those sector bodies regarded as most successful are often those that have sought to maintain a focus on a smaller number of issues that are highly relevant to the whole sector. These are recognised as having avoided trying to take on too many objectives and to do everything at once, but as having built a firm base in the sector, getting key (normally large) players on board by engaging them on a few key issues.

Sectoral System and Economic Development

The role of sectoral systems has evolved dramatically since their early formation. Although many of the immediate activities of sectoral systems appear to be concerned with skill training and workforce development matters, many sectoral systems have ventured into a more substantial role in enhancing economic development, which is seldom discussed and documented. The following section identifies examples of some of these achievements.

Facilitating Structural Adjustment

Two of the earliest sectoral systems - the Canadian Sector Councils and the Netherlands 'Knowledge Centres' - were corporatist in orientation. These corporatist devices were crucial in using skills training to manage industrial relations and to facilitate structural change. For example, the Canadian Sector Council Program was established as an effective platform through which to tackle industrial disputes and decline in the early 1990s. The metal working industry was one of the driving forces for the development of this approach and had one of the first sector councils. For this industry, the sectoral platform brought employers, social partners and government together to agree on industrial relations issues and re-training at a time of major decline in heavy industries. In more recent times, however, the Sector Council Program has developed to focus on more current issues such as skills shortages and promoting the notion of 'careers through skill development' in the different industries.

In Hong Kong, the Clothing Industry Training Authority (CITA) - an entirely levy-supported sectoral body - has shifted its strategy and emphasis in line with the changing economic activities within the industry and the economy as a whole⁵. In the 1960s and 70s, when Hong Kong was one of the major clothing manufacturing centres in the world, the emphasis was on basic training and skills for machine operators, which were in extremely heavy demand throughout the two decades. At this time, thousands upon thousands of trainees were put through CITA's dedicated training centres at a rapid pace. Often, training was short and targeted at relieving the severe labour shortage in the clothing industry.

In 1979, as a result of the Multi-fibre Agreements, Hong Kong's apparel industry was severely affected by quotas on exports to industrialised countries. CITA was instrumental in re-skilling the workforce to diversify into higher value-added garments in order to maximise the output value within a quota system. In order to achieve this objective, CITA, as a sectoral body, took on a number of strategic roles, e.g. strategic planning for the sector as a whole, researching and identifying high-value garment segments overseas, skill training for marketing, product design and the adoption of new technology. Instead of training operatives, much of the training now focused on quality assurance and productivity issues.

In more recent times, nearly the entire fabrication element of the industry has migrated to mainland China where the costs are far lower. This meant that CITA had to move the clothing industry to yet another (higher) position along the global value-chain. Thus, CITA's skills development programmes and strategies now focus on developing Hong Kong as a logistics hub for the garment industry in the region and a home for top design rather than fabrication.

⁵ Like Switzerland, Hong Kong was one of the countries/territories studied but not included in the case studies in Section Four.

The skills development programmes now have fewer trainees, but the skill training in design, fabric research, logistic and sourcing management are of a much greater depth and duration. CITA's role is therefore vital for the clothing sector to move to its next competitive position.

Strengthening Emerging Sectors and Moving Up the Value-chain

Sectoral approaches can equally be used to strengthen emerging sectors. In New Zealand, the forestry industry was a key focus in the establishment of the Industry Training Organisations in the 1990s. The forestry industry, especially for export purposes, did not exist before the 1990s. It was found that the specific climate and conditions of New Zealand allow Radiata Pine - one of the fastest growing commercial softwoods in the world - and other valuable woods to grow in a far shorter time than normally required anywhere else in the world. While the trees were planted in the early 1990s, it was soon recognised that the industry did not exist to harvest the trees. The sectoral system has been used to define the different levels of skills required to manage and develop the industry. Likewise, the sectoral system provides a potential tool to facilitate the development of the related furniture industry. This is a fairly low-value added industry at this time. However, it is recognised that rather than selling the wood to China, where cheap furniture will be made and sold back to New Zealand, the furniture industry has the potential, by introducing high levels of design training into the industry, to move up the value-chain and to enhance New Zealand's economy further.

Maintaining Flexibility Between and Across Sector Boundaries

Sectoral approaches can also support the re-alignment or re-design of traditional sectoral divisions. The different sectors covered by sectoral systems in each country can be quite diverse, reflecting the specific social and economic context of each country. In the longer-established systems, such as in Canada or the Netherlands, the sectors covered have changed over time. Sectors also re-group over time, reflecting changing economic and social circumstances, or the newly-emerging issues faced by industry. For example, in Australia, when sectoral bodies were recently required to regroup into 10 key areas, the ambulance group moved from the public services sector to the communications sector, which they felt they now shared more in common with in terms of skills and everyday working practices.

Changes in industry and society may mean that traditional 'silos' or vertically-defined sectors are no longer the most useful and productive way to facilitate economic and skills development. This may particularly be the case in current times, when many governments are focusing on transferable skills that are recognised as cross-sectoral, as opposed to specific knowledge tied to a profession or job role. Moreover, the shift from traditional industrial and manufacturing sectors towards a sharp growth in services sectors has meant a changing balance among the individual sectoral bodies. Those industries that traditionally had the strongest employer backing and lobbying power in the past, and which inevitably drove the agenda of the sectoral system, may not represent the largest areas of employment in the modern economy.

There are a range of models for setting up and re-grouping sector bodies in order to enhance economic development. The sector bodies in many countries have initially been self-selecting groupings, namely, sectoral groups that put themselves forward when there was the possibility of creating sector bodies in the relevant country. Notably, in those countries where the sectoral system is currently under review, the sectors covered within the system and the way in which these overlap have also been reviewed. This has been in terms of a range of issues, including efficiency, coverage and national economic development. In Australia, for example, a government review initially highlighted that only 8 Industry Skills Councils were required to cover the key economic sectors, as opposed to the 23 that existed. The Australian Industry Training Advisory Boards (ITABs) were left to negotiate among themselves where

they would sit within those 8 groupings, although this was extended to 10 after continued negotiation. Similarly, in South Africa, a government-commissioned economic report (not in circulation) recommended reducing the number of Sector Education and Training Authorities (SETAs) and focusing on a smaller number of key economic areas. This is currently under negotiation and there are plans for potential mergers between SETAs.

While it may be useful to organise sectoral approaches within those areas identified as the key economic areas for each country, this can also be problematic and potentially damaging to the system. Government drives for a reduction of sector bodies, or mergers, are often related to efficiency and best use of limited public funds (whether in terms of funding level or administration cost). However, the reduction of the number of sector bodies can involve a fraught political process. Each industry sees a valid reason for having their own sector body to represent what they regard as sector-specific needs and demands. Correspondingly, each sector body has built up its own expertise and resources. Moreover, there are powerful political and financial interests involved in sectoral groupings. In the case of a potential merger between the financial and banking sectors in South Africa, for example, the banking sector (as in the UK) is very powerful and well-financed, and sees itself as quite separate from financial services (e.g. accountancy). This can make negotiation difficult for the smaller player.

Some sector bodies are by nature cross-sectoral. For example, horizontal sectoral bodies in Canada include the Software Industry Sector Council that represents professionals working across all sectors, and the Apprenticeship Forum, which provides collective and centralised promotion for apprenticeships in a range of sectors. While these particular sector councils work with a range of other councils with which they overlap, and see their role as quite distinct, there is potential for dispute between sector bodies when they cover the same ground. In the Netherlands, for example, the 'Knowledge Centres' are partly funded according to how many competency standards they produce and maintain. They are not necessarily looking at a reduction in the numbers of sectoral bodies, but in a similar vein the government is driving forward a massive reduction in the number of standards and units of assessment. The government is urging sectors to work to find areas of commonality (e.g. sales training for one sector is largely similar to another sector). However, this means a cut in funding and creates competition over which industry will develop and hold that standard. Interestingly, the South African SETAs are organised to cover every single employee within a company in their sector. This means that they need to cater for all the occupations within that company - e.g. accountants, lawyers, cleaners, clerical staff etc. Thus, in a sense, the SETAs are naturally cross-sectoral and they may work with other SETAs to ensure that the needs of a particular occupation are covered. This arrangement is unique to the South African sectoral system and it is not found anywhere else.

Even the more vertical sector bodies are increasingly working in collaboration with a range of sectors. This might be as part of a newly-established sectoral body. For example in Australia, when the number of sectoral bodies was reduced to 10, the different sectors worked together to find common points of reference in order to form the new groupings. Whilst not a straightforward exercise, this brought together groups that shared many common issues, although they also need to ensure continued representation of issues specific to the diverse stakeholders. For example, the Services Industry Skills Council brings together wholesale, retail and personal services, tourism and hospitality, sport and recreation. As one of the biggest 'sectors', Services ISC brings together many common, but also a range of specific, skills issues and requirements. Thus, as well as promoting and developing the areas of common interest, this ISC provides a range of information tailored to each of the component industries.

Having more vertical sectoral bodies may appear to provide a better focus on skills training support. However, cross-cutting sectoral bodies appear to be able to reduce waste and to create the advantage of economy of scale. The trend towards a reduced number of sectoral bodies in most systems has been driven by cost considerations. However, it is worth noting that the same reduction exercise in the Netherlands is intended to bring about a better sectoral framework to support portable qualifications. The exercise is also seen in the Netherlands as part of their effort to move towards a Pan-European qualifications framework.

Creating New Sectors

Sectoral systems can be used to support the creation of 'new' sectors. In the USA, for example, diverse sectors have been brought together in order to re-think how they can work together in a more synergetic way. Here, a most recent example is the emergence of a 'geospatial sector'. The geospatial sector comprises various occupations in diverse sectors that, when brought together, will enhance a new information technology-based industry that seeks to acquire, manage, interpret, integrate, display and analyse geographic and spatial data. This new sector is a prime example of a rapidly emerging 'knowledge' sector, and it has been projected to grow exponentially in the next 10 years.

Whilst this may not be a new sector in the conventional sense, this is the first time that these groups have worked together and have recognised the shared and interlinked skill sets involved. This can be a useful means to re-think not only how sectors are defined (e.g. along traditional manufacturing and services lines, or in new cross-cutting groupings which may have different growth implications) but also how skills can be developed and recognised in new and cross-cutting ways. This may impact on the organisation, provision and assessment of VET. It may be that traditional skills provision for these sectors is no longer keeping up with change, and that this re-thinking of traditional sectoral and occupational profiles, in cooperation with employers, can bring about the necessary change in provision. Indeed, a new sectoral body under the US High Job Growth Training Initiative is to use a sectoral approach to work with employers to develop skills for this emerging geospatial sector.

In a very different manner, the Singapore government uses a sectoral-cluster approach to establish high value-added 'incubators'. These are intended to attract the best entrepreneurs and start-ups from across the world, creating communities of such enterprises in specific industries. The sectoral 'incubators' therefore provide a well-defined environment in which to gain government support as well as to develop high levels of technical skills and know-how transfer via joint ventures with multinational corporations.

Performance Monitoring

There are many lessons to be learned from the issues that sector councils and governments have faced when tools have been introduced to monitor the performance of sectoral bodies.

What Performance Measures Should Be Used?

The experience of sector bodies in the different countries demonstrates that there is a clear need for a balance between accountability and bureaucracy when monitoring the performance of sectoral approaches to skills development. A key challenge in establishing a performance monitoring system is what should be measured and how. A range of questions currently face the sectoral systems. How do you measure the impact of sectoral approaches? Do you survey employers about their engagement with sector bodies? Do you make every penny of public funding accountable by recording every contact that a sector body has with another organisation, institution, government agency or individual? Do you look at changes in the training activities in the sector? How do you distinguish the impact of the sectoral

approach as apart from the impact of wider government policy, economic climate, or employer activities? Should performance be measured by long-term changes or should it be tied to the financial calendar?

The following section describes a range of instruments that have been developed within the different sectoral systems, each seeking to identify the best way in which to measure the performance and outcomes of the sectoral approach to skills development.

Streamlining Government Funding

New Zealand Industry Training Organisations (ITOs) are now required to provide a Charter and Profile for their funding body, the Tertiary Education Commission (TEC). The Charter document is the broad vision statement of any training institution supported by the TEC, while the Profile document spells out the action plan to achieve the stated visions. At one level, the Charter and Profile can be interpreted as a useful means to rationalise all the TEC funding for training. This is particularly as TEC now funds all education and training beyond normal schooling. By examining these documents, the TEC can see if the proposed education and training activities are going to be of benefit to the national 'Tertiary Education Strategy' (see later case study). The exercise will also remove potential duplication of resources.

At another level, most ITOs felt that these measures were primarily introduced in order to streamline funding of the larger, more autonomous education and training organisations, such as universities. For the much smaller ITOs, a mission statement and business plan (although not dissimilar to the Charter and Profile and often used in order to construct them) could be more useful and more indicative of their aims and outcomes. As a result, some ITOs saw it as an unnecessary activity drawing on their time and taking them away from achieving those outcomes. Despite this negative impression, part of the Profile document is the historic growth of training places within the sector. ITOs may use this growth profile to demonstrate a case for greater funding from the TEC.

Avoiding Excessive Bureaucracy

In Canada, a lack of monitoring in the Sector Council Program (SCP) led to questions about accountability and the potential misuse of government funding. This brought about a re-working of the system, and the introduction of the 'Logic Model'. The Logic Model (LM) highlights the fine balance between providing accountability and excessive administration/monitoring. The LM is essentially a matrix of impact milestones on the vertical column (e.g. activities, output, reach, immediate, intermediate and ultimate outcomes) and the range of intended activities on the horizontal row (e.g. research, information, networking, workforce development, standards, career promotion etc.). However, for the matrix to be continuously monitored and fulfilled, so that that all funds and activities are traceable, can become a full-time job in its own right. While some form of monitoring is required, the Canadian experience illustrates some of the problems that can be involved in developing this. When a sector has a large coverage with the support of a small number of staff and limited financial resources, the effectiveness of the sector council can be adversely affected when engaging in performance monitoring systems. While monitoring is essential for performance, the irony is that this diverts key staff to non-impact activities.

Indeed, in the state of South Australia, the skills bodies are not required to provide performance indicators beyond the usual business plan and financial audits. It was felt that such performance monitoring could be counterproductive and even cost more than the total funding for the sectoral body itself.

Accountability and Credibility

In South Africa, Sector Education and Training Authorities (SETAs) are required to report quarterly on performance in terms of use of funds and data on aspects such as the number of learnerships established (the new form of apprenticeships in South Africa). Nevertheless, the perceived lack of accountability and potential misuse of funds has been an issue. Part of this problem is caused by the fact that while the system is being established, many companies have not claimed back their levy. This has left the SETAs with a substantial unclaimed fund, which some critics perceive as a sign that the sectoral approach is not working, since the funds have not been redistributed. Thus, in such cases, performance monitoring has been used to provide detailed information to the public in order to build and maintain the credibility of the system.

Funding, Performance and Strategy

Another issue raised by introduction of performance monitoring is how this impacts upon funding provision. Key questions raised are whether those sector bodies going beyond their targets should receive higher funding, or should all councils receive uniform funding? A balance needs to be struck between success and affordability of sectoral systems. There is evidence in some countries that the biggest challenge has been less to do with finding ways of engaging employers, than with coping with (and paying for) the success of the sectoral system. Success in developing a culture of sectoral training often brings higher numbers of learners and the potential need for additional public funding, albeit with employers potentially increasing their contributions as well.

A key consideration is how to maintain the system when the take up of sectoral skills development is really 'booming'. In some sectors in New Zealand, for example, this problematic aspect of success has yet to be resolved. Training has been steadily growing since 1995, and it has become obvious that in some ITOs there are not enough learning places to meet the demand. While this is a problem arising from the success of employers and learners responding to government policy, the reality is that there are limits to the amount of government funding that can be invested in the sectoral bodies. Governments see investment beyond this, if the system is taken up widely and demand increases, as the responsibility of employers.

Alarmed by the short fall between the Profile projections and TEC funding in New Zealand, different ITOs now use their monitoring tools to form alternative strategies. The Aviation, Tourism and Travel ITO fund external training places and currently face major shortfalls if they are to fund all of the places demanded. The Construction ITO, on the other hand, scales down advertising of training places over the year in order to ensure that they have sufficient funding. The Retail ITO, on the other hand, approaches this issue quite differently by funding accreditation of training rather than training itself, which is already funded by the employer. This last approach proves particularly cost effective and a positive means of engaging employers in skills development whilst ensuring best performance with current levels of public funding.

In the US, the performance of the private-sector-led Workforce Development Partnerships is measured quite differently, due to the aims of the programme. Two broad criteria are applied before the partnerships are formed and during their operation. One measures the number of jobs created and trained, and one measures the quality of these new jobs in terms of the level of median wage in the sector and other supplementary indicators. These measures will determine the level of public funding and continuation of these sectoral partnerships. However, unique to the US partnerships under the High Job Growth Training Initiative,

employers' contributions to the partnerships are explicitly assessed and measured as part of the performance audit.

Research Capacity and Changing Roles of Sector Bodies

Like the UK, many governments are beginning to expand the remit and role of sectoral approaches to skills development. This has involved both a new range of responsibilities and potential areas of influence, and a new range of skill sets for the sector bodies involved.

Importance of Sectoral Leadership

As well as shifting emphasis with changing economic times and sectoral development, sectoral systems are increasingly focusing on building research capacity, sectoral strategic development and leadership roles. These are generally interlinked since the basis on which leadership is provided is often supported by firm research evidence that can be used to develop a strategy and advice for the industry. This leadership role can take different forms, being a skills- or training-focused leadership, strategy or business model. The latter partly links back to the economic development role of sectoral systems.

For example, in New Zealand the introduction of the performance monitoring system included one element called 'Leadership'. The idea is to systematically embed skills training in the wider sectoral context. At this early stage, it has been left to the ITOs themselves to decide what this means. Some see it as continuing to provide sound advice and support drawing on sector information. Others see it as providing an authoritative voice for the sector and developing a sectoral strategy for the future (e.g. what is the shape of the sector as a whole going to be?). Since this is a new development, it remains to be seen how the different ITOs will embrace this role. Some ITOs may be in a better position to take the latter approach. The Forestry ITO, for example, is a major force within the industry and may be able to provide this authoritative voice, whereas others, such as the Furniture ITO, see that they will be a contributor to the sectors' vision for the future in terms of skills debates, but do not necessarily see themselves in a position to influence wider issues.

Increasing Importance of Labour Market Intelligence

In Australia, part of the shift from the former Industry Training Advisory Boards (ITABs) to Industry Skills Councils (ISCs), has been an emphasis on an increased role for ISCs in providing labour market intelligence (LMI) and research capability. The intention is that ISCs will feed LMI such as skills needs and shortages through to the vocational education and training system in a more strategic and effective manner. As part of this shift, ISCs will be required to prepare a National Industry Skills Report for each sector, identifying, importantly, whether it is training or another approach that is the best response. This partly reflects the shift from a focus on training towards skills, and the link with wider issues (and visions) within the sector.

Part of the challenge in Australia is to develop 'real time' labour market skill profile databases for the sectors. ITABs used to rely on econometric labour market forecasting models with projections based upon data that were typically 2-3 years old. In the booming conditions that Australia now faces, these projections often turn out to be less useful and even irrelevant to the future planning of the ISCs.

South African SETAs are currently developing their research capacity in order to fill a major gap in national data about the sectors, skills profiles and shortages. Since these are needed to develop the Sector Skills Plan (similar to the UK Sector Skills Agreement - a forecast and plan for the future of skills in each sector) considerable work and resources have been

required to establish the basis of this research. This is particularly the case with the sectors now having to reach out to the informal economies. Unlike the challenge in Australia, the task of the SETAs is to develop a reliable methodology to gather data in the informal economies. Often this challenge is more to do with ascertaining current profile than about future projections.

Interestingly, in contrast with many of the sectoral systems in which LMI is generated by the sectoral bodies, a more centralised approach has been taken to developing LMI and research capacity in France and in the USA. Over a number of years, a small number of Research Observatories in France have been actively supporting a few key sectors by providing research and data about the sector. This element of the national training system is currently being expanded in order to cover all sectors and professional groupings. As can be seen in the French case study later in this report, a government research centre has worked with the sectors and these research observatories in order to develop a centralised and integrated online LMI data system. This provides public access to a range of national surveys and is organised by sector and by professional grouping. This centralised approach to developing baseline data for the sectors has proved cost-effective and frees sectoral agencies up to work with research observatories on more sector-specific and strategic research.

All workforce initiatives in the USA - e.g. those under the Workforce Investment Boards for the unemployed and sectoral partnerships under the High Job Growth Training Initiative - are supported by the same nationwide LMI system, the Occupational Information Network (O*NET).

Unlike labour market databases in other countries, O*NET is not based upon projections from past surveys. Instead, most parts of O*NET are (almost) real-time databases that contain vacancies and job seekers (with their skills attributes), including those who are doing a job search but are still in employment. O*NET itself (known as O*NET OnLine⁶) is both an Internet portal as well as a database. The database component contains a newly developed occupational classification, which is underpinned by a 'Content Model'. The Content Model is intended for workers and employers to quickly identify skill profiles of the job seekers as well as the skill requirements of a job. This part of the database is updated frequently through regular surveys so that new and emerging jobs are captured.

However, where O*NET really excels is the fact that it is strategically linked to other databases which are dynamically updated, e.g. renewed every time a job opening is deposited at America's Job Bank - one of the O*NET related sites⁷. Other LMI is readily available, such as geographical information on vacancies and wage. One innovation with the Content Model is O*NET OnLine's ability to provide a so-called 'Crosswalk' search. A 'Crosswalk' search enables both job seekers and employers to see if a particular skill is also required by occupations other than the one that they have in mind. In this way, job seekers may be able to widen their job/career search and employers can assess likely sources of their future workers and skills.

Inspired by O*Net, New Zealand is currently piloting a similar version of O*Net which means that future LMI in New Zealand may be centralised. ITOs' LMI and skill sourcing practices may be progressively linked to systems beyond the sectoral bodies. Already, there are proposals that by using the job matching information, sectoral training may be brought in to prepare job entrants in New Zealand. This will replace the general skill training for job seekers. In other words, training for the unemployed will be more 'tailor-made', aiming to avoid the 'revolving door' of general skills training.

⁶ O*NET is located at <http://online.onetcenter.org/>

⁷ Related sites include CareerOneStop, Career InfoNet and America's Job Bank.

Relationships with Skills Providers and National Qualifications Systems

Relationships with skills providers are not uniform, even within a given country. This ranges from national, government-led initiatives to form better relationships between sectors and education providers, to close, individually developed relationships between specific sector bodies and related skills providers.

Skills Providers and Sectoral Bodies

Relationships can differ across countrywide systems, particularly in terms of the ways in which sectoral approaches are positioned within the national system. In some cases, the sector bodies are positioned within a 'collaborative' model, whilst others are positioned within a 'competitive' model. The collaborative model involves close cooperation - whether due to the set up of the system or the ways in which these relationships have played out over time - between the different stakeholders. The competitive model involves stakeholders competing over the same areas/trainees/funds. The competitive model is not necessarily intentional, but may be a natural outcome of the sectoral system or the way in which sectoral bodies were 'inserted' into an already existing VET framework. Thus, the likelihood that a collaborative or competitive model will emerge seems to depend on the range of the sectoral body's remit, its position in the national system, and the funding methods.

Collaborative Model

The Netherlands is one country where, at the national level, there is strong collaboration between sector bodies, educational bodies and regional training colleges. Thus, each sector body works together with a 'mirror' vocational education body to develop training and education provision based on employer needs, whilst also feeding national educational targets and strategies into the VET provision. This partly reflects the national culture of consensus and the corporatist model. Nevertheless, this relationship was not always one of collaboration, and has been significantly improved with the reform of the whole VET system in the 1990s. The most important element of this reform was the positioning of employers and sectoral bodies at the first stages of VET development, and the creation of mirror bodies within education that would work closely with and provide specific sectoral support to each sector.

Collaboration may be made more difficult because of other factors. Often these obstacles are not intended. A classic situation is when sectoral bodies are introduced into a system where other bodies, such as educational institutions, have a historically powerful position. In Australia, for example, the national Industry Skills Councils create 'packages' of training standards (units of competence) that feed through to the regionally-based Technical And Further Education (TAFE) systems which develop their own programmes based on the standards; although this is not in any way obligatory. Some argue that the late arrival of the ISCs leads to a lack of systematic and effective leverage with the training providers that make use of the sectoral training standards at the state level. Indeed, they are not accredited by, or answerable to, the ISCs in any way. This means that the effort of the ISCs may not have a binding impact on the delivery process. Indeed, some ISCs feel that this is one of the greatest tensions between the sectoral bodies and the education providers.

Competitive Model

Similarly, where sectoral and educational bodies are positioned in such a way as to make them competitors, these relationships can be difficult. These competitive positions may not be intended at the policy level. In New Zealand, for example, the Industry Training Organisations (ITOs) can find themselves competing over training places with the Polytechnics, which

attract higher funding per capita than ITOs, and such funding is not capped for Polytechnics. ITOs are not only capped, but attract lower per capita funding. These competitive positions might not have arisen in the past as ITOs historically covered levels 1-4, whilst polytechnics and universities covered the higher levels. However, these very different functions and training levels evolve over time. As a success of increasing training places at the lower levels, sectoral training is now moving into higher levels, such as management competence. This naturally puts ITOs into competition with the Polytechnics. This creates unintended obstacles for learning at the higher levels for some ITOs.

How do the ITOs influence training at the higher levels and support trainees when polytechnics and universities are autonomous institutions with their own financial objectives within the training markets? They are not necessarily required to provide courses that meet the sector standards. Hence, there is a high degree of competition between the ITOs and the formal educational sector. While the system was not necessarily intended to create competition, the funding arrangement has not reduced the competitive nature of the relationship. This situation is expected to improve following the introduction of the Charter and Profile (outlined above), as one of the requirements for each tertiary education body is to show how they will collaborate with other partners in the system.

Relationships can also differ across sectors. For example, one sector may have very good linkages with an educational institution, while others may not. Again, in some cases these are complementary, while in others they are competing. There are some successful examples of ITOs in New Zealand having worked closely with the higher education sector to create a course that meets the sectors' requirements. For example, the Real Estate ITO has successfully collaborated with a university department to ensure that the courses provided the kinds of skills that were in demand. However, it appears that part of the success comes from the fact that training in real estate has always been at the higher end of education, and some of the success comes from the close working relationships between the ITO's CEO and university staff.

Public and Private Providers

Following on from the above discussion, it appears that relationships between the sectoral bodies and private training providers do not have the same kind of conflict. This may reflect the fact that relationships among various skill bodies can be implied by the level of public funding - and recognition - given to the educational system and the sectoral system. Equally, private training providers appear to be primarily small organisations that aim to meet the demands of the sectors and employers (i.e. being demand-driven), whilst the public providers are driven by a range of political, educational, social and financial goals. For example, courses may be provided by educational institutions in order to meet the demand of learners and lifelong learning programmes within the local community, but which do not necessarily provide the skills demanded by employers.

Indeed, public training providers may have an important social role related to dealing with market failure, or driving forward government agendas (such as targets or widening participation), as opposed to meeting the demands of the labour market and employers. While this is the case, there is overlap as well as dissonance between employer-focused sectoral approaches and public skills provision. Arguably, even if there is a high degree of overlap, there may exist a different order of priority between the skills agenda of the employers and that of public provision.

In order to take greater control over training provision, some sectoral bodies became training providers themselves. This is particularly the case where there is little or no existing provision of the skills and training required by the industry. In other situations, the sectoral body may be

the default training provider because of the legacy of the sectoral system. For example, in the Netherlands, there was originally scope for sectoral bodies to be training providers, although they could only do this by running a separate privately-funded training function which did not link financially to their public-funded sector body function. Thus, until very recently many 'Knowledge Centres' incorporated private training companies, indeed some still do. However, in a review of the system it was recognised that it could be a conflict of interest for the sectoral body to be engaged in developing the qualifications, accrediting the qualifications (and receiving government money to do so) and then providing the training towards these. In recognition of the conflict this caused, many of the sector bodies have discontinued their role in training provision.

In other cases, in order to avoid the potential problems with training provision in the public sector, the sectoral body may turn to the private sector exclusively. The South African SETAs, which are entirely employer-funded (via the levy), provide a range of training programmes, primarily by contracting private training providers, in order to help meet the strategies for the respective sector. For example, FASSET, the SETA for Finance, Accounting, Management Consulting and other Financial Services, uses its discretionary funds in order to run special training programmes to get more black women into accountancy (due to low numbers), or to do outreach work with the unemployed and people in particularly disadvantaged areas. In this way, the sectoral body fulfils a market-failure role, providing both targeted training that meets employer demands, and playing a social role in developing the sector and the country.

The US High Job Growth Training Initiative have a very different approach altogether. The partnerships under HJGTI 'defines' away the potential problems between the sectoral body and public training provision at the outset. HJGTI partnerships can make use of private as well as public training providers. However, the specific collaboration and impact between the sectoral body and training providers have to be demonstrated at the HJGTI grant application stage. This model is possible for the HJGTI because all the HJGTI partnerships are relatively small and are predominantly locality based.

National Qualifications Frameworks and Sectoral Approaches

Within the different countries studied, there are differing levels of linkage between the sectoral systems and the national qualifications frameworks (NQFs). In many sectoral systems, NQFs have been used to support learning activities. In some cases, these frameworks are used to assess skill needs and measure progress.

However, in the sectoral context, NQFs can be also used to drive up the demand for skills and training for at least two reasons. Firstly, employers (and employees) may prefer to obtain skills through recognised qualifications. Secondly, recognised qualifications may help reduce the division between academic and vocational education and training. This may provide access to higher education that previously proved difficult for learners with a vocational background.

The use of NQFs among the case studies is generally unproblematic, but the usefulness of a national qualification framework does depend on the extent of employer involvement in defining the system. The more involved employers are in the development of the NQF, the more useful the NQF is to the employers and as a result, the more likely the sectoral system is to be driven by an employer-led environment. Also, the take-up rate will be high, assuming other things are equal - e.g. funding issues.

In many of the case studies of sectoral systems, NQFs and sectoral training are closely related. Where there is a national qualifications framework, sector bodies tend to provide the key means through which employers' skill demands are fed into the NQF (e.g. Australia, the

Netherlands, New Zealand and South Africa). This is primarily via the development of industry standards and units of competence, which are used to develop VET that is recognised and assessed within the NQF. In New Zealand, for example, the government sought to bring all qualifications and training under the NQF, providing recognised, comparable national qualifications. While a number of providers and partners resisted the NQF (including higher education and some schools), the Industry Training Organisations effectively became the creator for those qualifications, due to their role of working with employers to set national industry training standards and ensuring that training is assessed within the NQF (Philips, 2003).

However, the close relationship between sectoral bodies and NQFs does not guarantee sectoral bodies' ability to meet employers' skills demand or to promote employers' demand for skills via NQFs. As discussed earlier, this is due to the relative position of the sectoral bodies vis-à-vis those of other skill providers within the system. Thus, as noted, Australian ISCs translate employers' skill needs into 'training packages'. However, the utilisation of these training packages is subject to the interplay of other factors. Australian VET providers can develop qualifications that are recognised within the NQF. Qualifications developed by VET providers do not necessarily have to use the standards specified by the training packages, or they may only use parts of them.

Despite the potential difficulties, most sectoral systems show that NQFs can confer a number of advantages to sectoral activities:

- ❖ They provide a useful framework to assess industry skill needs;
- ❖ They help define competency, standards and learning outcomes;
- ❖ They help design curricula and learning activities;
- ❖ They are useful for measuring progress and designing career pathways and portability;
- ❖ They add value to learning and create future learning demand.

But NQFs are not the only devices that sectoral bodies may use. The US HJGTI partnerships use 'skill sets' (see case study) which are existing qualifications that employers have identified. These skill sets have been put together to form career pathways within the 12 HJGTI sectors, so they are progressive in orientation. They are also cost effective to create and maintain, while remaining the responsibility of the public VET providers. Together with the sectoral bodies, the role of the employers is to define the components of the skill sets for their industry/sector.

Conclusions

This international research raises a number of implications for the UK and issues that might be usefully considered in the future directions for the UK sectoral approach to skills development. For ease of elaboration, the conclusion has been organised in sub-sections.

Structural Effectiveness

Driving up the demand for skills is a key role for the new UK SSCs. This study of international approaches found that a range of mechanisms were used in order to drive up employer demand for skills. Notably, however, where financial incentives are used, it is vital that these are aligned with other components of the overall system for the maximum impact to be achieved. Thus, the sectoral system in the Netherlands combines a number of financial and non-financial incentives and is built into a wider support of the VET system. In the UK at the current time, the sectoral system does not have the same degree of coherence of systems such as that in the Netherlands. Here it would be useful to continue to explore the extent to which the various components of the UK system are aligned in order to reinforce each other in driving up the demand for skills. In addition, there are important changes taking place with the introduction of the National Employer Training Programme. This may provide an additional opportunity for examining the extent to which the various components of the sector skills approach are aligned and how they fit into the UK skills system as a whole. Here it will be important that the Sector Skills Agreements are used to determine the funding priorities both through the RSPs and the new LSC National Employer Service.

In addition, this study has highlighted the importance of involving employers as closely as possible in the design and implementation of sectoral approaches. The different national approaches examined (in the latter part of this report) illustrate some of the different ways in which employers can be involved in skills development. This includes placing employers as drivers of the system and how to engage them in the design of components such as the apprenticeship system and the qualifications framework.

The UK SSCs have been inserted into a complex network of stakeholders working within the skills and VET framework. This may lead to competition and overlap in some areas. At the moment the UK would appear to be moving further in the direction of a competitive model, with the potential for FE colleges to compete with private providers for apprenticeships and the delivery of NVQs through the National Employer Training Programme and the Skills Academies. Questions that might be asked are whether the SSA could provide a mechanism for regulating such competition? And could they also be used to minimise the tension between government policy requirements that funding concentrates on the lower level qualifications, and sector demand for higher level qualifications and skills?

The case studies examined here demonstrate that constant consideration may need to be given to developing partnership and collaboration to ensure that sector bodies are not sidelined by, or competing with, the more powerful and well-funded partners in the system. Collaborative models of working can be built into the sectoral system. However, this may require wider government review and reform of the system as a whole in order to create balance between the different stakeholders, rather than individual effort at the level of the SSCs.

The autonomous nature of higher education providers can make it difficult for sector bodies to have any leverage over provision at this level. Nevertheless, the changing nature of higher education in a globalised and market-driven system means that universities are increasingly having to work with business to develop tailored courses and to meet employer demand. Being able to work with HE on foundation courses, and professional development

programmes gives SSCs a good in-road to build a collaborative relationship with HE providers.

Industry Skill Needs and the Learning Culture

In addition to financial incentives, some systems have successfully focused on a wider cultural change, in order to develop a learning culture within specific sectors. In the UK, the SSCs might usefully explore the range of levers they have at their disposal, or which they can create, in order to develop a learning culture within their sector. For example, those operating in competitive global markets which use international standards could explore the use of those standards to drive up the demand for skills. SEMTA, for example, is already using Productivity Analysts⁸.

Equally, sectors where qualifications levels tend to be lower or where employee retention is a problem might consider how qualifications and accreditation of prior learning can be used to develop a career pathway, as used in the retail ITO in New Zealand. In such cases, it is important to identify ways to create a career pathway, which is supported by internal promotion and other incentive devices. This can be done via accreditation and recognition of skills and a change of organisational practices - making learning 'value-added'. This is not only useful in creating a demand among employers, but also among employees, who will create their own demand for higher skills. For example, a company in the UK took over a low-valued added textiles factory that was facing financial uncertainty, and wanted to raise levels of skills in order to create a higher-value added product (see Sung *et al*, 1999). While the employer offered to provide higher-level skills training, employees resisted this move. They could not see the benefits of investing time in training when their career was uncertain. Similarly, areas such as retail can suffer from high turnover rates due to the perception that there is no clear career pathway in the sector. Qualifications and the development of a learning culture can start to create that career pathway, enhancing motivation, skills recognition, career development and employee retention.

Another effective means of building a learning culture that was identified is the sharing of best practice. The Singapore case shows that most employers would be keen to learn how the leading companies in their sector train their workers and to work to develop a 'Blueprint' approach to skills development. The UK SSCs are well positioned to collate, develop and disseminate such information. Indeed, this may provide a useful means of engaging employers in the higher skills debate.

Sectoral Incentives

It has been shown that financial mechanisms to increase investment in training can take a range of different forms and have quite different outcomes. The Dutch system has demonstrated the powerful effect of fiscal incentives in driving up employers' investment in skill training. While levies may be less popular in the UK when compared with other countries, the UK can nevertheless learn from the examples in which these have been successfully and less successfully used in different countries and sectors. For example, it might be useful to consider how the levy is reimbursed, or how the potentially lengthy administration of levies is being simplified in areas such as Québec and France. Equally, we can learn from the ways in

⁸ Companies competing in world markets in the auto industry require certification to international standards in order to be accepted as suppliers to the major Multi-national Corporations, The Productivity Analysts, trained by Semta are engaged by firms to evaluate their readiness for such standards and whether their manufacturing processes are advanced enough to enable them to compete effectively. Where there are deficiencies the Productivity Analysts then provide advice on how these can be rectified. The result is not only an improvement in the productivity and performance of the firm but an increase in the demand for skills among the workforce.

which sectoral levies can be used to drive up the demand for skills and move the industry to higher value added forms of production, such as in Hong Kong or Singapore. Indeed, Singapore is currently experimenting with the use of levy funds to develop incubators for SMEs with growth potential. These ideas may have important implications for those UK SSCs with high proportions of SMEs in knowledge-intensive industries. For example, in the UK, Skillset has already worked with the film industry to develop a mandatory levy. Such a levy is thought to be extremely valuable for encouraging innovative projects in the creative media industry. This might be usefully discussed and eventually developed into other areas of the creative industries, which tend to involve a majority of small enterprises in knowledge-intensive industries.

National Governance and Sectoral Systems

Another important aspect that was evident from this study was the impact of national governance on the kind of work that sectoral systems can do and the success that they can have. This could impact in different ways depending on levels of governance, and where the sectoral system sits within the overall national picture and in relation to other players in the system. As the UK moves toward a devolved system of government, there may be important lessons to be taken on board if these problems are not to occur in the UK. For example, with the emergence of different national qualification authorities, it will be important for SSCs to retain their role in the construction of qualifications if they are to shape skills development in their sectors across the UK. Importantly, as devolved governance progresses, it is crucial to maintain a balance between devolved governance and some the potential problems that many two-tier sectoral systems have experienced.

Importance of Stakeholder Involvement

Clearly, the involvement of all relevant stakeholders is not a matter of who should be involved, but what strategy is most effective in involving those particular stakeholders. Some of the important lessons learned in other systems were that it is vital for the sector bodies or initiatives to focus on a small number of issues that are highly relevant to their sector as a whole, and to ensure that the major stakeholders are on board in tackling them. Equally, however, it is important to ensure good representation and that smaller enterprises do not feel disenfranchised. There are no readymade answers to the problem of SME engagement. However, to some extent this is dependent on the particular strategy of the sector body concerned. For example, some sector bodies start by working with larger employers for greater impact in terms of coverage, but will reach out to smaller employers at a later stage. This is a strategic decision. For other sector bodies, e.g. cultural or performing, small organisations and the self-employed may be the major clients of their sectors. In such cases, SMEs are the main employer body, though progress tends to be slower because it takes time to build the critical mass. In the UK, such issues are likely to arise for all of the SSCs, but may be particularly critical for areas such as creative industries and the leisure industry, where there are many smaller employers or sole traders to reach out to.

Value-chain and Sector Formation

Problems facing each sector are different and this means that while we have looked at national sectoral approaches in this research, this can encompass a wide range of activities and approaches. The success of sectoral approaches can differ widely across sectors but equally the role of the sector bodies in developing their sector can be quite different. There is clearly an important role for the UK SSCs in ensuring that their industry responds effectively to changes in markets. For some such as SEMTA and Cogent, operating in highly competitive product markets where international standards are extensively used, these can be used as identified above to move companies up the value-chain. In emerging sectors a strong

leadership role might be available to the SSCs if they are able to identify ways in which they can help move the industry up the value-chain. One technique that can be used to grow new sectors is that developed by the Singaporeans through their industry incubators.

Equally, the SSDA can play a crucial role in ensuring that the boundaries of the SSCs remain flexible and that their coverage remains sensitive to changes in the global economy. International experience shows that, for the sectoral system to maintain effective support for employers and employees, especially those operating in global markets, it will be important to continue to identify new and emergent sectors. This may be an important role for the SSDA, since it will be well placed to provide an accurate overview of sectoral coverage of the SSCs and new areas that arise. Industry members have a strong investment in their sector and may not immediately see the relevance of working in more cross-sectoral ways, or in re-defining the sector. On the other hand, emerging sub-sectors may see more innovative ways of working with an alternative sector.

At the same time, however, it is important to ensure that employers feel that their sector is represented, rather than being submerged within a larger grouping. Otherwise, the positive work that has been done to engage employers and build up sectoral knowledge, and the sense of ownership that the industry has, may be damaged. This can be facilitated by ensuring that any mergers and new groupings are made where there is a clear, shared agenda, and with room for representation of issues specific to each sub-sector or sub-grouping. While new groupings have been proposed and put in place in different countries, these were often the result of evaluative studies that focused on the economic benefits to government of reducing the number of sectoral bodies. This overlooked the political dimension of such mergers, and the impact this can have on employer engagement.

Performance Monitoring

Governments in a number of countries use performance monitoring of sectoral activities. Performance monitoring can be used to measure different areas of the sectoral system's work, and can have positive benefits in terms of accountability and ensuring the best use of public and private funds. However, recognition must be given to the amount of time and resources allocated to this monitoring system. In some cases, this can be counterproductive because there is more emphasis on audit than on action and engagement. If introduced, considerable thought needs to be given to exactly what is to be monitored and the measures by which an SSC is recognised as performing or not and the impact on funding.

Strategic Leadership Role

Leadership was raised as an important and emerging issue in the different national systems. This took a number of different forms, and was often an aspiration rather than reality at this point. In the UK, each SSC may need to review its role and identify what type of leadership the SSCs should and could provide within their sector. Some may see themselves as having an information role for the sector. Others may see themselves as working alongside a larger sector body, such as an employers association, in order to represent the skills element of the wider vision for the sector. Alternatively, the SSCs may position themselves in a much more encompassing leadership role, using skills as a means to drive future development of the sector as a whole. The crucial point here is that most sectoral systems have recognised that influencing skill training is useful as an immediate activity, but any progress has to be embedded within a wider vision for the sector as a whole.

Research Labour Market Intelligence Capability

The information role of sector bodies often links closely to their research capacity. This affects sectoral bodies' ability to coordinate future activities strategically. The different national sector approaches have different views of the research role of sectoral bodies. The SSSA and SSCs may want to review whether the existing balance between national and sector research capacity is the most appropriate for the UK situation and also any potential overlap and wastage. One option to consider, for example, is that SSC's strategic work could be facilitated by the creation of national LMI research centres. In the French system, this centralised approach to the collation and analysis of national-level data has proved a cost effective means of providing systematic, accessible and comparable LMI. Sector bodies then work with their industry and the research centres in order to develop more sector-specific data and research. The US O*Net provides an alternative centralised model with a significant benefits of (near) real time data and user interactivity.

Industry Skills Needs and National Qualifications Frameworks

Sectoral approaches can provide a key means for employers to engage with national qualifications frameworks, and to influence the supply-side of VET. The UK SSCs currently have differing linkages with the UK NQF, with some maintaining the role they had previously as Lead Bodies, and some having little linkage with standards and qualifications. While different sector bodies will need to take different approaches, according to the demands and needs of their sector, a strong linkage with the qualification framework can be a useful means to engage employers, ensuring supply meets demand. In addition, a closer relationship between employers and the qualification framework may encourage greater ownership among employers in the process of influencing VET provision and recognition of the resulting qualifications.

Section Four: Country Case Studies

Country Case Studies

As noted in Section One, the countries studied in this research are not all strictly 'sectoral' systems. As well as sectoral systems, this research has studied broader national VET frameworks where there are potentially useful lessons for engaging employers, driving up demand for skills, best practice or skills initiatives that might usefully be applied at the sectoral level in the UK. Therefore, the case studies are organised in the following way:

- 1) National Sectoral Systems (Australia, Canada, the Netherlands, New Zealand, South Africa);
- 2) National VET frameworks with sectoral sub-systems (France, Singapore, USA); and
- 3) Non-sectoral VET frameworks that provide useful learning for sectoral systems (Germany).

For Group 1, the cases are presented under the following topic headings:

- ❖ Current Policy Context;
- ❖ Governance and Skills Policy;
- ❖ Sectoral Approaches to Skills Development;
- ❖ Funding Arrangements; and
- ❖ Evaluation, Current Issues and Lessons for the UK.

Within each of these topics, we draw out examples of useful initiatives and challenges faced.

For Groups 2 and 3, however, the fact that these are not specifically sectoral systems means that it is not possible or illuminating to organise them under similar headings to the sectoral systems. Instead, each case study aims to give a broad understanding of the kinds of issues faced by that country and the skills responses that have been made or are being planned. Where possible, the same topic headings are used to facilitate comparison.

National Sectoral Systems

(Australia, Canada, the Netherlands, New Zealand, South Africa)

1) The Australian Approach to Sectoral Skills Development

Current Policy Context

As with many other older developed economies, Australia is currently facing what could be a dramatic increase in baby-boomer retirement and lower numbers of young people entering the labour market. In addition, the country is experiencing labour and skills shortages in certain key areas, with traditional 'trades' particularly affected. This is driving an increased government interest in lifelong learning and upskilling for those already in the labour market. Moreover, the global economy, competition and the changing nature of work are driving a shift towards employability skills and cross-sectoral training.

Governance and Skills Policy

Australian skills policy operates across a two-tier governance arrangement between the national/federal Commonwealth Government and the 6 State Governments (New South Wales, Victoria, Queensland, South Australia, Western Australia and Tasmania) and 2 Territories (Northern Territory and Australian Capital Territory). The states/territories have jurisdiction over education policy, However, the Commonwealth Government develops national skills and VET policy, strategy and initiatives through its Department for Education, Science and Technology (DEST) and the Australian National Training Authority (ANTA)⁹. These national initiatives are then operationalised and funded by the individual states/territories.

This two-tier coordination, and the national training framework, was part of the Australian National Training Authority Act signed in 1992 to develop an integrated national VET framework. Prior to this, the Commonwealth Government had little direct involvement in VET which was the responsibility of each state/territory. This national agreement was developed against a background of high unemployment, problematic youth transition, low investment in training and a drive for greater competitiveness on the international level (Dumbrell, 2004). Alongside these issues, was heavy criticism from industry that the Technical and Further Education (TAFE) system was not delivering their needs or keeping up to date with changing skills. Since the TAFE colleges are funded on a 'per student' basis, they have tended to focus on courses popular with learners rather than providing the kinds of skills required by employers. This was viewed as particularly problematic in a time of economic and industrial change and formed the context against which the Australia sectoral approach was enhanced and re-developed.

Although there are a range of state-level skills initiatives and priorities, the overall national VET framework aims to ensure comparability and portability between states/territories.

Sectoral Approaches to Skills Development in Australia: Industry Training Advisory Boards (ITABs) and Industry Skills Councils (ISCs)

The key sectoral approach to skills development in Australia is the network of national and state/territory industry skills bodies. The sectoral approach is a key feature of the Australian national vocational education and training (VET) framework. Although they are relatively small in relation to other elements of the VET system, these industry skills bodies nevertheless play an important linking role between employers and VET. However, this role is often overlooked and underplayed due to the size and historical power of other elements of the skills framework, particularly the education system.

⁹ ANTA has been abolished in June 2005. All responsibilities have been transferred back to DEST.

Please note that we use the term 'sector' when referring to industry skills bodies, However, it is worth noting that the term 'sector' is often used in the Australian policy context and literature referring to sectors of education - e.g. VET and academic, school, further and higher education, public and private training providers.

Developing the Sectoral System in Australia

Developing an industry-led VET system has been a key focus of Australian national and state-level skills policy since the early 1990s (Schofield, 2003). Indeed, Dumbrell (2004) claims that Australia has one of the most demand-led VET systems in the world.

Industry Training Advisory Boards, 1992-2004

Between 1992-2004, one of the key links between industry and the national VET system were the national Industry Training Advisory Boards (ITABs). These were developed as part of the Australian National Training Authority Act 1992. Thus, from 1992-2004, there were 23 national ITABs and 136 associated state/territory bodies. These were replaced in 2004 by Industry Skills Councils (ISCs). Since the ISCs are in their infancy, and much of the work they do remains the same as that of the ITABs, we will outline how the ITABs worked and some of the reasons these were reformed, before moving on to outline the new system.

ITABs were regarded as a modernised version of the Industry Training Committees created in the 1970s in certain key industries (Ryan, 2002). Industry training up until the 1990s was focused around a small number of traditional trades areas, covering apprenticeships and limited professional training. ITABs were established to work with employers in order to inform ANTA and the national skills policy of current and future skills needs. ITABs had to manage competency standards and training packages for each sector. Some ITABs also acted as training providers, with the possibility of setting themselves up as private industry-owned companies. However, this created some conflict of interest as they were receiving public money in order to develop standards, assessment and training provision.

The training packages were, and continue to be, the key device through which industry influences the VET system. Training packages are described by ANTA as the 'central architecture' of the NQF. Training packages are not teaching programmes but document the competences and occupational standards for each industry and profession and the related qualifications. The packages provide the framework for recognition and assessment of individuals' skills. These are identified, developed and updated by the ITABs in consultation with employers and other stakeholders (e.g. unions). TAFE colleges and other training providers then interpret these standards to develop their learning and training programmes, assessment and qualifications.

There are approximately 4,000 Registered Training Organisations (RTOs), providing nationally recognised training and qualifications. These include public and private training organisations, TAFE colleges, universities, schools and businesses. State and territory governments are responsible for registering and monitoring the performance of training providers. Training packages are reviewed every 3 years. However, all training packages have been under review following a national government-commissioned study (Schofield and McDonald, 2004). One of the conclusions of the study was that there were too many packages, with 1,800 packages registered on the National Training Information System. Future developments for the training packages include developing more general employability skills within the standards, and developing more cross-sectoral qualifications.

State-level ITABs also worked with employers and the key sectors within each state/territory to identify skills needs and sectoral developments. While these mirrored the national bodies to

some extent (according to regional industries), the links between the state and national bodies could be tenuous. In some cases, there was very little communication between national and state ITABs. As a result, state ITABs and employers could feel they were not represented at the national level. This lack of integration appears to be primarily a result of the small size and relatively small funding base of the national ITABs, and the difficulties of maintaining links with the many geographically dispersed stakeholders (e.g. employers' associations, unions, state and territory bodies, training providers, employers etc.) across the states/territories.

The New Industry Skills Councils, 2004 - Present

Since the ITABs were set up 13 years ago, the major issues facing the Australian workforce and economy have inevitably changed. The current issues that underpinned the major policy decision to develop Industry Skills Councils, now include:

- ❖ A continued lack of coordination at state/territory and national level;
- ❖ Ageing workforce - particularly in the trades professions at present, but forecasted for all sectors;
- ❖ Low unemployment and resulting skills shortages in key areas of industry such as utilities, trades and services;
- ❖ Need to link migration policy and skills strategy;
- ❖ Burgeoning Asian markets (with positive and negative implications);
- ❖ Shift towards multi-sector, transferable skills; and
- ❖ Drive to enhance flexible forms of training and skills development.

Job growth is seen as a key factor in raising employer demand for skills. However, there is concern that in the coming years job growth will slow, leading to a decline in demand for skills (ANTA, 2004a). ITABs were originally established in order to better meet the needs of employers and industry, providing a means through which to bring together different stakeholders to identify skill needs and to link into the VET system via the endorsed training packages. In 2003, after a review of national and state ITABs (document not in circulation) ANTA decided to dissolve the ITABs. Reasons given for a shift away from ITABs included a lack of impact, a need for better use of resources and the need to create a more focused and strategic framework. The replacement is a new network of 10 national Industry Skills Councils (ISCs)¹⁰.

The Commonwealth Government removed funding for ITABs in May 2004, although some ITABs will continue to run while they consult over which ISC to join. Shortly after the withdrawal of national ITAB funding came withdrawal of state funding for the state-level ITABs. This had caused some tension as it was not discussed with the state ITABs or the state governments, leaving a considerable and unexpected gap in funding.

The aim of having fewer, larger industry councils is to make better use of Commonwealth government funding whilst creating more effective councils with a larger coverage of both industries and individuals. ISCs are intended to have a wider vision than ITABs and more involvement in the future strategic development of sectors. Nevertheless, the new ISCs are made up of former ITABs. For example, EE-Oz Training Standards Ltd, the ElectroComms and EnergyUtilities Industry Skills Council, is a former ITAB that covers a large and distinct area, and which has remained largely as it was apart from a change of name. Others are

¹⁰ Appendix 2 lists the industry skills councils.

formed through a merger between former ITABs that have agreed to work together around interlinked and common skills requirements or issues. Thus, Services ISC is made up of a number of former ITABs including hospitality, tourism and retail.

The new ISCs are bi-partite, but they are not required to have equal representation between employers and unions. They have two primary roles, which are fairly similar to the ITAB roles. Firstly, ISCs have a labour market intelligence role, feeding LMI for their sector through to the VET system and identifying current and future skills and training needs. While this role is similar to that of the ITABs, it is intended that ISCs will have a more strategic approach for their sector. This includes preparing a National Industry Skills Report for their respective sectors, and identifying whether it is training or other responses that are required to meet these needs (ANTA, 2004a). For example, the introduction of 'High Performance Working' is hot on the agenda for a number of ISCs. Secondly, ISCs will continue to develop the endorsed training packages and additional products and services. These services can include activities such as supporting the packages with products or guides to be used alongside training programmes, providing initiatives for young people, and campaigns to promote the sector and apprenticeships.

An additional aim that is less strongly articulated but regarded as important in the future development of the ISCs is that they help employers to understand how to integrate skills development into their business aims. As the ISCs are being formed from former ITABs, the training packages have had time to build up and many are now established and well regarded by industry. ISC's future role is likely to be on developing the LMI and advisory roles. Some ISCs would ideally like to have more involvement in ensuring that Registered Training Organisations (RTOs) are trained to the required standards, and in organising the funding of training. However, this will remain the role of the State governments.

By June 2007, the ISCs are required to demonstrate that they have created:

- ❖ "Vibrant, influential and high profile boards recognised by stakeholders and mainstream media as the authority on their respective industry's VET issues.
- ❖ Status and capacity to integrate their activities as a key partner in a whole of government skills alliance. This will result in coherent policy frameworks and industry skill issues being recognised as integral to all aspects of economic competitiveness. Initiatives such as Backing Australia's Ability, the Tourism White Paper and the National Skills Shortages Strategy illustrate this point." (ANTA, 2004b: 1-2)

One significant change to the overall system, following the recommendations of Schofield and McDonald (2004), is that training packages can now also be developed by specific enterprises or industries outside of the ITAB/ISC system. It was argued that Aboriginal and other special interest groups such as small enterprises might benefit from being able to develop their own specialised training packages. Nine of the current 71 endorsed training packages were developed in this way.

In October 2004, as part of the national overhaul of skills policy and strategy, the Prime Minister announced that ANTA would be abolished in June 2005 and its responsibilities will be taken over by the Australian Government Department of Education, Science and Training (DEST). As the coordinating, strategic and funding channel for the ISCs, this transition will involve a period of change and consolidation.

Funding Arrangements

The ISCs have been declared for 3 years initially, with government funding secured until June 2007. Funding has been paid so far via ANTA, however, when ANTA is disbanded in June 2005, this role will move to the Commonwealth government Department for Education, Science and Training (DEST). Each ISC receives a base funding of AU\$120,000 plus project funding, with a total of around AU\$250,000 (just over £100,000) per ISC.

Evaluation, Current Issues and Lessons for the UK

As the sectoral approach to skills development in Australia is in reform, it is difficult to evaluate the success of the new system. There is little publicly available evaluation of the previous shape of the system. A national review of the ITABs, for example, is not publicly available due to the highly sensitive nature of the review, although there are public reviews of the training packages and reforms. Indeed, much of the literature overlooks the role of sectoral bodies or programmes in skills development, focusing instead on the national TAFE system, apprenticeships and the roles of Commonwealth and State governments. Moreover ANTA saw apprenticeships, not the ITABs and ISCs, as the key linkage between demand and supply. Nevertheless, the Industry Skills Councils (ISCs) do have an important role to play in linking employer demand with training provision, albeit as smaller partners within a large framework with multiple layers of influence and governance.

With the demise of ANTA, some of the expertise built up in ANTA over the last 13 years will inevitably be lost. This may have some impact on the functioning of the ISCs. Most of the ISCs have mixed feelings about this change, but are confident that while they will have to build new relationships, their activities will not be affected.

One of the key issues for the sectoral approach in Australia has been the dispersed and varied nature of the various stakeholders. The new system is aimed at creating wider impact. Better integration and communication between the national and state/territory skills bodies and other stakeholders would improve the impact of these skills bodies at all levels, since they would feed into each other, maximising the work that they could do with limited resources. It can be difficult for national bodies to consult with all the relevant stakeholders and for local employers to feel that they have a voice. This has been particularly the case for small enterprises, since the larger organisations tend to dominate the policy arena and have a more powerful position in the employers' associations. These difficulties reflect the realities of working across a two-tier governance arrangement, the size of the country/continent and the sometimes conflicting political interests at national and state levels. If the relationship between the national ISCs and state/territory skills bodies could be developed, it is likely that the system will prove more effective, with state/territory bodies working closely with regional and local employers and stakeholders and feeding their LMI and needs into the national system via the ISCs. There is some scepticism on the ground given the limited resources dedicated to this sectoral approach. There are lessons here for the UK in terms of how sector bodies are positioned within the wider framework, what is expected from sectoral systems, and ensuring adequate resources to achieve this.

A second issue within the Australian framework that remains to be resolved is that each state has different funding frameworks for education and training. When the ISC standards are turned into programmes by training providers at the state/territory level, states/territories have different arrangements covering the number of hours training that can be publicly-funded. This means that while the standards are national, the programmes developed from them may have different content and may not cover all of the same standards. This reduces some of the transferability and portability of skills across states.

In terms of future developments in the system, the Howard government after the general election in 2004 promised that 24 regional technical colleges would be created, focusing on meeting the needs of employers. Although the full details are sparse at present, these regional technical colleges (also known as the 'Australian Technical Colleges') are thought to be an attempt by the Commonwealth government to gain a significant steer in the future development of VET at the state level. These colleges will be established in areas where youth populations are high. The first objective of these colleges is to deliver trade learning for years 11 and 12 students through school-based New Apprenticeships. Twelve colleges will start to appear in 2006 and 2007. However, at the time of reporting, it is not clear how these colleges will enhance the work of the ISCs. As the ATCs are employer-led and not related to the state-based TAFE system, it is likely that ISCs may have a higher input in the training activities of these colleges.

2) The Canadian Approach to Sectoral Skills Development

Current Policy Context

After a period of recession in the early 1990s, Canada's economy recovered. But at the same time the Canadian economy also found itself facing a growing global competition, an ageing population and a shortage of skilled workers. There is a long history of skilled workers migrating to Canada, and it is foreseen that this will continue to be a major means of filling the current and forecasted skills shortages over the next few decades. However, despite increased immigration in the last 10 years, the Canadian economy is still experiencing labour and skill shortages, as most of the skilled migrants arrived and decided to stay in the main cities of Canada. They are not moving to rural and remote locations where their skills are most needed. One approach to this has been to focus on the skills development of indigenous people who tend to live in such areas.

Governance and Skills Policy

A distinctive aspect of the Canadian sectoral approach, shaping the characteristics, activities and impact of sectoral initiatives in Canada, is its two-tier federal and provincial governance. Education and training are the domain of the provincial governments. This is to ensure that provinces, with their diverse political, linguistic and ethnic interests, are able to design their local education system to meet the provincial needs. Another feature of the Canadian skills system is its tripartite orientation. As a result, the sectoral system in Canada has a strong industrial relations emphasis, and this emphasis has a fundamental influence over the historic development of the sectoral system in Canada. For example, the Sector Councils are mandatory to have equal representation from all parties concerned.

Sectoral Approaches to Skills Development in Canada: the Sector Council Program

The Sector Council Program (SCP) comprises 30 pan-Canadian sector councils. The programme was established by the Government of Canada in the 1980s and is now overseen by Human Resources and Skills Development Canada (HRSDC), the Federal government department responsible for skills and workforce development.

One of the strengths of the Canadian sectoral approach to skills development is its ability to adapt with social, political and economic change. The original formation and intention of the sector council initiative was quite different to that of today. The late 1980s/early 1990s in Canada saw a time of increasing global competition and industrial decline in a number of key sectors, alongside growing unemployment, economic slowdown and industrial disputes more widely. The first sector council to be established was in the metalworking industry, which was suffering a particularly sharp decline. The aim of the sector council initiative, supported by a tripartite agreement, was to act as a platform to bring together the different stakeholders in the sector in order to discuss how to deal with this crisis through skills development, re-training, redeployment and reorganisation of working practices. Thus, the early sector councils, arising in a time of decline and major change, played a vital role in industrial relations and redeployment of workers.

With improving economic conditions in the last 10 years, the remit of the councils has now shifted. It is now to develop training standards and to build a 'training culture' within their respective sectors. Equally, new and emerging sectors have developed their own sector councils, while others have changed or merged according to shared interests. The current focus, with the current socio-political context, is on how to develop the sectors, how to get

young people into the trades, and how to grow newer sectors and to develop better cross-sectoral cooperation.

While the Sector Council Program is now well-established and well-regarded, its development has been one of 'steady' and gradual transition. The councils currently have a coverage of 25% of the Canadian workforce and aim to cover 50% by 2007. At the outset of forming a sector council, sectors are invited to undertake a feasibility study, identifying the potential role and benefits of having a council for their sector. Having established a case for developing a sector council, a strategic plan is drawn up. For example, the voluntary sector is currently carrying out such a feasibility study. In practice, it is not uncommon that the civil servants involved in the initial feasibility study later become involved in setting up and running the councils. This aspect of the SCP has given rise to argument that despite its tripartite arrangement, the SCP has the capacity to act as a quasi-governmental body, especially the SCP is situated within a two-tier structure and the Federal government needs a channel for making input in sectoral matters (see discussion below). HRSDC and The Alliance of Sector Councils (TASC), the umbrella body for the councils, continue to work with sectors that are potentially interested in developing a council¹¹.

Different sector councils engage in a range of different activities. For example, these may include facilitating apprenticeships, providing careers information, certification, developing occupational standards and promoting new recruits into the industry. Some of the activities are innovative. For example, the Construction Sector Council aims to make intelligent use of labour market data to predict peaks and troughs in seasonal employment in order to better match recruitment and training. Some councils are able to generate additional income, for example, the Software Human Resource Council generates income by selling their standards and related programmes within and outside Canada. Similarly, the Hospitality Sector Council sells their standards and training packages to employers in overseas countries such as the Caribbean. The Sector Councils' overseas activities are largely the result of their funding method (see 'Funding Arrangements' below).

Working Across a Two-tier System

The Sector Councils play an important role within this two-tier system. In effect, they provide a means for the Federal government to have some form of leverage within the Provincial government education and training policy. This is carried out in two ways. Firstly, the Councils' presence acts as a channel of communication of Federal policy. Secondly, the Sector Councils liaise with provincial colleges regarding their sectoral skills needs. The Sector Councils therefore influence the supply of skills at the provincial level. In practice, while the SCP is national, its work within the provinces has to be carried out by their equivalent provincial sector bodies. In the province of Québec, for example, there are 16 provincial sector bodies representing the different key sectors in the province. Given the small size and relatively low funding of the national Sector Councils, it can be difficult for them to reach out to all areas. In this respect, the provincial councils are vital. However, at the practical level, the provincial councils are completely separate from and, it seems, often working independently from national councils. This is a sharp reflection of the historical, political and social nature of this two-tier governance. Given the autonomy and distinctiveness of the provincial initiatives, we will discuss the sectoral activities in Québec separately in a later section.

In order to facilitate communication between the provincial Sector Councils and the provincial colleges, there has been a recent innovation - the establishment of the 'Affinity group'. This device is a specific platform to translate SCP skill needs into local education and training provision. Although not binding, many Sector Councils see the Affinity Group being the most

¹¹ Appendix 3 lists the Sector Councils.

useful device that ever appeared in recent times. Now the Sector Councils have a direct means to negotiate and discuss their needs at the provincial level. The success of this group has led to recent discussion to establish a similar device for higher education.

Funding Arrangements

There are two sources of Federal funding for the Sector Councils:

- ❖ Core funding for the council recurrent expenditure;
- ❖ Project funding for specific projects.

A distinctive feature of the SCP is its funding method. The 'core' component is the part of Funding that supports the administration, overheads and staff costs of the Sector Council. The 'project' component is the 'additional' funding that will support Federal initiatives that are deemed to be important to skills development in the relevant sector.

Proposals for project funding must be submitted to HRSDC. Proposals are considered in line with government priorities. Some Sector Councils have experienced long delays in proposal approvals due to changing Federal priorities. Some Sector Councils rely entirely on government funding, while others have developed considerable capacity for additional fund-raising activities. In principle, the 'core-project' funding mechanism sounds equitable - funding depends on the level of activities and the extent of government policy delivery through projects. However, in practice, this method has not worked out as smoothly as expected. Firstly, the core funding component is relatively small. In most cases, this is just enough to keep a basic office running. This has tended to put a constraint on the Sector Councils' ability to expand into projects. Indeed, often when projects are approved, the relevant council may have problems of office space or other logistic issues (e.g. enough research and support staff) to get projects under way. Once capacity is expanded, there is no guarantee that future projects will get approved and the running of the council may experience down-sizing within a very short time.

Secondly, there may exist a discrepancy between what employers regard as 'useful' projects and those regarded as 'urgent' by the Federal government. As a result, different priorities may exist. This tends to create long delays in approving projects and frustration on the part of those who are involved in proposing the projects. Fortunately, the funding method also allows Sector Councils to seek additional funding from service activities within their sectors (i.e. outside Federal resources). Thus, enterprising Sector Councils have been keen to work on this 'third' source of funding (see below).

In the early years of the SCP formation, the Sector Councils were expected to become 'self-sufficient' after 5 years. After all, the SCP is supposed to be 'employer-led' too. Industry should fund the whole programme in due course. The SCP was initially funded entirely by the Federal government. Then in the following years, the ratio between government and industry would be 90:10, 70:30, 50:50 and then the intention was 100% industry-funded (Gasskov, 2001). However, this requirement was later withdrawn by the HRSDC. It was recognised there were a number of potential downsides to self-sufficiency.

Firstly, a few years into the running of the SCP, it was recognised that some councils might never be able to generate the level of funding needed for self-sufficiency. But these councils were just as important as others in order that the whole of the SCP would succeed. Secondly, it would be questionable that the Federal government should provide no funding if the Sector Councils were to be tripartite with equal representation. More importantly, however, self-sufficiency might lead to the removal of the small amount of leverage that the Federal government could have in relation to education and training at the provincial level via the

Sector Councils. The self-sufficiency idea was soon abandoned. In practice, Sector Councils have remained heavily dependent on public funding, with only a small number of councils gaining strong financial backing from industry.

Some councils undertake additional service activities which both build their research and consultancy capacity and provide additional financing. These include working with the sector and specific employers to develop research projects and activities partially or completely funded by employers; developing modular training packages for employers based on the sectoral training standards; providing targeted labour market information for particular employers or sub-sectors. A few Sector Councils have done this very successfully and this third source of income has provided those Sector Councils a degree of control over their growth and stability. However, not every sector has the conditions for this sort of development.

Québec's Sectoral Initiatives: the Combination of Sectoral Approaches and a Province-wide Training Levy

The province of Québec has developed its own sector skills approach within the federal-provincial system. In comparison, this Francophone province has a greater 'corporatist' approach to social policy than other Canadian provinces, reflecting its historical, social and political links with France and Europe more generally.

A sectoral policy strategy, aimed at increasing competitiveness and tackling issues related to training, skills and the economy, was developed through agreement between Québec's workforce development body (now known as Emploi Québec), employers and social partners.

The agreement aimed to develop a series of sectoral policy initiatives that increased the level of employer and social partner participation in training, providing policy tools and financing to increase levels of training and improve the relationships between employers, unions and education. The main means of doing this was to develop provincial Sector Committees - *Comités Sectoriels* - covering the various areas of the private sector. In all, 26 *Comités* were established where agreement could be made between the employers and social partners.

Another important and complementary element of sectoral skills development within the province of Québec is the training levy - *la Loi favorisant le développement de la formation de la main-d'oeuvre*. This training levy was introduced on the 22 June 1995, following agreement between the provincial government and social partners on the need to develop specifically a 'training culture' in Québec. The levy is organised by Emploi Québec, the Provincial government's workforce development department. The aim of the levy is to raise levels of training, qualification and employer demand for skills. As well as training for those in work, it covers training for adaptation (e.g. changing to a new sector, coping with decline), entry to work and to enhance workforce mobility. While not a specifically sectoral initiative, the levy is seen as an effective means of engaging all employers, and can be organised along sectoral lines when agreed by the different stakeholders in a given sector.

Up until 2004, when the new Liberal government made amendments to the levy, all companies with a wage bill of more than C\$ 250,000 were legally required to invest at least 1% of the wage bill on training. This covered both private, public and not-for-profit organisations. Recent changes to the levy mean that organisations with a wage bill of less than C\$ 1 million are no longer liable to pay the levy. This will make a significant difference to the number of companies covered, shifting from 25,300 companies to 10,300 (Harding, 2003). Some smaller companies, in particular, argued that completing the necessary documentation was an additional burden on them, with complex regulations and requirements. This has more recently been improved, however, with the forms streamlined to two pages; although many

SMEs will now be exempt from the levy. The documentation is now kept by the company for 6 years in case of audit, but employers are not required to submit this to the government.

In practice, the employer obligation to the levy can be fulfilled in a number of ways. For example, these may include providing for apprenticeships and work placements, supporting employees studying in their own time, contributing financially to an officially-recognised collection agency and maintaining training premises. Interestingly, this wide range of admissible training and training-related expenditure means that some companies may no longer see the levy as a tax because these are expenses/costs that the companies may incur during their normal operation in any case. Together with other facilities described below, some companies see the levy being extremely useful in encouraging a learning culture nation-wide and setting up a level playing field for training and skill development for all.

Companies that meet the 1% requirement can also apply for additional funding through Provincial training grants. When companies do not make provision for such activities, and provide no evidence of investing the 1% in training, they pay the 1% levy, or the difference between what they spent and the 1%, to the national (Québec) training fund - *le Fonds National de Formation de la Main D'Oeuvre*. This fund is used to promote and support training and development, according to the training plan set by a tripartite Commission, and a number of the beneficiaries include Sector Committees. For example, between 1999-2000, 9 of the Committees received funding under one of the national training fund's 5 priorities, covering a wide range of sectors from electronics through to furniture Sector Committees.

A tax credit is available to those companies that are not subject to the levy, due to the small size of the wage bill, in order to encourage them to provide training. Apprenticeship is one of the areas that attracts this tax credit.

Employers are encouraged, but not obliged, to put together a training plan for their company and are provided with examples of this. Equally, there are many local public and private sources of information and guidance regarding the levy - e.g. how to fulfil their obligation and how to complete the paperwork.

In terms of impact, of those companies that were subject to the levy between 1996-1998, 74% of companies invested more than the required 1% (Emploi-Québec, 2000). When looked at by company and by sector, investment in the training levy shows that the greater the wage bill, the greater the investment in training. When it comes to sectors, 68 out of 70 sectors invested more than the required 1%, while 6 sectors invested more than 2% in training. The latter included: information technology; mining; provincial administrative services and textiles (Emploi-Québec, 2000). One of the problems identified with the levy, as has been found in other countries, is that smaller firms and non-training firms tend to pay the levy as a form of penalty for not training, rather than seeking to raise the levels of training or demand for skills. However, the statistics shows that the majority of the Québec companies are the ones who train and take advantage of the levy system.

Evaluation, Current Issues and Lessons for the UK

While they still have a relatively low profile in Canada, the pan-Canadian Sector Councils are widely regarded as an effective means of bringing together and enhancing cooperation between the various parties involved in training (Lowe, 2001). Although their history is firmly placed within a context of structural change in the labour market and the need to re-build declining sectors, the SCP has been able to adapt to current needs and trends. Sectoral bodies thus function as a workforce agency focusing beyond immediate skills and training matters (e.g. restructuring). Sector Councils now provide a means for sectors and the various stakeholders concerned with them, to raise awareness of the employment opportunities

different sectors offer and to look at future skills development and the very shape of the sector itself. Similar changes may be seen in the UK as the SSCs grow and develop, and the economy changes. In order to remain relevant and to maximise their impact, UK SSCs will need to consider how they can adapt over time in order to follow the changing demands of employers and the economy. For example, many sectoral approaches have focused on the training role of sectoral bodies. However, more strategic work such as establishing 'standards' that employers buy into may be a more effective way to enhance employers' involvement. This has been used to engage employers in some of the Canadian sector councils such as engineering and trucking.

The two-tier governance in which the SCP operates means that sector councils have to build links with many geographically dispersed stakeholders and social partners. With limited resources, this can be difficult. Equally, there may be some uncoordinated duplication across provinces of sectoral approaches to skills development. In addition, a key issue for skills development in Canada, as a result of the differences between provinces and the need for greater mobility of the workforce, is comparability between provinces for education, apprenticeship and professional development. This means that creating a generally acceptable set of industry standards is a big challenge for all of the Sector Councils. Inter-province comparability/qualifications are an important area of work for some sector Councils in order to meet skill needs within their sectors (e.g. professional engineers). There are lessons here for the UK in terms of potential outcomes of devolution and issues of working effectively across regional differences. The national Canadian sector councils are looking to develop better links with local skills bodies and the government have commissioned research to learn from a range of such partnerships with regional employers and skills-related bodies. The results of the research may provide useful learning for the UK SSCs.

Changes are planned for the Federal sectoral approach to skills development over the next few years. This will be as part of the Federal government's Workplace Skills Strategy (WSS). It was felt that the current skills policy and practice were useful, but needed to go further to raising productivity, skills and human capital and better meeting the needs of employers, and engaging SMEs. While a white paper is yet to be developed, this has led to a number of initiatives, highlighting the role of different national and provincial bodies and systems in developing a highly skilled workforce and economic competitiveness. The current strategy aims to promote the role and accreditation of workplace and prior learning, increasing employer commitment to skills development, and highlighting the links between human capital and business performance, with a particular emphasis on smaller businesses. Some of the initiatives that are currently being piloted or planned include:

- ❖ Support for R&D, training and environmental projects in the automotive sector with the view to developing new business;
- ❖ Promoting the role of workplace training, with involvement of the Sector Councils;
- ❖ An initiative to better integrate the aboriginal workforce; creating better measures for returns on investment in training;
- ❖ Developing tax incentives for training in the private sector; and
- ❖ Developing a National Skills Passport.

The Sector Councils will have an important role to play in this strategy. Some of the areas in which Sector Councils are intended to be developed in order to meet the strategy include: responding to workplace needs by creating greater employer ownership of the councils; enhancing the dissemination of labour market information; improving links with different

stakeholders nationally, regionally and locally; implementing occupational standards; and reorganising the funding arrangements for Sector Councils. One important learning point here is that, although it is desirable for sectoral bodies to be employer-led, their importance as a vehicle (a quasi-governmental body) to deliver a wider range of government initiatives cannot be overlooked.

3) The Netherlands' Approach to Sectoral Skills Development

Current Policy Context

The Netherlands, like much of Europe, has recently entered a period of economic downturn. While there was a high demand for skilled workers, the current economic climate has meant a decline in the number of workplace training places available for young people, and a resulting growth in demand for school-based training. The government is concerned to ensure the continued provision of training places both in the workplace and at school in order to minimise the impact on future supply of skilled labour. This is viewed as particularly important in light of the ageing population and the impact that this is likely to have over the next few decades. Particularly evident in this system is the government focus on meeting the objectives of the EU Lisbon Strategy and the resulting emphasis on ensuring a greater amount of flexibility for learners in the VET system, developing transferable skills, and portability of qualifications with a European Skills Passport.

Governance and Skills Policy

Two aspects of governance in the Netherlands are closely related to sectoral development in the current case study. The first is the tripartite framework within which all skill training matters are defined. The second is compulsory education extends to 18 years old (at least part-time) which means that a large proportion of young people are supported by vocational learning when they are already working with an employer.

As a one-tier government system, skills policy is developed at the level of national government and involves a number of different stakeholders (also see outlined below). There are some regional dimensions to skills policy and practice, though the sectoral approach on which we focus is a national system which involves both national and regional partners. In 1996, a major reform in the Dutch VET system was made possible under the Dutch Adult and Vocational Education Act, known as the WEB Act (*Wet Educatie Beroepsonderwijs, WEB*). This reform involved major change in a number of areas, including the redevelopment of the sectoral system and the way in which the VET system supports sectoral learning. Importantly, this means that the reform positions sector training at the heart of the vocational education and training framework. This VET formation with sectoral bodies being a leading partner appears to be unique amongst all the sectoral approaches that we have examined.

The Dutch Approach to Sector Skills Development: Kenniscentra

Central to the WEB Act was a tight integration between the school- and work-based elements of the VET system. This integration supports sectoral training and creates a more cohesive and dynamic system. Importantly, the Act gives vocational education equal standing and recognition as a learning pathway when compared with general/academic education. Among the key changes was the establishment of a national qualification framework that supports sector skills needs and is capable of supporting work-based and school-based learning pathways simultaneously.

Organising VET to Provide Dedicated Support to Sectoral Training

The VET system in the Netherlands is specifically organised along sectoral lines. This implies three important features:

- ❖ Employers occupy a pivotal position within the VET system to 'lead' sectoral skills development through the sectoral *Kenniscentra* (or 'Knowledge Centres');

- ❖ The sectoral arrangement brings all key stakeholders together and works towards sector-defined training objectives (some of which as part of the sector collective bargaining); and
- ❖ Effective use of financial incentives to enable a fluid and dynamic system, capable of meeting continuous change in sectoral needs.

This appears to be the longest-running sectoral approach to skills development among the cases studied. Many of the original sector bodies were created in 1954, with some such as the construction industry dating back to 1946. Much of the early emphasis of the Knowledge Centres was derived from the development and maintenance of the traditional apprenticeship system in the post-war period.

In order to bring greater focus to sectoral support under the WEB Act, the hundreds of vocational training centres around the country were merged to form 43 large regional training centres (ROCs) and 13 additional specialised training institutions. Under the new system, senior secondary vocational education (MBO) and apprenticeship are brought together to follow the same qualification pathway. The ROCs deliver MBO education, as well as continuing education for adults, in order to meet the vocational needs of employers.

A unique feature in the current Netherlands' sectoral system is the linkage between the 19 Knowledge Centres on one side of the VET framework, and the 19 sectoral education groups that mirror these on the other side¹². These mirroring sectoral education groups are located within BVE Raad, the Dutch Council for Vocational and Adult Education, which represents the 43 regional colleges (ROCs). BVE Raad plays an important role in both acting as an umbrella body for the ROCs, and feeding Dutch and EU policy in to the VET system. Since 1996, all 43 ROCs have been re-organised to support sectoral training designed by the Knowledge Centres via the national competency framework. The Knowledge Centres identify the competencies required by industry, and these are fed via BVE Raad to the ROCs that carry out the school-based training delivery and assessment to meet these requirements.

The New Qualification Framework and Sectoral Training

The 1996 WEB Act led to the development of a new national vocational framework comprising 4 levels of training. Irrespective of the work-based or school-based routes, the trainees are working towards one of 4 levels of vocational qualification taking up to 4 years to complete: Level 1 (assistant training), Level 2 (basic vocational training), Level 3 (vocational training) and Level 4 (middle management training).

Two features are associated with the new qualification structure. Firstly, it has been designed to support the requirements of prior learning recognition, with the aim of enhancing workers' employability through qualifications and recognised (but also sector-related) skills. Secondly, the framework is used to standardise all sectoral training - both within and outside of the ROC system. This qualification framework is used by both public and private training providers in order to structure their training programmes. The immediate benefit of this practice is that the Netherlands system has a greater degree of sectoral focus, irrespective of how and where training takes place.

Functions and Roles of the Knowledge Centres

The 1996 WEB Act defines the Knowledge Centres' functions as follows:

- ❖ Through a tripartite arrangement, to coordinate and promote sectoral training;

¹² Please see Appendix 4 for a list of Knowledge Centres.

- ❖ Create and maintain skill competencies required by their respective industries;
- ❖ Accredite appropriate workplaces for sectoral work-based training;
- ❖ Act as quality control body to oversee the quality of sectoral training, including examinations conducted by ROCs.

The last role on quality control (school-based learning) of the Knowledge Centre is again unique among sectoral systems. There has been some argument over as to whether this should be the responsibility of the ROCs and BVE Raad. Currently, this role is carried out by BVE Raad, but sectoral bodies have an input along the process.

Although the Knowledge Centres cover 19 diverse sectors, they function in a uniform manner. The role of the Knowledge Centres is to support and develop sectoral training in their respective sectors but, more importantly, this sectoral training role is derived from the participation of employers, workers' representatives, other social partners and the Ministry of Education, Culture and Science. This tripartite arrangement is a key feature of the boards of the Knowledge Centres. The tripartite arrangement means that when the Knowledge Centres identify appropriate competencies for sectoral training, the skill content has the support of a broad spectrum of stakeholders. In particular, employers are at the forefront of driving the competency framework. Employers take this role very seriously as this affects the skill supply to their respective industrial sectors.

These competencies provide the basis for the national vocational education and training framework. They are used to ensure that both work-based and school-based trainees are trained to the same standards and competences as identified by the sectors; although it is recognised that there will be some differences between the kinds of experience that work-based and school-based trainees have gained. Importantly, as well as developing the sectors standards, the Knowledge Centres are responsible for accreditation of employers who wish to provide traineeships. Accreditation is a crucial function of the Dutch sectoral system, since many training outcomes have to be delivered through the workplace, especially for the work-based training route. In 2001, there were 167,000 accredited companies providing training places (Minocw, 2003).

As an incentive to provide training contracts for new or existing employees, an employer that has their workplace accredited for sectoral training can claim approximately 15% of the trainee's wages back as a tax refund. This tax refund is often seen as a significant incentive for employers to engage in training. The fact that these trainees are trained to sector standards, in the workplace, with learners obtaining a nationally-recognised qualification and the employer being able reduce training cost through a tax refund, means that this is a popular scheme for entry level employees. Indeed, few employers are likely to take on entry-level workers through other non-training routes. This system does not necessarily cover higher levels of recruits, however, since it is primarily focused on competency Levels 1-4. As such, this mainly covers younger people entering the world of work. From Level 4 (first year of higher education), the HE sector is responsible for the vocational competencies. Nevertheless, there is the possibility for workplaces to collaborate with their Knowledge Centre and the ROC to develop a specific training programme for workers training beyond Level 4, and a growing national policy interest in lifelong and adult learning could have some impact on this sectoral approach in the future.

In addition to the core remit, the individual Knowledge Centres engage in diverse research and development activities related to their specific sector. Some sector bodies, such as KC Handel, the retail, distribution and wholesale trade sectoral body, also provide accreditation for international companies that offer training placements for school-based trainees seeking to spend a part of their training programme overseas. Thus, they work with similar bodies in

others countries, such as Skillsmart in the UK, to find suitable placements in overseas. This is an innovative initiative that is seldom seen in other sectoral training systems outside the Netherlands. Importantly, these overseas training opportunities are used as a vehicle to deliver two objectives:

- ❖ The language component of a competency required at work;
- ❖ The preparation and a testing ground for the future European Union-wide qualification framework.

Social Partner Involvement

Three trade unions are active participants in the sectoral system. Trade unions in the Netherlands have three significant roles within the sectoral training system. Firstly, together with the Knowledge Centres and employers, the unions engage in the initial identification of skills and competency profiles for each sector. Secondly, the social partners make recommendations about the number of trainees that should gain their training on and off the job. Thirdly, trade unions influence additional training through the negotiation of their social contracts (*collectieve arbeidsovereenkomst* - CAO).

Work-based and School-based Training Pathways

Initial sectoral trainees have two potential pathways to follow. These are primarily younger people, although, in principle, there is no age limit on these two pathways. The first pathway is work-based (*Beroepsbegeleidende Leerweg* - BBL). A key feature of the BBL route is that BBL trainees have an employment contract with an accredited employer and are paid the minimum wage. They spend 80% of their time as trainees in the workplace, and 20%, usually amounting to one day a week, in school-based training. The school-based or more theoretical training element can consist of either a day release spent in the ROC, or a day in the workplace spent with a visiting trainer from the ROC. Only accredited employers can provide training places.

Alternatively, there is BOL (*Beroepsopleidende Leerweg* - 'school-based' training), which involves a minimum of 20% and a maximum of 60% spent in the workplace, during which time the trainee receives on-the-job training and a small training allowance (but not a wage), and up to 80% spent in the ROC. Irrespective of the route taken, the WEB Act sees these two pathways as having equal status.

The BBL and BOL approaches have the initial advantages of providing training according to the individual trainee's preferences, needs and the availability of a traineeship. However, this approach has a number of additional benefits when compared with the pre-1996 system. The capacity of the BBL/BOL framework enables the Dutch sectoral training system to respond to economic change. Thus, in times of economic downturn, when employers can be reluctant to offer traineeships, the BBL/BOL system allows for young people to continue to receive training by shifting the emphasis towards school-based training. So at times of economic downturn and higher unemployment, the college-based system increases its capacity for trainees and vice versa, meaning that the sectoral approach can function effectively regardless of the economic situation. There are, nevertheless, some debates about the relative worth of work- and school-based training, however, it is generally recognised that both routes offer different advantages and provide scope to engage different learners/trainees with different needs.

With an increasing emphasis in recent times on flexible provision in sectoral training, the Netherlands' system is also capable of meeting new demands. For example, in order to be responsive to local and sectoral needs, the ROCs have the right to adapt up to 20% of the

national curriculum to meet the needs of the local or regional employers. In the Netherlands, it is well known that the local labour markets in the North and the South of the country are very different. As a result, employers may have different training needs for their workforces. For example, in regions where light manufacturing dominates, employers' training needs are very different from regions where traditional industries still operate.

The ROCs also provide post-experience and continuing VET. For example, in order to gain specific training, employers can approach the Knowledge Centre concerned, which will consider training needs alongside the sector standards. The Knowledge Centre will discuss the needs of the company and employees, approaching a local ROC to create a specific programme, which is funded by the company.

Funding Arrangements

The Knowledge Centres are comparatively well-funded when compared to sector bodies elsewhere. The Knowledge Centres are paid according to how many competency standards and programmes they develop and maintain, how many companies are accredited, and how many students they recruit. Core government funding for all sectoral training activities in 2001 was around €2.26 billion. Because funding is tied to the volume of training activities, individual Knowledge Centres may have incomes many times that of their counterparts in the UK and other countries. For example, KC Handel received €14 million funding in 2003.

There are also additional incomes from projects and research. An example of these might include 'services' to other stakeholders in the system. For example, a Knowledge Centre may collate various data about their sector and the workforce. The information then forms guidance to ROCs about the kinds of training programmes that are most likely to lead to employment and the regions in which certain skills are in particular shortage. Some Knowledge Centres produce employer surveys periodically on the growth, decline and new developments in the sectors.

The funding is used by the Knowledge Centres to fund their core activities, which are defined in the 1996 WEB, and according to the additional sectoral development plans. As long as they fulfil their remit in terms of standards and accreditation, the Knowledge Centres are relatively autonomous and can use their funding in any way they see fit. The Knowledge Centres are subject to financial audit and are required to show that they met their aims.

Additional Funding from Sector Agreements

In addition to the usual pay and conditions bargaining, national social contracts also include an agreement on the percentage of wage bill (ranging from 0.2% to 0.5%) to be paid by employers into a sectoral training fund. This is, in effect, a training levy that is over and above government funding for the regular sectoral training activities. For example, when there was a shortage of metal workers, the sector training fund was used to put on a short and intensive training programme, provided through a contract with a local ROC, in order to train unemployed people to work in the metalworking industry. These funds are regarded as effective in meeting immediate and pressing needs, and in providing specific and necessary training for those already in employment, i.e. necessary continuing training for adults.

Evaluation, Current Issues and Lessons for the UK

A recent development within the Netherlands' sectoral system sees the Knowledge Centres working together in order to reduce the number of professional qualification programmes from around 800 down to between 200-250 programmes over the next 5-6 years. This development aims to make qualifications 'portable' across a wider range of

occupations/sectors, as well as reducing the costs of maintaining this large number of programmes. A strong link with the NQF and cross-sectoral portability of skills sets are both useful learning points from the Netherlands' sectoral approach. Nevertheless, this new development is likely to be a difficult transition and to take some time. As well as requiring the different stakeholders to work together, and to recognise the common areas of competence, there are different views about specialist knowledge and common competence. On the one hand, sectors/employers favour training and qualification structures geared to specific skills profiles and knowledge sets. On the other hand, in response to the current global labour market and policy influences, the government is placing emphasis on young people having greater employability, with a range of transferable competences that can be used in many different kinds of jobs and sectors, as opposed to a specialist knowledge attached to one kind of job or sector. Furthermore, at this time, the Knowledge Centres are funded in line with the number of programmes they develop. The need to reduce programmes could mean either an increased competition between the Knowledge Centres for responsibility in particular areas, or/and a move to integrate different Knowledge Centres, resulting in a smaller number of Knowledge Centres. An important concern among sector bodies, however, is a loss of identity, influence and training focus for industries.

Uncertainties aside, there are a number of positive features of the Netherlands' sectoral system that can be regarded as major achievements when compared with counterparts elsewhere. These include a genuinely industry-led training system, a system which has the full participation of all stakeholders, is well-funded, has learner choice in terms of pathways, a clear and coherent qualification system which is capable of progressing into higher education and best of all, a system that employers have bought into. A key learning point from this case is that separate elements of the sectoral skills system are complementary and reinforce each other. Not only is the system well funded and incentivised, but the VET system is dedicated to support sectoral activities within a coherent and integrated system. Employers take ownership of the sectoral system because of the benefits of both incentives and their ability to shape the VET system. In addition, employers can draw upon additional resources from the levies to launch industry-specific projects. Moreover, as well as aiming to meet employer demand, the sectoral system uses its qualification framework to address globalisation issues and EU obligations, such as the EU qualifications project and the Lisbon agreement.

Beyond a lead position in the VET structure, the sectoral system in the Netherlands also demonstrates the importance of substantial public funding investment into sectoral bodies. The Dutch case shows that instead of being the 'poor' relative of the VET system, as it is often the case for sectoral systems elsewhere, there is an alternative model of allowing a good proportion of the VET funding to flow via the sectoral system. The Dutch case also shows the effectiveness of multiple income sources working seamlessly with a (collective bargaining-based) levy system. This combination of funding sources is imaginative and is seldom seen in other sectoral systems.

One aspect in which the government feels the reform has not been as successful is in reducing the number of trainees that drop out or fail to complete their programme. This is currently being reviewed.

Overall, the positive features of the Netherlands sectoral system ensures the continuous cooperation and discussion between government, employers and employees about the organisation of sectoral training and skills, and the use of collective agreements to ensure working conditions and access to training are fully utilised. The result is a general agreement among the participants and a well-coordinated, effective and focused sectoral training system.

4) The New Zealand Approach to Sectoral Skills Development

Current Policy Context

New Zealand is currently experiencing a buoyant job market and a time of low unemployment at 3.8% in September 2004 (Department of Labour, 2004b). However, accompanying this are the highest skills shortages across all sectors in 30 years. 34% of firms report difficulties recruiting unskilled staff, 54% of firms report difficulties recruiting skilled staff, and 22% of firms regard this as the main reason that they cannot increase output, particularly in the construction industry (Department of Labour, 2004b). There has been a steady migration of skilled labour to Australia and other countries such as the UK, where wages are generally higher. Moreover, despite low national unemployment levels, unemployment remains an issue among the Maori and Pasifika peoples (originating from other Pacific Islands), and particularly those in more rural areas. Thus, a number of government programmes are aimed at facilitating Maori and Pasifika entry to the labour market and access to education and training, which has been a problem historically (Reid and Melrose, 2004). In addition to these issues, productivity is a particular concern since this is relatively low compared with other OECD countries (OECD, 2001). This current climate means that skills are a major focus of the current government.

In order to tackle this skills shortage, the government is working together with Business NZ and the Council of Trade Unions to promote workplace learning and skills development. A target has been set of engaging 250,000 people nationally in formal industry training by 2007 (DoL, 2002). Equally, promoting a massive programme of attracting skilled labour from overseas, facilitating access for the longer-term unemployed and equitable access for indigenous populations are all key challenges for New Zealand.

Governance and Skills Policy

The governance system (and funding as outlined below) for the New Zealand sectoral system is part of a wider system designed to increase accountability and effective use of government funds in post-compulsory education and training. This means that wider agendas and issues drive some aspects of the framework within which the sector bodies sit, and can prove both useful and difficult for these smaller players in the system.

The government system of New Zealand is relatively small, but there are a relatively large number of post-compulsory education and training providers and partners. The government took the brave move of establishing an over-arching government body, the Tertiary Education Commission (TEC), to oversee all public post-compulsory education and training. This covers polytechnics, colleges, universities, Industry Training Organisations (to be discussed below) and related bodies. Established in 2002, and starting operations in 2003, TEC has both a funding and strategic role, implementing government policy and priorities. The main role of the TEC is to facilitate implementation of the government's 2002-07 Tertiary Education Strategy (TES) and Integrated Funding Framework (IFF). The TES and IFF were intended to streamline education and training provision in New Zealand, following over 10 years of deregulation and marketisation of education (and other parts of the economy), and a growing need to focus on the skills needed to compete in the knowledge economy. The Tertiary Education Strategy (TES) has six key aims:

- ❖ "Strengthen system capability and quality;
- ❖ Contribute to the achievement of Maori development aspirations;
- ❖ Raise foundation skills so that all people can participate in our knowledge society;

- ❖ Develop the skills New Zealanders need for our knowledge society;
- ❖ Education for Pacific peoples' development and success;
- ❖ Strengthen research, knowledge creation and uptake." (DoL, 2002)

These aims set the agenda for all public, post-compulsory education and training providers and partners.

The Integrated Funding Framework (IFF) maps out the funding allocated for these different areas of skills and education provision, and seeks to remove duplication of courses offered (e.g. it is common to find more than one polytechnic offering the same course in the same small town) whilst developing more focused provision in each area. Hence, the TEC plays a key role in streamlining VET provision, and in pulling back some of the control that was lost when New Zealand fundamentally transformed itself into a market economy and deregulation in the late 1980s. While this tightening and streamlining of control and finances is primarily intended for the educational institutions, it inevitably has impact on the sector bodies. This is particularly the case in relation to funding, training places, sector development and performance.

Sectoral Approaches to Skills Development in New Zealand: Industry Training Organisations (ITOs)

The key sectoral approach to skills development in New Zealand is the network of 41 national Industry Training Organisations (ITOs)¹³. These were established under the 1992 *Industry Training Act* during a time of wider education reform in New Zealand, in line with the 1990 *Industry Skills Training Strategy*. ITOs replaced the tripartite Industry Training Boards set up in the 1960s, and were given the remit of setting skills standards and coordinating delivery of (but not delivering) industry training that meets the requirements of the National Qualifications Framework (NQF). The fact that the NQF was in the early stages of development at the time meant that ITOs were one of the key means to drive forward the development of standards and qualifications that tied to the NQF. This crucial role still exists today as the NQF has yet to cover all areas of VET provision (Philips, 2003).

The ITOs have an umbrella body called the Industry Training Federation (ITF). ITOs pay membership to be part of the ITF, which provides a voice for ITOs on general issues of concern and works with ITOs and government to develop wider industry training policy and practice. In addition, ITF carries out research to support the wider ITO framework. As the New Zealand government has embraced a regional development strategy and the particular intention to create competitive clusters, relevant ITOs have begun to operate with regional representatives that work closely with employers in each area, facilitating training and apprenticeships.

The development of the ITO system - and the issues it currently faces - owes much to the political and economic climate of the time, as well as the 6 aims noted above of the Tertiary Education Strategy. There was a strong economic and political shift towards de-regulation in the late 1980s. In terms of VET provision, the result was to have a large, dispersed and competing network of providers. For example, it became common practice for local polytechnics and regional universities to set up satellite campuses in various locations across the North and South Islands in order to compete for students.

In terms of industry training, as with many other countries, employers argued that the education system did not provide the kinds of skilled workers they needed. One of the initial

¹³ See Appendix 5 for a list of ITOs in New Zealand.

drivers to set up these new sector-based training bodies occurred in the forestry sector, which represents an important element of the New Zealand economy. In the early 1990s it was discovered that the specific environmental conditions meant that many of the commercially valuable trees could grow in New Zealand much faster than anywhere else in the world. However, the industry realised that they would not have the necessary workforce or skills to deal with this new area of the industry. Partly in response to this, the government developed a wider industry training strategy and the ITOs.

The forestry ITO continues to be one of the largest and most successful ITOs, with strong backing from the industry. It is effectively seen as the 'skills' section of the large employers association. As New Zealand moves towards the harvesting of the trees, it also became clear that added value could be enhanced by developing skills in the related furniture and design industries in order to make full use of the wood, rather than sending it to China where it is turned into cheap furniture. This area is currently under development, and the furniture industry remains low value-added at this time (e.g. flat-pack and lack design). Nevertheless, this illustrates one way in which the sectoral approach has the potential to move sectors up the value-chain through synergetic collaboration and a wider economic strategy.

The primary functions of the ITOs continue to be the development of industry training standards and the coordination of training. ITOs coordinate between employers and private and public providers who provide training (including facilitating setting up apprenticeships), and receive government funding in order to facilitate and help fund training programmes. The majority of industry training is carried out in the workplace or involves accreditation in the workplace and covers NQF Levels 1-4. Higher levels of training are covered by polytechnics, universities and private providers. A few exceptions have been made to allow a limited number of areas to be covered by ITOs at Level 5.

With industry support, ITOs are now lobbying for the ability to cover higher levels, since the skills and sector-specific training demanded are not necessarily catered for by the existing tertiary education provision. Furthermore, relations between polytechnics, universities and ITOs/industry have been difficult in the past because of intense competition under the de-regulation era. This makes collaboration sometimes difficult. For example, the relative autonomy of universities means that they are not required to work in cooperation with other partners in the post-compulsory education system. This means that ITOs have to work hard to build links with higher education. The Real Estate ITO, for example, had been able to work with one university department to develop and tailor some courses to the demands of their industry. This was based, however, on a personal connection between the CEO of the ITO and a lecturer in that particular discipline. Some of these tensions are discussed further under funding.

Additional Roles

More recently, a number of new roles have emerged for ITOs. Industry training and skills development are seen by the government as having a key role to play in social and economic development of the country, with the aim of increasing productivity (which is comparatively low in relation to other OECD countries), profitability and average earnings. ITOs are regarded as the key means through which the government can engage employers - with particular emphasis on SMEs - in skills development, and to raise the image of VET (Maharey, 2003).

In addition, driven by the current climate and labour market situation, there has been a strong emphasis on building a learning culture within each sector, enhancing foundation skills and calling on ITOs to engage in literacy and numeracy programmes. Similarly, there is a government drive for better participation by women, Maori and Pasifika in industry training. A

number of ITOs are working to attract women and ethnic minorities in to their industries as a means of growing the workforce and skills pool (e.g. construction and utilities in particular). However, social inclusion is not necessarily a popular agenda with all ITOs. Some feel that their main aim is to increase training places and respond to employer demand, rather than putting their effort in areas without immediate impact.

The fact that there are 41 ITOs means that the shape and work of ITOs can vary considerably. For example, larger ITOs (generally attached to larger industries) may engage in more strategic and project work for the industry, while the smallest ITOs with one or two employees may remain focused on developing standards and coordinating and funding training places and apprenticeships. Indeed, some ITOs may be working in more innovative ways such as engaging with specific enterprises to develop small packages of units that are particular to the enterprise, or developing promotional programmes such as the ESITO (electricity supply) Bright Sparks mentoring programme to get young people in to the industry.

Among all the sectoral systems, New Zealand stands out in terms of the number of ITOs. Unlike other countries in this study, the New Zealand government does not foresee any need to reduce the number of ITOs. Since ITOs can only be set up with proof of industry engagement, each ITO is seen as fulfilling a necessary role.

Raising Investment in Training

One of the key measures of success of the ITO system is the number of trainees. As the following table demonstrates, this has risen consistently over the past few years (data is not yet available for 2004).

Year	Number of trainees
2001	95,263
2002	106,997
2003	126,870

Source: TEC, 2002; 2003

Both government and employer investment has risen too. In 2003, the government figures showed that employers invested NZ\$41.6 million in cash in industry training, while government invested NZ\$98.4 million (TEC 2003). However, ITOs and employers estimate that if time, resources and in-kind support are taken into account, employers actually invest between 30-50% of the total costs of training.

Different approaches have been taken to raising demand for, and levels of, training and skills. In the retail industry, for example, the original Retail ITO did not succeed in engaging employers. The ITO focused on increasing and improving in-house provision of training among employers. However, employers felt that they were already providing a high level of quality training, with larger employers, in particular, having a well-established and recognised training culture. When the Retail ITO was re-established with a new strategy and new leadership, their approach was to recognise rather than chastise the work that employers were doing to develop the skills of their workforce. The result was that rather than looking to provide training places, the ITO engaged with employers to provide accreditation in the workplace for the knowledge and skills that employees had developed.

This was a successful strategy, as employers saw training as their responsibility and cost, but did not necessarily see accreditation as a necessary expenditure. The employees benefited by gaining nationally-recognised certification for their current skills and the establishment of a

form of career pathway which had not previously existed. The Retail ITO's motto, "Proud to be Qualified", has helped to develop a culture of learning and development, and a sense of career pathway which can be seen even on the walls of small convenience stores where employees display their certificates. Both employers and employees recognised the benefits of this pathway for development and retention in a sector with a high turnover and which had been seen in the past as lacking a clear career pathway. This has led to a growing interest in the benefits of a learning culture and a desire to move on to and, for employers, invest in the next level of training and accreditation. The success of this particular approach was to recognise where the sector already was, to engage employers and employees on these terms, and to use this first step as a catalyst to further investment by employers.

Industry Leadership

More recently, a new element of the ITOs work, driven by the more recent government focus on skills, includes the notion of 'leadership'. This mandatory requirement was brought in under the Industry Training Amendment Act (2003). However, what this means has not been specified too tightly. This flexibility enables each ITO to judge how they can best provide that leadership within their own sector/industry and according to their resources. Indeed, while it dates back to 2003, the exact meaning of this role for each ITO remains under debate.

The amended Act for 2003 states that the 'leadership' role involves:

" ... providing leadership within the industry on matters relating to skill and training needs by:

- (i) identifying current and future skill needs; and
 - (ii) developing strategic training plans to assist the industry to meet those needs; and
 - (iii) promoting training that will meet those needs to employers and employees".
- (Industry Training Act 2003, No 79)*

In 2003 Steve Maharey (2003), then Associate Minister of Education (Tertiary Education), called for ITOs to take a more 'strategic' approach when developing this new leadership role, building on the needs assessment and standards development work they had achieved over the previous decade, in order to forecast future needs and to plan for these. Nevertheless, Maharey (2003) admitted that new skills and capacity would be needed in order to take on these new roles. As such, while this role remains subject to negotiation within and among ITOs, it is likely to be one of the major challenges for the ITOs over the next few years.

Performance Monitoring

The TEC recently introduced a performance monitoring tool known as the Charter and Profile. The former has been obligatory since 2004, and the latter is obligatory from 2005. Reflecting the TEC's function, as outlined above, these monitoring tools are applied across the post-compulsory training and education organisations funded through the TEC, including tertiary schools, polytechnics and universities. Some groups are exempt from the Charter, but includes small enterprises that receive government funding to run training programmes. The Charter involves each post-compulsory organisation mapping out their role within and contribution to the tertiary education framework and Tertiary Education Strategy which focuses on quality, access and emerging skills needs. These cover approximately 10 years. The document maps out medium and long term plans, but importantly, how they will work in collaboration with other partners in the framework. This is seen as a means of shifting away from the heavily competitive environment that was brought about in the 1990s. Sample

Charters are provided by the government for each type of organisation in order to facilitate this process¹⁴. The Charter is then used to develop the Profile.

The Profile is an annual report that reports how the ITO (or other TEC-funded organisation) will put the Charter in to practice, and how this contributes to the TEC's strategy. This is updated each year.

A Profile sets out an organisation's:

- ❖ Operating plans, key policies and proposed activities for the next three years;
- ❖ Objectives, performance measures and targets;
- ❖ Short to medium-term strategic direction;
- ❖ Activities for which it seeks or receives TEC funding.

ITOs felt that these were primarily introduced in order to streamline funding of the larger education and training organisations, such as universities. For the smaller ITOs, a Mission Statement and Business Plan (although not dissimilar to the Charter and Profile and often used in order to construct them) could be more useful and more indicative of their aims and outcomes. The response to this monitoring system has been mixed. Some ITOs saw it as an unnecessary activity drawing on their time that took them away from achieving those outcomes.

Funding Arrangements

The primary source of funding for the ITOs is government funding, via the TEC's Industry Training Fund (ITF). As with all post-compulsory training and education bodies, this differential funding comes via the TEC and is decided according to a number of factors.

Firstly, the ITF is capped, and there is a set amount of funding set aside each year for ITOs, this is currently around 5% of the TEC's budget. ITOs receive a per capita funding, under the Equivalent Full-Time Student (EFTS) formula, for each trainee that is paid for or subsidised by the ITO. Thus, funding is based on overall available government funds for the ITOs, allocated funds for each individual ITO, the number of training places offered, contestable project funding, and strategic factors such as the role of the sector in national job growth, GDP etc. Each year the ITOs prepare a funding submission to the TEC, which is judged against the above factors. Each ITO receives a different amount of public funding, based on this submission.

The resulting differential funding between ITOs can lead to some tension. Some ITOs dispute receiving lower funding than other sectors. In most years, a number of ITOs will find a shortfall between their planned expenditure and the amount of funding made available. This means that the training places planned for may not necessarily be funded. Different ITOs dealt with this difficulty in different ways. For example, in the Tourism, Aviation and Travel industry, the take-up of training places was very high, and when the TEC decided not to fund all of the planned training places, this left them with a considerable shortfall. This ITO provides fully-funded external training places. This is particularly important in the travel sector, which historically has a low level of training provision, although in the aviation and tourism industries there is a much higher provision and embedded training culture. On the other hand, the Retail ITO do not provide full funding for training places, instead, they provide funding for accreditation of workplace training that is undertaken and funded by employers. This means that they are able to support a high level of skills development, but with much lower state

¹⁴ See <http://www.tec.govt.nz/funding/charters/charters.htm>

subsidy per head. For the Construction ITO, the sectoral body has to carefully manage alternative training delivery methods in order to make ends meet - e.g. full-time, part-time, on-the-job, off-the-job or apprenticeships. Indeed, some of the ITOs have been so successful in promoting training that some have to turn trainees away because there was no funding for the extra demand.

There has also been some differentiation in the per capita rate paid for trainees that enter the system via ITOs and those that sign up with public training providers. If industry trainees are signed up via the ITO, training costs can be subsidised by up to 75%, with employers paying the remaining 25%. However, if they enter a training programme via the public provider (such as polytechnics) this attracts up to a 100% subsidy. However, the government see this as responding to learner demand (which is uncapped), whilst capping industry demand, since any extra demand on the ITO system should be the responsibility of employers. The TEC argues that if industry feels constrained by this capped funding, they have the option of introducing a sector levy. Following a review of ITOs in 2001, provision was made for levies to be introduced into sectors where this was supported by employers. We found no evidence of this being taken up as yet. Some of this differential funding among ITOs and between ITOs and public training providers may be lessened in the future following the introduction of a Single Training Measure contract in 2005 that replaces the EFTS.

Evaluation, Current Issues and Lessons for the UK

As noted, while ITOs are designed to meet industry demands, whilst building a learning culture and systematically high levels of training, the government is also introducing a more social inclusion agenda for ITOs. This is not always popular with ITOs or with employers, particularly when targets are set for the inclusion/participation of specific groups or when areas that are seen as the responsibility of initial education become part of the remit of industry training. While the government may see raising lower level skills and literacy levels as beneficial to industry, this may not be immediately recognised by industry. Equally, adding additional targets and remits for ITOs may require additional funding in order to ensure the continued increase of training places and their ability to work in new areas.

A similar issue is raised by the new role for ITOs of leadership. Whilst this has been loosely specified at this time, if this more strategic role is to be taken, it may require significant new resources and skill sets. For example, there is some engagement in sector research, but ITOs generally do not have the current research capacity or human resources in order to provide skills forecasting or systematic LMI that can underpin strategic decisions within the sector. There are plans to develop a National Centre for Vocational Education and Training Research (similar to NCVET in Australia or the *Observatoires* in France described elsewhere) to collate and develop good information on industry VET. This may be a way of facilitating this leadership and research role.

Some of the key issues faced by the sectors at this time are the growth of generic skills and employability, with more need to work cross-sectorally. Equally, a major part of the current work of the ITO system is to change the dated image of trades and traditional industries, and to increase opportunities in those industries considered as low skills and non-career routes, whilst supporting growing and emerging industries.

The ITO system is heavily focused on training and the promotion of learning culture, skills development and the key role of employers in this. When they are successful (as reflected by continuous rise in training places), there is a question whether they should be penalised by capping their activities through funding limits.

Productivity is not a central focus of the ITO system and competitiveness is mentioned as a benefit of training rather than being a systematic element of what ITOs focus on. The work of the ITOs seems to be quite separate, for example, from the Ministry for Economic Development's Growth and Innovation Framework (GIF), which focuses on productivity, innovation and skills. This programme has a particular focus on the biotechnology, information and communications technology, and creative industries sectors as these are recognised as strategic areas of potential economic growth and future development of the New Zealand economy. However, it seems that the department itself is not closely linked with wider sectoral approaches and has very little knowledge of, or interaction with, the ITOs. This could prove a shortcoming when designing policies which may be relevant to or facilitated by these sectoral bodies. A learning point here for the UK is the need for joined-up government and partnership, especially there are a number of agencies involved in the skills system. Equally, however, this can impact negatively on public perception of sectoral approaches if other parts of the government do not work in cooperation with SSCs.

The New Zealand Trade and Enterprise are equally interested in these 3 key sectors and what they consider the 5 key economic sectors. While they are much more knowledgeable about the ITOs, they would like to see ITOs reorganised within the 5 sectors they have identified. NZTE has developed a number of engagement strategies with the biotechnology, creative, food and Beverage, ICT, specialised Manufacturing and wood Processing sectors and are developing similar strategies for the education and tourism sectors (NZ Trade and Enterprise, 2004). This raises an issue that is also evident in the Singaporean and US case studies where the sectoral approach is not intended for the economy as a whole, but for selective industries, for reasons such as rapid job growth or major development in areas of high skills. Most of the sectoral systems tend to view sectoral systems as a comprehensive device. Few governments have looked at the potential benefits and implications for a more selective sectoral approach.

SMEs signify an important part of the economy, making up more than 40% of full-time employment in New Zealand, with the majority being micro-enterprises (Department of Labour, 2004b). Reaching out to SMEs, as in all systems, is seen as a particular problem among the ITOs. Indeed, a review of ITOs (Office of the Associate Minister of Education - Tertiary Education, 2001) saw it as problematic that in some sectors there were no larger employers to provide some focus for industry training. In the seafood industry, for example, micro enterprises based in rural areas can be difficult to reach out to and engage. Indeed, some ITOs admitted that they tended to focus on larger organisations initially, since these were easier to reach out to and potentially easier to engage in the early stages of developing the sectoral system and the learning culture within the sector. Having had successes with larger organisations, and as the system matures, SMEs are increasingly becoming a key focus of many ITOs. The government has introduced a Small Business Fund to support projects to reduce barriers for SMEs to engage with industry training. Since 2002, this fund has supported a research report identifying the key barriers to SMEs participating in industry training and three research projects undertaken by the Retail ITO, Aviation, Tourism and Travel ITO, and the Apparel and Textile ITO to test ways and means of reducing some of these barriers.

5) The South African Approach to Sectoral Skills Development

Current Policy Context

The social and economic context for this sectoral approach is very different from those in our other case studies. There are, nevertheless, lessons to be drawn about the impact of the country context, the role of sectoral approaches in economic development, best practice and how sectoral approaches can evolve to meet changing socio-economic and political needs. Particularly noteworthy here is the integration of sector bodies with a training levy. The outline of the sectoral approach and the funding arrangements are covered under on topic heading in this case, since they are integral to each other.

South African government policy in the last 10 years has focused on developing a democratic, egalitarian and economically stable nation following the end of Apartheid. This legacy posed major challenges for national development and entailed developing a totally new policy framework and system for training and education. Issues of equality and access are of prime concern, with 4.8 million people unemployed, high youth unemployment and ambitious government targets to ensure equity for black workers, women and those with disabilities (Department of Labour, 2003). In addition, as well as a large informal economy, the country faces a potential crisis due to HIV/AIDS, which is having a significant impact on the current and future working population in all sectors (Vass, 2002). This social and political context means that equality, health and economic development go hand in hand to form the basis of national and, moreover, sectoral policy and practice.

Governance and Skills Policy

South Africa has a unitary governance system and a national sectoral approach endorsed by the Department of Labour and accredited by the South African Qualifications Authority (SAQA). Following a review of the sectoral system in 2004, there is set to be a new emphasis on provincial-level activities and working with Provincial Offices of the DoL that provide schemes for the unemployed.

Sectoral Approaches to Skills Development in South Africa: The National Training Levy and Funding Arrangements for the Sector Education and Training Authorities (SETAs)

As well as contributing to South Africa's productivity and competitiveness, education and training have been identified as fundamental to the growth of the economy and employment, and to developing social cohesion, citizenship, equity and stability for the future. The Department of Labour's (DoL) Skills Development Act (1998), with a particular focus on skills development in the workplace, established the framework for a compulsory training levy and a network of Sector Education and Training Authorities (SETAs). The levy was set up on April 1st 2000 and is collected monthly through taxation by the South Africa Revenue Service. This is currently set at 1% of the wage bill (originally 0.5%). The Act allows for SETAs to collect the levy where agreed. Given the resources needed to organise such a collection system, it would seem more efficient to work through the government's centralised tax systems, freeing up the SETAs to focus on their developmental tasks.

The levy covers all private sector employers that are liable for tax and have an annual wage bill of R250,000 (£22,000) or more per year. It does not cover the public and voluntary sectors, companies with a wage bill of below R250,000, or those not required to register for tax. The levy was set up to:

- ❖ Establish a national network of 27 SETAs (replacing former Industry Training Boards);

- ❖ Encourage employers to develop workplace skills plans and invest in skills by moving beyond compliance towards the development of an embedded culture of skills development and lifelong learning; and
- ❖ Fund national priority skills development programmes through the National Skills Fund (NSF), providing a range of training programmes and strategies to fill skills gaps and increase employment opportunities and social cohesion.

The Sector Education and Training Authorities started operating in 2000, covering all public and private sectors. They are bipartite, bringing together industry and unions, and entirely funded via the employer levy. The key roles of the SETA system are to:

- ❖ Organise and administer the levy funds and grants, 80% of which are passed on to them after the payment of 20% to the national fund;
- ❖ Develop a sector skills development plan and strategy for the sector;
- ❖ Develop, register, promote and monitor learnerships, ensuring access to quality training within the National Qualifications Framework (NQF);
- ❖ Help companies develop their workplace skills training and development plans and practices; and
- ❖ Provide information about current and future skills needs in the sector;
- ❖ Act as agents for NSF strategic projects (e.g. bursaries, funding training places etc.).

Currently, there are 25 SETAs, the funding of which depends upon the size of the sector and the levy paid, but it is on average R2.5 billion each year¹⁵. The public sector has a separate budget agreement with the Public Services SETA.

Administering the Levy and Raising Demand for Skills

Once companies have paid the 1% levy, they can work with their respective SETA to reclaim a good part of the levy through three key activities. The levy is divided up into 3 parts - (a) 20% goes to the National Skills Fund (NSF), used to fund programmes outside the remit of the SETAs and of which no more than 2% can be claimed by government to cover costs; (b) Around 10% is retained by the SETA to cover administration and discretionary funding, and (c) the remaining 70% can be claimed back through SETA grants, as long as employers meet the requirements.

To claim from the first activity, the company must appoint a Skills Development Facilitator. A current employee can take on the role, or someone contracted solely for this role, such as a consultant. Once appointed, this attracts 15% repayment of the levy paid. The facilitator's role is to develop and put into practice the company's yearly training and workplace skills plan, to prepare an annual training report, and to keep the company informed of issues relating to accreditation, available courses and learnerships.

Grants are made on approval of the Workplace Skills Plan by the SETA, and again on submission of the annual training plan, in order to fund the proposed activities. A further grant is available to fund additional skills activities proposed by the SETA (e.g. meeting priority areas). Additional discretionary grants fund specific programmes such as basic education and skills and health-related initiatives. Some SETAs have found that companies are not applying for the grants, leaving them with surpluses. For example, some of the larger companies that provide training well beyond the 1% of pay roll have not sought to reclaim the levy. This

¹⁵ See Appendix 6 for a list of SETAs in South Africa.

surplus can enable such SETAs to develop programmes targeting access, health and basic education programmes or advanced training for specific occupations where certain groups are extremely under-represented.

In order to raise demand for skills, in addition to the Workplace Skills Plan, each SETA develops specific initiatives and strategies to raise skills levels and employer demand for skills. For example, in 2003, Bank SETA worked with the banking industry on a government pilot to introduce the Investors in People standard, using discretionary grants in order to support its implementation (Department of Labour, 2003).

Learnerships

SETAs work to promote training, development and, importantly, recognition of skills within the National Qualifications Framework (NQF). The NQF was set up in 1995 and has the dual purpose of promoting democracy and equal access to education and training, whilst building national economic competitiveness and skills recognition (Matseleng Allais, 2003). An important element of the SETAs' work in this area encompasses the new Learnerships, also set up under the 1998 Skills Development Act. Each SETA is responsible for developing the learnerships in their sector, building on the Sector Skills Plan and identified skills profiles, making use of their discretionary funding to support these. By 2003 there were 159 learnerships and by 2004, there were 726 learnerships registered with the Department of Labour (DoL), covering a range of occupations and the 8 levels of the NQF, depending on the needs of the sector.

SETAs can develop learnerships in conjunction with any range of stakeholders, such as specific employers, sectors, unions, training providers or even communities. Learnerships replaced the former apprenticeship system, which was regarded as a young, white, male-dominated training programme. They provide an accessible programme, combining practice and theory, development of basic and core skills (including literacy, numeracy, IT and team skills), and equally accessible to new entrants or established employees. As such, learnerships can be developed for employees from entry level through to para-professional level. This is important given the legacy of a wide lack of access to basic education and training and the new focus on lifelong learning.

The learnership programme is open to any size of enterprise in the private and public sector. Indeed, there is provision for employers to work together to provide joint learnerships. A Learnership involves an agreement between an individual employee or job seeker, an employer and a training provider (which in some cases may also be the employer). It constitutes a work and learning contract, providing a job, experience in the workplace, and time for training courses or attendance at classes. During the course of the Learnership, learners receive an allowance and off-the-job course costs are covered by the employer. Once an employer agrees to support a learnership, an official agreement is signed, setting out the rights and responsibilities of each party and the provision that will be made for the trainee/learner. This is registered with the SETA and the Department of Labour (DoL), and an individual DoL learnership number is given to each candidate. It is a legal requirement that all learnerships lead to a qualification that is recognised within the NQF.

SETAs' discretionary funding is used to provide a number of financial incentives for employers to sign a learnership agreement, where the employer contributes to the levy. When an agreement is signed, employers can apply for a SETA grant in order to develop learnerships for current employees, a grant to support learnerships for people that were unemployed, and can offset a certain amount of the learnership against taxable income, both at the start of the programme and on completion. This provides an incentive for employers to make such an agreement with an employee, but also to ensure support and successful

completion. Providing learnerships for current employees is more popular at this time. Learnerships are generally viewed as a success. The government aimed to have 15% of workers engaged in structured learning, and 50% successfully completed by March 2005. Data from 2002/3 showed that the 15% target had been achieved and covered all sectors (Department of Labour, 2003).

Evaluation, Current Issues and Lessons for the UK

The major challenge for the South African sectoral approach, but equally its major achievement, has been the establishment of a national workforce system within such a short time. Although more work has to be done in order to reach out to employers and workers in the informal economy, the sectoral system in the formal economy has all the facilities to support skills development at the national level.

Within the emerging political context that South Africa faced in the 1990s, the new government had to adopt a pragmatic means to get workforce training underway, and to do so very quickly. The combination of a levy system with a network of national SETAs places the onus for demanding and financing skills development firmly on employers. An important learning point here is the combination of a sector council approach with a national levy. While levies have proved unpopular in many countries, they can be used in order both to ensure employer investment and to encourage a more strategic and planned approach to training. For example, tying a percentage of the levy to the creation of a Skills Development Facilitator role aims to shape employers' training activities, ensuring that training is better linked to organisational objectives and the company's training plan. Rather than a national approach, this may prove a useful policy option for some sectors in the UK. Nevertheless, the key to success will be ensuring that employers do not only pay their levy, but undertake the activities required to claim it back, e.g. training and development of training systems.

Another achievement is the creation of the new Learnership, which provides a national framework for workplace skills development at all levels. This is not always the case for apprenticeships and other entry-level training programmes, which often focus on younger learners and entry-level trainees. The learnership provides opportunities and benefits for employers and employees, since it is designed to ensure that learning is tied to the practical needs of the workplace/sector while being backed up with theoretical training, external classes, assessment and nationally-recognised qualifications. As with many apprenticeship systems, there is a concern that learnerships attract low wages. Nevertheless, this is balanced with access to recognised training and education for people of different ages and at different levels within the organisation. The UK SSCs have a significant role in the Modern Apprenticeship system. The development of apprenticeships for employees across the board, rather than for initial training, could be one area for further development in the UK and would tie into developments such as the Lisbon agreement and the continued need for promotion of adult learning and development (OECD, 2005).

Within the South African SETA system, there are equally some major challenges. One of the first challenges faced by the SETAs has been engaging employers and gaining support from the leading players in industry. As with other countries explored in this research, in order to be effective, the SETAs recognise the need to have high level of industry representation on the SETA board and a dynamic leadership. Another issue has been the historical lack of national data on the sectors, skills profiles and shortages. Since these are needed by each SETA to develop the Sector Skills Plan, considerable initial work was required to establish the basis of this research. A more current challenge is ensuring accountability as employer-funded, sectoral bodies. There have been some strong criticisms of the SETA and levy system, with perceptions that there is a lack of impact (e.g. in the informal economies) and poor distribution of levy funds. The difficulties of some are blamed on poor governance and disagreements

between unions and employers as to how their SETA should operate (Grawitsky, 2002). It may be that the impact of surpluses gives the impression that the SETAs are not distributing the levy funds. This distrust has also been fuelled by media coverage of mismanagement of funds in some SETAs. When a sectoral system is employer-funded, it is vital that employers, and citizens, are clear about how the funds are being used.

Nevertheless, the establishment of this sectoral approach remains a major achievement and many of the SETAs are doing good work and becoming established and recognised by industry and unions alike. One of the learning points here is the role of performance monitoring in establishing the accountability of the sectoral system. Changes are being proposed for the system that may provide some useful learning points. These are likely to include a reduction in the number of SETAs, with new, larger SETAs focusing on key economic groups; more rigorous financial auditing; and some potential developments in how impact is measured (e.g. measuring how many people are trained against occupational classifications).

***National VET Frameworks with Sectoral Sub-systems
(France, Singapore, USA)***

6) The French Approach to Sectoral Skills Development

Current Policy Context

One of the most important approaches to skills development in France over the last four decades has been the training levy. While not a specifically sectoral approach, the French system encompasses a number of sectoral developments and initiatives. Sectoral training in France tends to be very localised, based in specific regions and around specific sectors. This partly reflects the decentralisation of the French government and the responsibility of regions for continuing education and training policy, which was introduced in 1982, though the State continues to play a key role through the Ministry of Education and Vocational Training and through a series of labour laws (Auer, 1995: 630-1). The localised and short-term nature of many sectoral training activities means that there is little documentation of such initiatives. Thus, we will focus here on the national training levy as one of the most important and influential national policy approaches to skills development and the engagement of employers, and on two particular sectoral aspects of this practice.

The French system is a highly consensual system which aims to raise skills level, reduce the number of untrained people in the labour market and encourage employer provision of training and development (CEDEFOP, 1998; Greenhalgh, 1999). Vocational and professional training and development is divided in to two main categories in France. These are IVT or initial vocational training, which is primarily institution-based and focused on youth training, and CVT, which is intended for those in work, just starting work, re-training for redundancies and job seeking. The training levy primarily - though not exclusively - covers CVT.

Skills Development in France: the Training Levy

The key sectoral approach to skills development in France is a statutory training levy. This was established in 1971 and continues to evolve through social dialogue and consensus. The most recent amendments to the Act were on the 4th may 2004.

The main aims of the levy are to encourage employers to provide training and development for their employees, to develop a training plan for each company and to contribute funding to the initial vocational training system (e.g. apprenticeships). Described as a 'train or pay' system (CEDEFOP, 1998; Greenhalgh, 1999), employers must demonstrate that they have spent a certain percentage of the wage bill on training provision. Two fairly short documents are completed and returned to the treasury in order to demonstrate this spending. The levy originally covered private companies with more than 10 employees and was later extended to cover companies with less than 10 employees, public organisations and the self-employed. Thus, every employer, whether private, public or self-employed, must spend a certain percentage of the wage bill on training. This has recently increased following the amended legislation of 2004.

The percentage paid is as follows:

Private Companies (not including self-employed)		
		What activities are covered?
<10 employees	0.55%	The funding of the training plan; a contribution to the <i>alternance</i> contracts for youths (which come under the IVT framework and include work/school training).
10 or more employees	1.6%	The funding of a training plan, as well as funds for employees made redundant; the administration and funding of the <i>alternance</i> contracts for youths (which come under the IVT framework and include work/school training); personal training leave (<i>congé individuel de formation</i>) for employees on a fixed-term contract.

Companies that have not provided the required amount of training either pay into the mutual fund for training organised within their sector etc., or pay a tax directly to the exchequer. This will be the relevant percentage, minus any documented training activities.

The approximate break down of how this 1.6% levy is used for organisations of 10+ employees is as follows: 0.90% for the training plan, 0.50% for training contracts and the DIF, and 0.20% for CIF.

For organisations with less than 10 employees, it is as follows: 0.40% for the training plan, and 0.15% for training contracts and DIF (Centre INFFO, 2005).

Importantly, the level paid for most companies is beyond the legal requirement, at around 3%. The small and micro enterprise levy (less than 10 employees) was recently increased with agreement of employers. It is felt that this was agreed due to the fact that such enterprises are experiencing difficulties with recruitment and training investment is regarded as one means of attracting employees and a more efficient alternative to raising wages.

There are separate collection agencies for both the public sector, and for the self-employed. The public sector is not subject to the levy by law, so it is not a legal requirement as yet but subject to collective agreements in different areas of the public sector. Those classed as independent workers, such as those in the arts, agriculture, commerce or crafts, also pay a 'special compulsory levy' which helps to fund their training (CEDEFOP, 1998).

Public Companies		
		What activities are covered?
Self-employed/Independent workers	0.15%	Various training and development activities.
Public sector	3.8%	Where collectively agreed. Covers training and development activities.

Key Features

Two important aspects of the training law for the continuing development of individual employees are the 'individual training leave' (*congé individual de formation* CIF) which has been in place since 1971, and the new 'right to training' (*droit de formation* DIF) which was introduced in 2004. The new DIF has partly been established due to the low uptake of CIF which, while proving popular with unions, proved less popular with employers and employees due to the fact that it does not need to be tied to the individual's current job role and it required an extended period of leave from work.

The new training right, DIF, will operate rather differently. Every employee will collect 20 hours training right per year worked for an employer. After 6 years of employment, employees will have the right to undertake a programme of training totalling 120 hours. This scheme represents a considerable engagement of employers in skills development, since employers will cover full training costs, continued salary for the employee if training in work time and an allowance where trainees are required to train outside working hours. It is expected that the majority of training time will be outside work hours, with a maximum 80% outside work hours and 20% in work time. One aspect under discussion is how the financing will be managed - will the 20 hours training costs for each employee be put aside each year by the company? Will they be paid to a fund or provided at the time of claiming the right? Since a number of employees would benefit from this training now, rather than waiting 6 years, the law allows employers and employees to negotiate to claim their next 6 years of training right now. At the moment discussions are also underway as to whether this training right could be transferable between employers. One area that required considerable discussion was whether employees had the right to undertake this training during working hours. Having collectively agreed a 35

hour working week in a number of sectors, with very clear parameters around working and training time, some sectors were concerned this agreement would be challenged by the new right to training (Méhaut, 2003). This sensitive situation accounts for the overtime paid where training is outside working hours.

This new training right is seen as one of the key outcomes of the updated legislation. At this time it remains to be seen how it will work in practice, and whether it will be feasible for the right and, therefore, potentially the finances to be transferable when employees move jobs. The latter has been a particular concern to SMEs (Méhaut, 2003).

Collective Approaches to Skills Development: Collection Agencies and Research Observatories

The key sectoral aspect of the levy system, although this can be both sectoral and multi-sectoral or based around a specific employers' association, is the collection and administration of the levy. Following collective agreement, a sector can agree that the levy for their sector will be paid to state-registered collection agency, or Organisme Paritaire Collecteur Agrée (OPCA). Such agencies can be newly established for this purpose, or this role can be taken on by an existing organisation, such as a union or employer's association. The OPCAs are set up, administered and managed by social partners.

A Sectoral Example

For example, UNIFAF (formerly PROMOFAP) acts as the collection agency for the sanitary, social and health care sector, covering a wide range of private, not-for-profit organisations of all sizes. This organisation is a state-registered paritaire/tripartite organisation that dates back to 1951, and which has taken on this OPCA role in more recent times. 13,177 organisations, employing around 560,000 people, currently pay into the fund. Organisations that are founder members of UNIFAF must pay the agreed levy to the OPCA, whilst organisations that are not members can make a collective agreement to pay their levy to this organisation. This sector covers a wide range of organisations, levels of qualification, skills levels and professions - some of which are heavily regulated. For this reason, the activities covered by this collective levy payment will be wide-ranging and varied. The aims and role of UNIFAF are not only to collect and distribute the levy within the sector, but to:

- ❖ Support and develop the qualification of employees in the sector;
- ❖ Anticipate training needs of the sector;
- ❖ Develop collective national and regional policies on continuing professional development;
- ❖ Identify priorities and strategies for the sector and ensure the best use of the training funds;
- ❖ Measure the impact of training interventions;
- ❖ Provide information about best practice.

The key areas on which the fund is spent are: fulfilling company training plans, supporting individual training leave and supporting work placements and training for youth and adult trainees (alternance). One of the important aspects of the OPCA role is that they can pursue additional collective funding through regional, national and European funding sources. UNIFAF has a strong regional focus, with 22 teams providing policy and technical information for both employers and individual workers at a regional level. These teams provide

information and advice both for individual enterprises and for the sector as a whole (Moysan-Louazel and Podevin, 2003).

For OPCAs more generally, agreements can be made about the collective priorities on which training funds will focus. For example, as well as covering training at the enterprise level in line with the company's annual training plan, a certain percentage of the fund is mutualised and paid into the Fonds d'Assurance Formation. This element of the fund can be used to provide support for enterprises with fewer resources (e.g. micro enterprises), to provide training for job seekers, can be dedicated to priority training for certain sub-sectors or professions where there is a specific need or shortage, but also to more transferable skills training.

In this way, OPCAs are based on a collective effort to create and develop a training culture within a sector or multi-sectoral grouping. Indeed, one of the benefits for companies paying into a mutual fund - particularly micro and SMEs - is the cooperation and mutualisation of training funds, through which companies may pool resources where appropriate or share the costs of certain training programmes. As a mutual fund, companies do not necessarily get out what they put into the fund. Indeed, there is a law to prohibit such a claim being made (Bentabet *et al*, 2002). Bentabet *et al* note that larger companies may have a problem with their levy benefiting competitors. However, they add that the mutualised amount dedicated to supporting those with lesser resources tends to be small and to be set aside following the end of the year from the funds left over after company claims.

A number of sectors have made collective agreements to make a contribution that is greater than the statutory levy (CEDEFOP, 1998). Individual employees can also be asked to co-invest in training schemes. For example, the individual may contribute towards personal training leave when funds from the OPCA do not fully cover the costs of training leave and attending training.

Research Observatories

Following the changes to the CVT law in 2004, a number of research observatories are to be established to develop LMI for each professional branch (occupation/sector). These observatories will support the work of such sector- and multi-sector agencies and the wider develop of the sectors by providing information and analysis that will feed into the sector's labour and training policies and will provide LMI and other relevant information to inform the development of the sectors. Such observatories have been in place within some sectors since the mid-1990s (e.g. the pharmaceutical industry). However, these will now cover a wider range of sectors.

In order to support the development of the initial and current observatories, Céreq (the government Centre d'études et de recherché sur les qualifications) has worked with the government and the sectors since 1999 to facilitate access to national data. They have more recently developed a system that provides baseline statistical information on which the sectoral research observatories can start to build their information systems. Céreq have developed an internet-based, freely accessible public data system that provides a user-friendly interface through which to access standardised national data by sector and sub-sector (*Les Portraits Statistiques de Branche*). This database can be used, for example, to look at how many people work in a given sector, what regions they tend to be concentrated in, what size of organisations operate within the sector, what proportion of workers are women, how many work full-time, what skills levels different groups of workers have and so on.

Previously, access to, and usage of, this national data proved very problematic for sectoral groups or individual employers and employees, due to lack of sufficient research capacity and

resources in some cases, but often due to the mismatch between national statistical data and the sectoral footprint covered by an observatory. They can now access a wide range of data, drawn from different relevant national surveys, providing up to date, accessible LMI. The sectoral profiles are intended to provide a tool for government, policymakers and social partners in analysing sectoral employment, qualification and human resources. The aim is that, having this baseline data, the observatories will be able to focus on developing their additional activities, such as mapping the kinds of jobs and professions available within a given sector, undertaking thematic studies and forecasting. In addition to these publicly available tools, Céreq provides a number of payable services, such as training sessions on how to use the profiles, conducting specific research and other activities that support the development of the observatories' work.

Evaluation, Current Issues and Lessons for the UK

While levies are not always popular policy tools, it is useful to see how they can be used in different ways in order to support sectoral skills development. Unlike South Africa, where levies are used to fund a national sectoral system, the French approach is to facilitate sectoral and professional groupings. While these bodies are collection agencies for the sector's levy payment, they can provide a far broader strategic and leadership role in terms of developing skills and planning for future skills needs.

As has been seen here, a collective approach to skills development can be particularly beneficial for SMEs and for those organisations with few resources to invest in training. Despite initial resistance to the levy system, employers are increasingly engaged with the skills development debate and are opting to invest far higher levels than legally required. Indeed, SMEs have used this increased investment in the levy as a means to attract recruits in a tight labour market - rather than trying to compete on wages, they try to demonstrate their investment in training and a learning culture. This collective approach, albeit providing a relatively small funding resource, may be one means for the SSCs to better engage SMEs.

Evaluation of the French VET framework and funding demonstrates that there is still an uneven access to training, with employers far more likely to fund training for younger, highly-skilled, higher-status male workers on a secure contract (DARES, 2003). It is hoped that the individual training right (DIF) will help to tackle this problem, although the uptake of this right remains to be seen. The individual training leave facility (CIF) has proved unpopular with employers and employees, despite union backing and the hope that it would, again, ensure wider access to training. Nevertheless, the individual right to training presents an innovative approach, aiming at formalising learning as well as engaging employers and workers in continued skills development.

Importantly, the DIF effectively incorporates an agreement that employers fund a period of training, an incentive for employees to remain with the company, and an incentive for employers to invest in higher levels of skills over the long term. This signifies a considerable investment by employers in skills development. In the UK, the notion of learning/training as a right has been under-developed. Clearly, this is one area in which progress may encourage greater investment in training on the part of the employer as well as the employee.

7) The Singaporean Approach to Sectoral Skills Development

Current Policy Context

After a long period of uninterrupted growth between the 1970s and 1990s, Singapore hit a series of economic difficulties. The 1999 Asian financial crisis created a year-long recession and then the SARS out-break put the recovery back to the previous low. However, the most fundamental challenge that Singapore faces is the emergence of China. Prior to the mid-1990s, Singapore still enjoyed a very high level of inward investment by MNCs in manufacturing. The recession was reflected by a rapid decline in MNC investment and the number of jobs created by such investment. Unemployment reached a record high in 2003 - 5.4% - a post-independence record. Although unemployment has improved since, major restructuring and re-focusing are urgently needed as Singapore's traditional competitive advantage - as a low cost manufacturing base - has long gone.

The response from the Singapore government is three-pronged strategy. Firstly, the government has invested heavily in bringing in high value-added and hi-tech companies, e.g. financial services and biotechnology. However, while these industries tend to be knowledge and capital intensive, they do not create too many jobs. Moreover, the fragility of this relatively small number of industries such as electronics and chemicals was highlighted by the aftermath of the dot-com crash. The second effort is to grow its internal service economy. It is here we see some of the early sectoral bodies emerging, e.g. the Retail Academy. Thirdly, the government uses a cluster/sectoral approach to facilitate venture incubators from other countries to be established in Singapore. This approach came out of the growing realisation that if Singapore was to retain a position at the 'high end' of the skills ladder, then it had to start building its own new industries. Aspects of the sectoral approach can also be seen in the cluster development.

Governance and Skills Policy

Singapore is a small city-state with just over 4 million inhabitants. It has a Westminster-style parliament, but Singapore is also known for its strong state leadership in many aspects of its economic and social systems - also known as the 'developmental state'. Education and training have long been part of the developmental state's apparatus in order to achieve objectives laid down in the vision documents. Within this framework, the VET system is subordinate to lead economic agencies such as the Economic Development Board (EDB) and the Ministry of Trade and Industry (MTI). These lead agencies 'spearhead' the growth process, especially in relation to inward investment. The volume and types of inward investment in turn significantly influence the formation of the skills policy in Singapore. Currently, this means that education and training have to support the wider economic restructuring to build competitive clusters, as identified by the Economic Review after the Asian financial crisis.

The Previous Approach to Sector Skills Issues: Moving Employers up the Value-chain

In many important respects the Singaporean skills system is in transition. During the 1980s and 1990s, the economy was driven by multi-national corporations (MNCs), fostered in certain key industries by the activities of the Economic Development Board (EDB). The EDB specified the key industries, e.g. electronics, chemicals, and persuaded MNCs in these industries to invest in Singapore.

Once the investment came into the country, the EDB had a variety of measures in place to ensure that, as far as possible, they stayed in Singapore. In the most recent phase of growth this involved a range of grants and subsidies to MNCs to help move them up the value-chain.

Workforce development measures were then put in place to help ensure that the skills required by these industries were available. These were financed by a levy imposed on low paid labour, another measure designed to push the economy up the value-chain.

Such skills programmes were usually developed as a joint effort between the National Productivity Board, later renamed Standards, Productivity and Innovation Board (SPRING), and leading edge employers in the industries concerned. They were invariably delivered through employers and covered aspects of workforce development such as on-the-job training, training in soft skills, and a range of programmes designed to raise the skills levels of older workers. These were supplemented by measures such as the People Developer (the Singaporean version of Investors in People) and Business Excellence models, designed to help improve people development and other management practices (Ashton *et al*, 2003). This system had a clear focus, with the economy being driven by a series of industry clusters and workforce development policies targeted at ensuring the skills required for those industries were in place and that the companies had the best possible help from the government to improve their business performance.

New Policy Response to Sector Clusters to Drive Up the Demand for Skills

We can characterise the main thrust of government and EDB policy as continuing to drive up the demand for knowledge intensive, high skills employment. The response has been to continue with the emphasis on attracting MNCs in those traditional clusters, but with a primary focus on retaining their headquarters and the 'high-end' innovation and R&D activities. Thus, the EDB still see some of these companies in electronics and chemicals as central to the development of their economy and to the maintenance of that industry cluster.

However, they are now using those clusters, and the lead companies within them, in a different way. The new strategy is to link the 'high end' manufacturing and R&D activities of these MNCs with groups of small start-up companies. To this end the government have put in place policies aimed at attracting the best entrepreneurs and start-ups from anywhere in the world, creating communities of such enterprises in specific industries, referred to as 'Incubators'. These start-ups are located in national groupings, e.g. new enterprises from Germany, New Zealand, Israel, Korea and so on, which are designed to help the new entrepreneur set up in Singapore¹⁶. Government assistance is provided in the form of financial help, training and facilitating links to the MNCs. However, the EDB then leaves their further growth to market forces since they believe the government cannot control innovation.

These policies are creating new industries in Singapore, such as optics/phonics, industrial IT and nanotechnology. Some of these are centred around HOTSpots (Hubs of Technopreneurs) through which the talent is linked and ideas fostered and supported by a growing number of venture capital funds managed in Singapore (EDB, 2003). In 2000 there were 24 Incubators, a figure that more than doubled by 2003 to 55. These incubators are being fostered within a broader enterprise ecosystem, which secures intellectual property rights and resource development.

These Incubators have been created in both the manufacturing technology and service sectors. In the latter they have identified education and research as growth areas. The aim here is to make Singapore the global hub or 'Global Schoolhouse' of education and research in the region, providing the highest quality education and research in those fields with links to

¹⁶ Singapore has a history of inviting (and funding) various national research institutions to establish 'national collaborative' research projects in Singapore with a view to transfer technical know-how. These projects are 'grouped' together by nationality and assisted by dedicated EDB local support. The latest 'incubators' follow a similar practice but instead of technical transfer, the incubators seek to transfer entrepreneurial venture into Singapore.

the clusters. This aim is being achieved by bringing in overseas universities such as Stanford (USA), INSEAD (Europe) and top Chinese universities to establish campuses in Singapore. In addition, they are developing local institutions with the aim of attracting overseas students. Education is planned to expand from 2 to 5% of GDP. To ensure that local institutions deliver quality education, the EDB has partnered with SPRING to introduce the Quality Service Award for private education organisations, without which they are not allowed to recruit foreign students. In the service sector they have also identified Infocomms & Media, Headquarters and Business Services and Logistics and Supply Chain Management as clusters.

Other clusters, such as the biomedical cluster, consisting of pharmaceuticals, biotechnology, medical technology and health care sciences, do not fit neatly within the manufacturing/sector categories. However, this is another cluster which is centred around a group of MNCs plus small incubators and has seen rapid growth in recent years.

The attraction of Singapore to the new start up companies that it offers a number of business advantages, such as tax breaks, help with finding cheap premises, help from other entrepreneurs from their own national community and the proximity of MNCs and their global connections, all of which then provides a better base from which to build global businesses.

These new clusters are broadening the economic base of the country and provide the basis for further growth by creating a range of new, knowledge intensive, world class industries in Singapore. However, it may be that not all of these clusters survive and grow but initial results are promising.

Supplying the Skills

While these are specific sectors that are being developed by the EDB, the government does not have a formal set of sector skills councils to support them. The main support for the new clusters which are all aimed at producing 'high end' internationally traded goods and services, comes from the operation of the EDB which then either helps generate the training required for the new skills or provides links to existing training schemes, if these are required. As inward investment is secured in each of these new clusters the EDB works in partnership with companies to help generate a talent pool or, more specifically, to ensure that the requisite skilled workers are available. For example, in 2002 EDB worked with the consulting firm, McKinsey's, to create a pool of branding and communications professionals.

There is now a general recognition within Singapore that higher level skills are more difficult to predict and deliver through education or training. Therefore, the aim is now to try to create an environment in which ideas can grow and to be developed, rather than concentrating on attempts to identify and transmit specific skills. Outside these new clusters the EDB works with other industries, such as aerospace, to upskill the labour force. Although only a small industry with 11,000 employees, the EDB worked with the Air Transport Training College, the Civil Aviation authority, Ministry of Manpower and the NTUC to create the Aerospace Reskilling for Operations programme.

Industries focussed on the domestic market have a different form of support more akin to our sector skills councils, but with a remit restricted to skills supply issues. For example, retail has the 'Retail Academy'. This is a company started with funding from SPRING, which aims to raise the level of professionalism in the retail trade. It cannot compete too directly with the Singapore Retailers Association Institute (SRA), which sells lower level training courses to the industry. Instead, the Academy focuses on the executive and professional levels. It is using existing university (mostly Australian) courses in retailing to deliver professional development to managers in the retail industry.

Working alongside these agencies are two others. SPRING which attempts to drive up productivity across the whole range of sectors and the new Workforce Development Agency (WDA). The latter is attempting to establish a series of 20 sector skill frameworks which will deliver sector skills at three levels, those of generic skills, industry-wide skills and occupational skills. The approach is similar to the competency approaches developed in the UK and Australia. However, this framework is still in the early stages of development and, as such, has few lessons for the UK, although there may be more of a focus on international benchmarking of standards to provide the new system with greater recognition by employers.

It is worth noting that in time of economic booms, SPRING used to carry out both workforce development and productivity issues. The recent recessions in the Far East meant that workforce agencies had to deal with workforce issues, e.g. job creation, separate from productivity matters. As a result, the WDA was created to oversee workforce development. The separation of workforce development issues from the productivity issues has meant that the uniformity and coherence which was a characteristic of the skill supply system in Singapore in the past, and which ensured that it linked closely to the attempts by the EDB to raise the demand for skills, has been lost.

Evaluation, Current Issues and Lessons for the UK

The selective approach to developing certain sectors in the economy appears to be able to make rapid progress. For example, the biomedical sciences sector did not exist in Singapore until the late 1990s. With the support of A*Star (the research and sectoral coordinator) and the incubator concept, biomedical output in 2004 reached S\$12 billion. Skilled personnel (engineers and researchers) reached 9,500. In a matter of 8 years, the sector has become one of the highest value-added industries in Singapore. At a time of major economic restructuring, a question could be asked whether sectoral bodies should be designed to cover the whole of the economy or should the sectoral system be more selective aiming at certain sectors only? The case of Singapore may show that sectoral bodies can enable focused efforts on developing new sectors.

Where there may well be lessons for some of the Sector Skills Councils is in the use of Incubators to link the MNCs to small start up companies to develop new innovative, knowledge intensive industries. These are proving a success in creating new companies with the capability of competing successfully in the provision of goods and services international markets. In this way they are successful in driving up the demand for skills.

8) The USA Approach to Sectoral Skills Development

Current Policy Context

With a buoyant economy for the most part of the last 10 years, the USA has an unusual mix of workforce policy. On the one hand, the country's expanding knowledge-based economy needs a growing skilled workforce. The US Government has to ensure at least 80% of the 23 million new entrants into the economy to have at least some form of post-secondary education. On the other hand, there are significant numbers of US citizens who have not been part of the rapid growth phenomenon - e.g. the various disadvantaged groups. As a result, we observe that there are two aspects of the US workforce policy - one that deals with job growth and one that deals with social issues through sustained employment.

Governance and Skills Policy

The two-tier governance arrangement in the USA, between the Federal and State governments, and the sheer size of the country, means that the major responsibility for education and training policy is devolved to the state level. As such, there is no national qualifications framework. Skills policy tends to operate at a very localised level - not even necessarily operating state-wide. The sectoral component within the USA workforce system outlined here is a classic example of small scaled and localised sectoral projects.

Workforce Investment and Training in the USA - a Sectoral Sub-system

There was no real sectoral system until the introduction of the Workforce Investment Act (WIA) in 1998 and the more recent High Job Growth Training Initiative (HJGTI) in 2003. However, the WIA was not introduced for the purpose of establishing a sectoral approach to skills development. Sectoral training began to appear under the WIA in the form of specific partnerships in certain localities in the USA in the late 1990s, although this was an outcome of the system, as opposed to the aim of the system. Indeed, WIA partnerships can take many forms and many have no sectoral emphasis at all. The majority of the partnerships under the WIA are targeted at specific unemployed groups such that they can re-establish sustainable employment for themselves, e.g. youth, long-term unemployed, low-income and disadvantaged groups.

In 2003, the High Job Growth Training Initiative (HJGTI) was announced. HJGTI is an additional scheme to the WIA and has a specific sectoral framework. In 2004, the US Employment and Training Administration (a division of the Department of Labor) began to put the system together. In many respects, the introduction of the HJGTI is significant as it represents a marked departure from previous generations of workforce training systems in which tackling unemployment and social objectives featured prominently in those schemes¹⁷.

Although HJGTI is separate from WIA in terms of objectives and funding, HJGTI and WIA schemes are related to each other in a number of areas. Like the WIA, HJGTI is designed to be employer-led and has similarities in terms of the way the partnerships are formed and new trainees are sourced. But, unlike the WIA, HJGTI is not a general scheme but focuses on job training for 12 specific industrial sectors. These 12 sectors are expected to experience significant job growth in the next 10 years. HJGTI has little focus on tackling unemployment other than treating the unemployed as one of the potential sources for new recruits and linking its recruitment mechanism to the WIA workforce infrastructure.

¹⁷ Please see Appendix 7 for a brief history of the US workforce systems.

Thus, we will discuss the US sectoral system in two parallel dimensions. Firstly, we will discuss the now well-established WIA workforce training system. Secondly, we will describe the work of the still-emerging HJGTI. In the last section, we will identify the relevant strengths and issues concerning the US system as a whole. The reason that we start with the WIA system is two-fold. Firstly, HJGTI is not entirely stand-alone despite its very different objectives. HJGTI still requires the support of the WIA workforce system. Secondly, the sectoral examples within the WIA system closely resemble the partnerships that HJGTI seeks to establish. In due course, it is likely that the sectoral bodies in the USA will be drawn from two sources - those from the WIA and those from HJGTI.

New Directions Under WIA

In many respects, the introduction of the Workforce Investment Act in 1998 set the scene for the current US workforce training system and the emerging HJGTI. The WIA is not a completely new system, as two important features in the WIA came into force during the previous training system - namely the Job Training Partnership Act (JTPA), 1982. In particular, JTPA signalled the first genuine attempt to localise training services at the state and localities levels. This is in stark contrast with the previous systems in the 1960s and 1970s which were managed at the Federal level. More significantly, JTPA also introduced a radically new element into training provision, namely private sector involvement in the management of local funds. This was the first attempt to make training provision more demand relevant. The idea was that through localisation and the involvement of local private sectors, training provision could systematically take into account of local needs.

Localisation and private sector involvement were successfully implemented under JTPA. However, localisation also led to the multitudes of programmes for different targeted groups and some appeared to be overlapping with each other. These became a major issue and severe criticisms were levelled at the JTPA being 'confusing' for the employers and users of training schemes. Also, in some instances, they were 'wasteful' because of overlaps.

The introduction of WIA aims at creating a new national workforce training system which is 'uniform' in structure but diverse in training contribution to local needs. This was achieved through the 'OneStop' Centre system which would combine all the services into one management in every local community - i.e. irrespective of funding and training were for youth, unemployed or workers in work. This 'OneStop' Centre system has turned out to be particularly important in a country where a variety of funding sources for training exist in any particular locality. For example, the Federal Government has direct funding via the WIA. In state or localities such as a metropolitan area, there are specific funds for local issues. For young people, there is financial support from the Pell Grants and student loans (under the Higher Education Act). In addition, there are numerous charities and local schemes funded by associations and employers to support training activities. The 'OneStop' Centres have become the focal point to channel these diverse funding sources to appropriate training activities.

How Does WIA Work?

Under WIA, all states and localities are mandated to establish a Workforce Investment Board (WIB) in order to receive funding from WIA. At present, there are 650 WIBs in the USA. Through the local WIB, local management identifies the various funding sources as described above. The WIB also organise and spend such funding on training provision, as it sees fit.

Two demand-led features emerge under the WIA. Firstly, WIBs are mandated to be 'employer-led' and training is therefore linked to the specific needs of the local businesses.

Secondly, the introduction of the 'Individual Training Account' means that through a voucher system, trainees exercise their training purchase at one of the designated providers.

The employer-led requirement means that at least 51% of the WIB membership, including the chair, should come from the employer community. At least two labour representatives, nominated by the state and local labour federations, are appointed to sit on the WIB in order to ensure that workers' interests are seen to. Other than these requirements, WIBs have complete leeway to design their workforce policies to meet the needs of the local labour market. An additional new focus of WIBs is the need to work closely with local economic development agencies so that workforce development is linked to local economic development.

Under WIA, three different kinds of services are offered at the OneStop Centre: core, intensive and training services. Core services - e.g. case assessment, job search assistance and labour market information - are available to everyone without any eligibility requirements. Intensive services are available to unemployed individuals who do not find a job after using the core services. Intensive services include work experience activities, drawing up individual employment plans and counselling. If after using the first two services, the individual is still unable to find work, training services are available. This may include job readiness training, literacy training and occupational skills training.

An Example of a Sectoral Partnership

WIA partnerships are schemes that address local employment needs from a dual customers' perspective - i.e. meeting employers' and job seekers' needs. The Gulf Coast Workforce Board (GCWB) is an excellent example of a WIB that has created partnerships with a sectoral focus.

Under GCWB, a regional partnership called WorkSource was created specifically to serve 13 counties in Southeast Texas and includes Houston. WorkSource comprises of members from business, education, labour federations and local community representatives, all seeking to use education, training and labour market services to improve employment prospects of 4.5 million residents and the skill supply of 90,000 businesses. GCWB oversees the operation of WorkSource. The majority of the 63 board members of GCWB come from the private businesses. They together with boards staff directs and manages private sector contractors that provide direct services through 32 of the WorkSource OneStop Centres in the region.

In order to serve employers' needs, there is a business service model' at WorkSource which focuses on two areas of activities. The first is a dedicated employer support service with 80 full-time staff supporting employers on a one-on-one basis. Then service uses its labour market intelligence to rank' employers according to their potential impact in the region for service support priority. The ranking criteria to include job growth potential, job openings, average wages in the sector/occupation and the strategic importance of the business in the region. In order to maintain continuous improvement in employer support, there is also a feedback system, known as the Power Rangers', which is a team of WorkSource staff who visit the 32 OneStop Centres regularly in order to create cross learning among the 32 centres through feedback and internal training.

Despite a sophisticated system to support employers to get the right kinds of skills and new recruits, the majority of the WIA funding (95%) is spent on resident support - i.e. the three levels of job seeker support that we describe previously.

Through its labour market research, WorkSource discovered that the healthcare sector was likely to grow significantly between 2001 and 2010, and in particular, there would be a severe

shortage of registered nurses. WorkSource made this a priority area of service support, as larger hospitals were poaching each other's staff and small hospitals could not afford the rising wages. As such, WorkSource created a series of initiatives to enhance employment and training for qualified nursing staff. In addition to initiatives such as marketing career opportunities among school-leavers, accrediting foreign-trained nurses and improving workplace practices. However, WorkSource's labour market research also showed that the nurses shortage was very much due to the lack of training staff. Hence, the most surprising achievement turned out to be WorkSource's coordination to make all hospitals in the region to agree to donate' senior nurses to increase training capacity in nursing schools. In effect, WorkSource managed to persuade employers in the sector to increase their investment in training through putting senior staff into a common training pool. The end result was that nursing supply was increased by one third on average in the region in 2003.

In addition to healthcare, GCWB also has other sectoral schemes for engineering, electrical work, telecommunication and construction. These schemes are supported similar as the healthcare example that we just described.

WIA funding is subject to performance appraisals. There are three broad categories of measurement: (a) achievement of the 'dual customer approach'; (b) employment impact (quantity of jobs); and (c) wage impact (quality of jobs). In the case of GCWB, the following specific measures are used: employer satisfaction, number of dislocated workers served, employment entry rate, retention rate, earning change in median income and education credential achievement rate.

The High Job Growth Training Initiative

In 2003, a new workforce initiative 'High Job Growth Training Initiative' (HJGTI) was announced. With it, a \$15 billion separate fund was to be allocated to HJGTI's development. In many respects, HJGTI bears similarities to WIA partnerships, e.g. demand-led board formation, serving regional or local communities and making use of the OneStop Centres. However, HJGTI has been funded separately from partnerships under WIA because of its very different objectives. In general, HJGTI differs from WIA in the following ways:

- ❖ HJGTI focuses on high job growth and high demand industries only;
- ❖ Job training for HJGTI has a career development/high-skill emphasis;
- ❖ HJGTI training is competency-based.

There are currently twelve industries identified to be eligible for HJGTI funding:

Automotive	Geospatial
Advanced Manufacturing	Health Care
Biotechnology	Hospitality
Construction	Information Technology (IT)
Energy	Retail
Financial Services	Transportation

HJGTI is relatively new. There are three phases of their development:

Phrase One

- ❖ Identify high job growth industries;

- ❖ Identify industry leaders and form executive forums.

Phrase Two

- ❖ Identify and prioritise workforce challenges for the 12 industries;
- ❖ Conduct workforce development forums and identify solutions.

Phrase Three

- ❖ Form partnerships;
- ❖ Fund demonstration models;
- ❖ Measure results and disseminate information and models to other parts of the country.

The Business Relations Group (BRG) within the Employment and Training Administration, Department of Labor (DoL) is the main coordinating unit to facilitate progress from Phrase 1 to Phrase 3. Much of the work in Phrases 1 and 2 is completed. In 2005, many of the sectors are in either Phrase 2 or Phrase 3. Demonstration/seed partnerships are funded by the DoL. The idea is that once the demonstration model is successful, it will be used to facilitate other partnerships to be formed in other localities, if a similar need is identified. The adoption of a successful model into other parts of the country (beyond the demonstration stage) is deemed to be the responsibility of the private sector through the formation of partnerships.

Unlike the WIA partnerships which may have social policy elements, HJGTI has been specifically designed to grow employment opportunities through expanding industrial sectors. Common to all HJGTI partnerships are the needs to develop seven sectoral related dimensions. These dimensions in turn form the challenges and solutions proposal that the partnerships have to submit to the BRG in order to gain approval and funding. These seven dimensions include the following:

1. 'Pipeline' - the needs to recruit young workers who are entering the world of work and building their career-related skills.
2. New labour pools - e.g. immigrants, older workers, war veterans, persons with disability. The idea is to minimise bottlenecks for the growing sectors.
3. 'Transitioning' - targeting workers from declining sectors and in particular sectors with likely portable skills. The idea is similar to the first two - finding the extra workers to avoid bottlenecks in the skill supply.
4. Competency models - competency models for the 12 sectors in the US are not referring to national qualification frameworks that we have seen developed elsewhere. Indeed, after the slow progress and abandonment of the National Skill Standards Board in 2003, competency models in the US are firmly sectoral oriented and individual career-ladder focused. In this sense, there is little attention to cross compatibility and a national structure for qualifications. Specific 'skill sets' are defined by industry forums which are then supported the education institutions or schemes (see the Automotive example below).
5. Post-secondary alternative training - forming partnerships with local colleges and national training schemes that could provide the training necessary. Common to all HJGTI partnerships are the use local colleges, apprenticeship programmes and national training centres for 'Job Corps'.

6. Retention - these are initiatives for the incumbent workers. Much of the attention is channelled through the need to design career ladders within the sector.
7. Small business engagement - much of the growth is predicted to be through local small businesses. Hence, HJGTI partnership and sectoral solution has to address this particular dimension of training.

An Example of a High Job Growth Training Initiative - Automotive

The automotive industry is one of the largest industries in the USA. It creates 6.6 million direct and in-direct jobs and produces 5.6% of private sector wages (\$243 billion in 2002). Direct jobs in the automotive industry are projected to grow between 11% to 14% between 2002 and 2012.

In 2002, an Executive Forum for the automotive industry was formed (comprising 19 industry CEOs) to discuss critical workforce issues facing the industry. Critical issues that the industry wanted to tackle included image and awareness of the industry, better diversity of the workforce, certification of instructors, standardising training and qualifications to be compatible with the requirements of the National Automotive Technician Education Foundation (NATEF).

In 2003, an Automotive Industry Workforce Solution Forum (comprising 28 senior human resource vice presidents) was formed and met for the first time to tackle the industry issues identified and possible next steps in the form of partnerships. This process is not one-off. The BRG coordinates the progress for Forum discussion throughout. In 2004, the Solution Forum became larger (80 members) involving other stakeholders, e.g. education institutions, economic development agencies, military and public workforce system representatives. At this meeting, specific models and partnerships were explored and proposed. As an example of these partnerships, the following is a summary of the "Upgrading the Nation's Automotive Programs to Industry Standards" partnership:

<i>Subject</i>	<i>Details</i>
HJGTI Grant	\$900,000
Grantee	Gateway Technical College.
Key Partners	Snap-on, Inc., Wisconsin Automobile and Truck Dealers Association, Automotive Youth Educational Systems (another HJGTI partnership), Melior Institute, National Coalition of Advanced Technology Centers, the public workforce system, including Job Corps, One-Stop Centres and other stakeholders.
Leveraged Amount	\$2,110,000 (incl. vehicles and parts required in training) from partners.
Location of Activities	Nationwide.
Main Challenge	Building capacity and standardizing industry training and education to that established by NATEF.
Addressing the Challenge	Gateway Technical College and its partners will develop a blended training approach with online, classroom, and train-the-trainer methodology that are accessible to any automotive and collision repair program interested in NATEF certification. A system will also train and update secondary and postsecondary instructors serving as evaluation team leaders throughout the nation.
Outcomes	a) An increase in training and education capacity for the automotive services sector. b) Certification for more industry-standard training programs offered by NATEF. c) Technical and program assistance to Job Corps automotive

	technician programs. d) Dissemination of information and guidance on industry standards to over 500 instructors by way of their participation as evaluators.
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Source: http://www.doleta.gov/BRG/Indprof/automotive_investment.cfm

The above example only tackles one issue identified by the Industry Forum. There are other partnerships which deal with other issues, ranging from sales, servicing to recruitment from the inner city and Hispanic communities. Some schemes are nationwide and others are regionally based.

Training under these partnerships are specific, as defined by the HJGTI grant proposal. The relevant 'skill sets' are also specified by the Forum. But unlike competency standards in other national sectoral systems, the skill sets in HJGTI are more traditional, ranging from apprenticeships, diplomas to associate degrees. The US system has not gone down the competency-based qualification route, as witnessed else where.

Evaluation, Current Issues and Implications for the UK

A demand-led workforce emphasis is a corner stone for the US workforce system, even though roughly a third of the public workforce spending under WIA is directed towards social welfare assistance through employment. However, the sectoral partnerships in WIA have been growing and have given inspiration to similar arrangements and the birth of HJGTI. HJGTI can be described as an 'improved' version of the WIA sectoral partnership.

With the number of workers trained under WIA declining in recent years - 313,000 in 1998 to 141,000 in 2002 - HJGTI is likely to continue to grow. The decline in WIA training places is thought to be a consequence of the WIA rules - i.e. the 'Work First' requirement in 2003 and sequential requirement of the three services offered by the One-Stop Centres. Since its introduction in 2003, there are 83 HJGTI grantees in 40 states at the beginning of 2005. Total spent on these partnerships were \$141 million.

There are a number of useful features for the UK to learn from the US sectoral system under WIA and HJGTI:

- ❖ Employer-led from the beginning;
- ❖ Partnerships formed on the basis of specific industry issues, i.e. project-based;
- ❖ Commit employers to investing into training, as reflected by resources (leveraged finance and personnel) committed to sectoral development from the start;
- ❖ Administered by the private sector with a focus on employment outcomes (quantities and qualities);
- ❖ Performance-based monitoring for public fund (as shown by the WIA partnership) and the need to demonstrate achievement of the 'dual customer approach';
- ❖ Skill sets build on existing qualifications (though negotiation for new ones does take place). It is therefore quicker and more cost-effective to construct and maintain;
- ❖ Training is delivered through existing workforce/training systems. Again, more cost effective than otherwise;

- ❖ Localised, and it is more flexible to tackle local issues and to engage local small businesses.
- ❖ Capable of defining new sectors and therefore providing a means to assessing job growth and skill requirements. The best example here is the Geospatial Technology Sector. The geospatial sector is defined as an information sector that focuses specifically on occupations that acquire, manage, interpret, integrate, display and analyse the data deriving from the geographic, temporal and spatial context. By being able to identify a 'new economy' sector, workforce development for the emerging sector can be free from old occupational classification and workforce support can be clearly identified.

The biggest challenge to the US sectoral system comes from criticisms that have been levelled against the WIA system. Although the cost-effectiveness of WIA funding is generally regarded as 'positive' on worker training, the numbers of trainees have been declining. This decline was found to be mainly the result of a lack of knowledge of the role of the WIBs and their OneStop Centres.

Many of the existing 83 HJGTI partnerships have only been in operation for a year or less. Therefore, no substantial evaluation has been made. However, not only that HJGTI partnerships are expected to grow further in the coming years, they also offer a very different (or almost unique) approach to sectoral training compared with other national approaches. While many of the well-known sectoral systems are national, uniform and training focused, the US system is localised, diverse and job growth oriented.

***Non-sectoral VET that Provide Useful Learning for Sectoral Systems
(Germany)***

9) Vocational Education and Training in Germany and Lessons for Sectoral Development

Current Policy Context

The reunification between East and West Germany in 1990 has put a great deal of pressure on their combined economy. This happened during a time when the West German economy was already facing economic stagnation. The end result was a massive rise in unemployment. In addition, like other Western industrialised countries, Germany also had to deal with the 'new economy' and emerging new occupations. These events meant that the German dual training system has been under great stress. As a result, Germany's training system is at a crossroads at which the following three areas are in urgent needs of reforms:

- 1) Finding a more flexible approach to creating new occupational standards;
- 2) Finding new ways to produce enough training places for apprenticeships;
- 3) Finding new ways to cater for the training needs of a large number of youths who are unable to meet the standards of the traditional dual system.

The German 'dual system' is unique in many respects. It is hard to put it in any particular category. However, for the current international case studies, the German case does provide useful lessons for sectoral systems to consider. In the following sections, we will examine some of these issues.

Governance and Skills Policy

Germany is the largest economy in the EU. It has a two-tier governance arrangement between the *Bund* - the Federal government, and the *Länder* - the states. While education policy is broadly the remit of the individual states, the VET system outlined here is driven at the federal level and organised in partnership between the federal and state governments.

The General Context of VET in Germany

One of the strengths of the German dual system is that it is highly supply focused with a great deal of emphasis on 'front-end' training. But at the same time, training content in the dual system is also demand-led. This is the case as the German system of skill formation is highly regulated which systematically includes employers in the decision making process. As is described below, employers are part of the institutionalised setting that conceives and develops VET frameworks and thus have a very regulated route of influencing developments. Arguably, the degree of employer involvement in the dual system is greater than most of the sectoral systems that we have examined. To some extent, this high level of employer involvement may limit (additional) pro-active public policy intervention in sectoral skill needs because some employers may already consider their workplaces to be an outlet for such skills.

In the process of devising new VET based occupations, a consensus principle applies: the government does not decree apprenticeship regulations (*Ausbildungsordnungen*) without agreement from the social partners. Moreover, as part of the dual system, the federal government determines the curriculum for the work-based learning part but theoretical and class-room based sections of the apprenticeship are under the jurisdiction of the *Länder*. The curriculum of vocational schools and colleges is thus determined by a conference of all regional ministers for education called the KMK (*Kultesministerkonferenz*). To establish the work-based part of vocational training, a preliminary decision process on the future apprenticeship is made by the social partners, federal and regional government

representatives as well as sectoral specialists. It is followed by an eight month negotiation process that determines the specific curriculum, including (BIBB, 2003):

- ❖ Determining the occupational profile and job description as well as the skills and knowledge to be imparted;
- ❖ Determining the duration and scheduling structure;
- ❖ Determining the areas, content and forms of examination;
- ❖ Formulating an apprenticeship profile.

Within such a corporatist structure, it is interesting to note that both employer-led and sectoral elements are present, but are systematically subsumed into the social partners, federal and regional government arrangement. Appendix 9 gives an overview of the German VET system and indicates how tightly integrated all participants are into the process of determining the need for and delivery of qualifications and training for the various occupations in the different industrial sectors.

The diagram in Appendix 9 shows that the corporatist arrangement means that as all stakeholders will be involved in the establishment and development of training in each specific industry and its occupational profiles. Arguably, there is little chance for sectoral bodies and sector specific skills policies to emerge. However, as will be outlined in the section 'Employers' Expectations' below, there have been recent changes to a somewhat more centralised decision making process that could make employers more likely to lobby for their own sectoral requirements.

The Problem of Lack of Training Places

The biggest problem in the German VET system is the lack of apprenticeship places. In 2003, there was a deficit of 15,000+ of such places (Dietrich *et al*, 2004). Public services are especially bad at providing apprenticeships. The main reasons for employers not providing training places are assumed to be:

- ❖ Structural change: in particular a decrease in the traditional crafts and an increase in the service sector such as the hotel and catering industry;
- ❖ The current economic situation.

According to Culpepper (1999) a reduction in apprenticeship places can lead to a vicious circle as employers who witness a decline in the numbers of firms who train will become more concerned with the issue of poaching and thus may be less inclined to train apprentices themselves.

From the employers' point of view, the lack of apprenticeship places is part and parcel of the overall difficult economic situation in Germany. Though they support the 2003 Offensive' to create more apprenticeship places (*Ausbildungsplatzoffensive*), they also make clear that they will only be able to offer enough apprenticeships if employers, state and trade unions share the responsibility to significantly improve framework conditions. A minority statement by the group of representatives of employers' (*Minderheitsvotum der Gruppe der Beauftragten der Arbeitgeber*) that forms part of the annual VET Report, suggests that the success of employers is dependent on a change of direction in the economic, financial, social and tariff (wage bargaining) politics. This would enable growth and therefore more employment and vocational education and training (BMBF, 2003). In particular, they call for a 10-point improvement of framework conditions:

- 1) The economy needs new and flexible vocational occupations on a modular basis, especially in the service sector.
- 2) Flexible vocational occupations with less complex requirements are necessary to give lower performing [low achievement in education] youths a chance in the dual system.
- 3) Qualification building blocks' based on the vocational training regulations should be made use of. (This refers to making training more flexible and moving towards a modular, e.g. similar to the British system.)
- 4) Extended participation in education should not automatically lead to a reduction in vocational training periods as this has a negative effect on training.
- 5) The PISA study showed that up to 25% of school leavers are insufficiently educated. It is necessary to improve the quality of the education system to remove this barrier to VET.
- 6) Payments to apprentices are the largest individual cost and are a barrier, especially to training over and beyond a firm's own requirements. Tariff agreements should contain articles to allow a reduction in such payments as well as stipulate a break of several years in the otherwise consistent rise in these pay rates.
- 7) More companies need to be won over for VET. Their accreditation should not be allowed to fail on the grounds of bureaucratic details. In the long term, legal regulations on the personal and professional aptitude as well as the suitability of training sites should be simplified considerably.
- 8) The time management of vocational colleges needs to be improved to increase the presence of apprentices in firms. They should be able to cater for block release as well as concentrating the second vocational college day into the first year of the apprenticeship.
- 9) Vocational colleges require investments to be developed into efficient, modern partners of firms in delivering vocational training.
- 10) Considering the present situation regarding apprenticeship places, there should be no amendments to the vocational training law at present as this would result in making firms feel even more insecure.

The above issues imply that the German system is looking at an improved version of the dual system, but not a different VET system. Sectoral initiatives are therefore likely to be located in the occupational discussion and employers' influence on training relevant to their sectors. Several of the above points are elaborated in the discussion below.

The Cost of Apprenticeship

The success of the German apprenticeship system is in part based on employers' willingness to voluntarily sponsor the general training of their employees (Bougheas and Georgellis, 2004). Albeit, this strong employer commitment is all at the front end. As a result of the difficult economic climate, firms are considering more carefully whether they can afford to take on apprentices, especially because income made from training apprentices is reducing while the costs remain the same (Dietrich *et al*, 2004). In addition, there are further industry-specific problems:

- ❖ A third of firms estimates the costs of apprenticeship to be higher than they actually are (Dietrich, Bellmann, 1999);
- ❖ Personnel costs have increased, in particular due to higher social insurance contributions (Dietrich *et al*, 2004);
- ❖ Based on the educational training regulations (*Ausbildungsvorschrift*) the curricula has increasingly contained occupation specific but not firm specific training. This leads to further costs for the firm training apprentices (Dietrich *et al*, 2004);
- ❖ Firms do not take on apprentices because they cannot guarantee that they will take them on once they have finished their training (Dietrich *et al*, 2004).

On average the cost of an apprenticeship is €16,450 per apprentice per year of which the employer pays €8,700 (BMBF, 2003). In addition to the cost issues, the dual system tends to train heavily at the front end and continuous training such as the development of *meister* training is entirely left to the employee's own time and expense. A recent report shows that Germany only spends 0.9% of payroll on continuous training, being one of the lowest in the EU (Smith and Billet, 2004: 25). Consequently, there have been proposals to introduce either a general levy or a sectoral system to arrest the decline in training places. In fact, construction has had a sectoral system and a sectoral levy within the dual structure for a long time. So it is possible to have a sectoral system within the current dual system. However, larger employers have been resisting the idea of levies, as they fear that larger organisations will be subsidising smaller ones disproportionately, especially during economic downturns.

The lesson here is that employers' commitment to training has been a strength of the German system. However, in times of economic difficulties, even German employers see training as a 'cost'. As a result, the sectoral approach is unlikely to gain further ground for three reasons: (1) the inertia of the dual system; (2) the sectoral approach could be seen as a back-door to introducing a sectoral levy; (3) the sectoral approach is not expected to add that much more than the dual system is already offering to employers.

Competencies in the Dual System

In the past, the importance of the German VET system has in part been based on the fact that key competencies can often only be acquired within the firm and with practical experience (Wagner, 2004). It can thus be ensured that employers' skill requirements are met. A 1997 survey found that three-quarters of the firms surveyed were satisfied with the efficiency of the dual system as a way to cover their needs for skilled workers (Culpepper, 1999). Yet there are now indications that the content of VET curricula no longer correspond to the profile of employers' requirements (Dietrich *et al*, 2004) (see for example the 10 point list of employer recommendations above).

Continual amendments to established vocational training occupations as well as the introduction of new occupations may address the requirements of employers. There are a range of projects to monitor for changes in such requirements and enable an early recognition for new occupations. For example, in August 2002, 24 new vocational training regulations came into effect, eight of which applied to new occupations. In 2003, 18 amendments/further developments of occupations were being undertaken and a further 32 occupations were being considered (BMBF, 2003). In the past, the renewal processes of the vocational training regulations for each occupation were very slow and could take up to ten years. In the main, this was due to contradictory aims of employers wanting more firm specific qualifications and trade union demands for more general qualifications. Since 2004, there is no longer a need for compromise on all issues in that the Federal Ministry for Employment and Economy

(BMWA) can now overrule individual stakeholders if it is difficult to come to an agreement. This route has, for example, led to the introduction of 2-year apprenticeships which had previously been blocked by the trade unions for being too short and lacking in quality. Similarly, more flexible occupations with less technical-centred requirements have been introduced, especially to cater for low performing youths. A new focus on key qualifications has allowed individual firms more leeway in how they train without losing the overall federal requirements contained in the regulations. Amendments to the vocational training regulations can now take a maximum of two years.

Evaluation, current issues and Lessons for the UK

The VET situation in Germany is currently dominated by a lack of apprenticeship places as well as the concern with the German economy at large. In addition to the changes we discuss above, there are other efforts to improve the dual system, namely offering apprenticeships outside of firms, a general levy for apprenticeships and a complete overhaul of the dual system.

Since 1999, there has been a considerable increase in the amount of apprenticeship places that are offered outside of companies (*außerbetriebliche Ausbildungsplätze*). Initially, they were mainly used in connection with the 'Jump' programme against youth unemployment as well as to support youths from minority or socially deprived backgrounds. A premium of 4000 DM was set to encourage employers to take on these apprentices as soon as possible. In effect, they have now become a means to address the lack of apprenticeship places in firms. An average of 10% of all apprenticeship contracts are now agreed without the involvement of a firm. The proportion in the East of Germany is higher than in the West, and higher in some sectors than others (e.g. 22% of clerical occupations, 1.8% of hairdressers and carpenters (Dietrich, 2003). Apprenticeships outside of firms would reduce the danger of poaching as enough qualified young people come onto the labour market but at the same time bears dangers in that these youngsters will not have had in-firm experiences and will hold general skills rather than firm specific skills.

The introduction of a levy for apprenticeships was rejected by the Bundesrat (the second chamber made up of the head of state of the federal regions) on 11 June 2004. There had been considerable opposition to the legislation from all members of all parties and the rejection was supported by a large majority in the Bundesrat - as well as by the employers! One of the main criticisms was the possibility for employers to 'buy themselves free' from the duty to take on apprentices which would probably have led to a reduction in apprenticeship openings. Christian Wulf (Christian Democrat head of Lower Saxony) cited that the tendency towards regulating vocational education was wrong, as was also visible from other European neighbours. Both France and Denmark have an apprenticeship levy but have higher youth unemployment and worse figures for apprenticeship places than Germany. However, there are indications that the proposed legislation has sparked enough debate to pave the way for a 'voluntary levy'.

The irony is that a 'voluntary levy' is not entirely new in Germany. Lower Saxony has successfully utilised a voluntary levy for years. However, it remains to be seen whether such a voluntary scheme will address all the problems in the dual system, e.g. the inability of school leavers to fulfil the requirements to become apprentices. It is being considered to institute a 'competence-check' for apprentices who cannot be placed (Hausding, 2004). Furthermore, it has been questioned whether a levy would be efficient because (Dietrich *et al*, 2004):

- ❖ There is no guarantee that a levy would increase apprenticeship places across the labour market;

- ❖ As there would be an overall increase in taxes an overall negative effect on production and employment might be more likely;
- ❖ Firms that train over an above their requirements but do not fulfil the apprenticeship quota are punished whereas firms who train more than the apprenticeship quota but below their own requirements are rewarded.

The German dual system has shown that employers' commitment to training can be achieved through regulation and consensus arrangements. However, this is an expensive system to run and can be severely tested by economic conditions. The German corporatist model is still functioning, but only just. The immense stress that the system is experiencing means that it is a matter of time before the system has to go through a major overhaul. Current efforts to make the system more flexible and capable of providing more training places have only achieved some degree of success. But by so doing, the dual system is increasingly 'pluralistic', containing many elements that few would anticipate in the early 1990s.

The biggest learning point for the UK is the appropriate balance between the need for strong institutional ownership of the competency framework and the need for flexibility to cope with changing economic and individual needs.

Section Five: Policy Matrix

Policy Matrix

	FORMAL SECTORAL SYSTEMS					WORKFORCE SYSTEMS WITH SECTORAL FEATURES			
	Australia	Canada	The Netherlands	New Zealand	South Africa	UK	USA	Singapore	France
GENERAL ARRANGEMENTS FOR SECTORAL APPROACHES									
Governance arrangement	Federal	Federal	One-tier	One-tier	One-tier	One-tier	Federal	One-tier	One-tier
Financing for sector bodies G - Grants SI - Service Incomes L - Levies	G, SI	G, SI, L (Québec), Contribution Agreements (Some) ¹⁸	G, SI, L (small)	G, SI, L (some sectors)	L, G (small)	G, SI, L (some sectors)	G, SI	G	G, SI, L
Sectoral umbrella body	No	The Alliance of Sector Councils	Colo	Industry Training Federation	Dept of Labor (SETA Coordination Unit)	Sector Skills Development Agency	No - but the Business Relations Group (DoL) has a role	No	No - OPCA bargaining covers some aspects of an umbrella body
Sectoral umbrella body's functions	N.A.	Communication, representation, discussion forum.	Coordination, forum, communication, representation and liaison with VET umbrella body (BVE Raad)	Research, policy, promoting good practices, advocacy and lobbying	Technical support (e.g. drafting sector training plans); monitoring and levy distribution	Coordination, policy, promoting good practices, research and forum	N.A.	N.A.	N.A.
Performance measurement tool	3-year business plan with quarterly and annual reports	The Logic Model	Business plan and annual report	Charter & Profile, Annual Report, and separate reporting against key performance measures	Quarterly and yearly reports	Sector Skills Agreements and reports	Grantee Business Plans and reports	Not identified	Not identified
Relative emphasis on levels of skills (low, intermediate, high)	Intermediate to high skills	All levels	Low to high skills	All levels	Low-intermediate skills	Low-intermediate skills	All levels	Intermediate to high skills	Varies by sector

¹⁸ These are based upon agreements between the government and industry both contributing cash and other incomes to ensure the success of the project.

	<i>Australia</i>	<i>Canada</i>	<i>The Netherlands</i>	<i>New Zealand</i>	<i>South Africa</i>	<i>UK</i>	<i>USA</i>	<i>Singapore</i>	<i>France</i>
COVERAGE AND PARTNERS IN SECTORAL APPROACHES									
Extent of coverage (sectors)	10	30	19	41	24 (mergers on-going)	25	83 (HJGTI partnerships)	1	Not identified
Union involvement	Voluntary	Compulsory (but % varies, depending on extent of sector unionisation)	Compulsory (Equal representation)	Compulsory worker representation (union or other equivalents)	Compulsory	Voluntary	Voluntary	Not identified	Compulsory
Regulatory bodies involvement	Compulsory (at the State level)	Voluntary	Compulsory	Voluntary	Compulsory	Voluntary	Voluntary	Not identified	Voluntary
Tertiary education involvement	Voluntary	Voluntary	Compulsory	Voluntary ¹⁹	Voluntary	Voluntary	Voluntary	Voluntary	Voluntary
INVOLVEMENT WITH TRAINING AND DEVELOPMENT									
Delivery of training by sector bodies	No	No	No	No	Some do - commissioned by SETAs through discretionary funds	Some do	No	Yes	No
Supporting training for entrants (except delivery)	New Apprenticeships; Traineeships; Informal Training	Yes, including apprenticeships	School- or work-based (NQF levels 1 to 4)	Entrance levels 1 and 2, plus Modern Apprenticeships	Learnerships - unemployed and those in work	Yes, including Modern Apprenticeships	Yes, some involving apprenticeships	Yes	Yes, work placements, apprenticeship, IVT
Supporting training for existing workforce (except delivery)	New entry and existing workers	Some do	Mostly entry level. Some specific employer or shortage area programmes	Mostly entry level. Some specific programmes (e.g. labour shortage)	Learnerships all at levels and short-term training (not leading to qualifications)	Yes	Some do	Yes	CVT
Create/Maintain standards	Compulsory	Many do	Compulsory	Compulsory	No	Some did but not a current function	No	No	Yes - where OPCA operates

¹⁹ Increasingly becoming 'compulsory' as the Tertiary Education Strategy (and funding) requires tertiary education and industry to develop training plans at the industry level.

	<i>Australia</i>	<i>Canada</i>	<i>The Netherlands</i>	<i>New Zealand</i>	<i>South Africa</i>	<i>UK</i>	<i>USA</i>	<i>Singapore</i>	<i>France</i>
Accredit training places/ employers	No	No	Compulsory	No, but some ITOs carry out assessment as part of their training role	No	No	No	No	Some OPCA agreements only use accredited employers
Use National Qualification Framework (NQF) for all sectoral training	Used by TAFE and RTOs to design curriculum	No	Yes - Used by Regional Training Colleges (ROCs) to design curriculum	ITO Training must be part of NQF - except in Polytechnics and HE (not funded by ITOs)	Training should be recognised by SANQF; Learnerships tied to SANQF	Some do	No	No	No
Use FE providers to deliver training	TAFE system	Work with colleges in provinces	Yes - use ROCs	Colleges and polytechnics	Some do	Some do	Some do	Not identified	Some do - OPCA dictates, if used
Use private sector training providers to deliver training	Registered Training Organisations (RTOs)	Yes	No	Yes	Yes	Yes	Yes	Yes	Some do - OPCA dictates, if used
PROMOTION OF THE SECTOR									
Sector promotion role for sector bodies	Key role	Key role	Some role	Key role	Run specific campaigns (profile raising)	Some	Key role and via One-stop Centres	Some role	Small role
Information dissemination about the sector	Some role	Key role	Some role	Small role - but increasingly seen as a value add role to industry	Key role (with support from SETA Coordination Unit)	Some	Key role - but only within partnership locality	Some role	Small role
INCENTIVISING AND SUPPORT FOR SKILLS DEVELOPMENT									
Fiscal incentives for training and subsidised training places	No general fiscal incentive; some subsidies at the State level ²⁰	Levy in Québec None in other Canadian provinces	15% tax refund for employers for entry level training. Subsidised fees for individuals on school-based programmes	No general fiscal incentives, but up to 75% of training costs to employers via ITO or 100% via polytechnics	Levy, plus some bursaries, (e.g. training for unemployed)	No general fiscal incentives but subsidised training places under specific schemes. Some use levies	No	Subsidised training places under the SDF levy	Levy. Some sectors may organise specific subsidised training

²⁰ Via TAFE placements or specific job/training schemes with employers, e.g. certain shortage trades. However, the list of eligible trades and subsidies vary from state to state.

	<i>Australia</i>	<i>Canada</i>	<i>The Netherlands</i>	<i>New Zealand</i>	<i>South Africa</i>	<i>UK</i>	<i>USA</i>	<i>Singapore</i>	<i>France</i>
Business support/products to enhance performance	Varies according to specific state provision	Varies according to state provision	Investors in People (NL)	Investors in People (NZ)	Investors in People piloted through the Bank SETA	Investors in People; Business Links; RDAs	WIA workforce systems	People Developers	Not identified
Emerging practices	24 Regional technical colleges driven by the Fed govt, focusing on trades skills	Affinity Groups, building more connections with the provinces and between councils, and tying in govt's Workplace Skills Strategy (new)	Reduction of sector bodies and units of standards; skills passport; individual learning accounts and greater cooperation between sector bodies	Employer of Choice programme; Talent Visa for high skill immigration; Union Learning reps; skill profile job matching; training programmes for the long-term unemployed	The Learnership is still in development; new focus on informal sector and provinces	National Employer Training Programme	Completely employer funded sectoral bodies	Incubators, emerging NQF (A form of NVQ)	Individual Training Right
RESEARCH ROLE OF SECTORAL BODIES									
Research capability	Baseline data but increasingly strategic via the National Skills Strategy	Baseline data and to identify footprint; some strategic in certain sectors	Work with employers, schools, governmental organisations on specific projects (differed by sector)	Baseline data; small but increasing strategic role under 'Leadership' role as it becomes more pervasive	Baseline data and to identify sector footprint, emerging skill needs and baseline data	Baseline data and projects	Local baseline data for initial set up - not a normal function	Baseline data	Work with national research centres and individually

Appendices

Appendix 1: Countries Covered by the Research and Areas to Follow Up

<i>Country</i>	<i>Included in the main body of research</i>	<i>Included in report</i>	<i>Notes for issues to follow up</i>
Australia	YES	YES	End of ANTA, future progress of ISCs at national and state/territory levels, introduction of 24 regional colleges
Canada	YES	YES	Possible reduction of numbers and changes to funding for Sector Councils
Québec	YES	YES	Development of the levy - SMEs now not liable for the levy, what will be the impact in long term?
Denmark	Not beyond initial searches, contacts and reading	NO	Some sectoral dimensions developing
France	YES	YES	Development of Research Observatories and impact on shape of the legislation/work of the collection agencies
Germany	YES	YES	Future reform of VET system
Hong Kong	YES	NO	The emergence of China means further change of role for the two sectoral bodies
The Netherlands	YES	YES	Merging of some Kenniscentra, reduction of standards and impact on funding
New Zealand	YES	YES	Funding discrepancy with ITOs and Polytechnics, leadership roles
Norway	Not beyond initial searches, contacts and reading	NO	Some evidence of small-scale/specific sector approaches, very little existing knowledge on these. Possible area to investigate - health sector activities.
Singapore	YES	YES	Mix of cluster and sectoral approaches, few formal sectoral bodies at present
South Africa	YES	YES	Shift in emphasis towards informal economy and sectoral support
South Korea	Not beyond searches and contacts	NO	Expressed great interest in sectoral approaches; appears to be forming sector councils
Switzerland	Not beyond searches, contacts and initial reading	NO	Impact of changes in VET law
USA	YES	YES	Progress and impact of the HGJTI and WIA

Appendix 2: Industry Skills Councils in Australia

Industry Skills Council	Area Covered
Agri-Food Skills Council	Food production and processing sectors including seafood and meat, and food and beverage processing. Covers 140, 000 enterprises, more than half a million employees. Being expanded to cover racing, and bloodstock exports.
Community Services & Health Industry Skills Council	Non-clinical health and social care and community support work. 9.7% of the Australian workforce.
Construction and Property Services Industry Skills Council	Building and property industries including spatial information, surveying, drafting, architecture, general home and building construction, off-site construction, plumbing, real estate sales and property management, cleaning, pest management, waste management, security, stock and station agency, portable fire equipment servicing and fire safety system inspection, and facilities management. Covers more than 1.6 million employees.
ElectroComms and EnergyUtilities Industry Skills Council Ltd (ESITO)	Electro technology, lifts, communications, gas, and the electricity generation and transmission and distribution sectors. More than half a million employees.
Government Skills Council	Yet to be declared.
Innovation and Business Industry Skills Council	Business services, cultural, education, financial services, information and communication technologies, and printing.
Manufacturing Industry Skills Council	Range of industries from heavy engineering through to textiles. Covers 75,000 businesses, with nearly 1 million employees.
Resources and Infrastructure Industry Skills Council (RIISC)	Resources supply chain, from exploration, extraction, and primary processing to the civil construction sector, which uses extractive industry products like sand and gravel. More than 1.8 million employees.
Services Industry Skills Council (SISC)	Retail and wholesale, sport and recreation, tourism, hospitality, hairdressing, beauty therapy, and funeral services. Covers more than 640 000 businesses, with more than three million employees, and more than one million volunteers.
Transport & Logistics Industry Skills Council	Transport and logistics, maritime, and aviation.

Appendix 3: Canadian Sector Councils

Sector Council
Apparel Human Resources Council (AHRC)
Biotechnology Human Resource Council (BHRC)
Canadian Automotive Repair and Service Council (CARS)
Canadian Aviation Maintenance Council (CAMC)
Canadian Council for Human Resources in the Environment Industry (CCHREI)
Canadian Council of Professional Fish Harvesters (CCPFH)
Canadian Food Industry Council (CFIC)
Canadian Plastics Sector Council (CPSC)
Canadian Professional Logistics Institute (CPLI)
Canadian Steel Trade and Employment Congress (CSTEC)
Canadian Tourism Human Resource Council (CTHRC)
Canadian Trucking Human Resources Council (CTHRC)
Child Care Human Resources Sector Council (CCHRSC)
Construction Sector Council (CSC)
Contact Centre Canada (CCCC)
Council for Automotive Human Resources (CAHR)
Cultural Human Resources Council (CHRC)
Forum for International Trade Training (FITT)
Installation, Maintenance and Repair Sector Council (IMR)
Mining Industry Training and Adjustment Council-Canada (MITAC)
Motor Carrier Passenger Council of Canada (MCPCC)
National Seafood Sector Council (NSSC)
Petroleum Human Resources Council of Canada (PHRCC)
Software Human Resource Council (SHRC)
Textiles Human Resources Council (THRC)
Wood Manufacturing Council (WMC)
Aboriginal Human Resources Development Council of Canada (AHRDCC)
Canadian Apprenticeship Forum (CAF)
Canadian Aquaculture Industry Alliance (CAIA)
Canadian Council of Professional Engineers (CCPE)
Motor Carrier Passenger Council of Canada (MCPCC)
Canadian Council of Technicians and Technologists (CCTT)
Canadian Technology Human Resources Board (CTHRB)
Canadian Police Sector Council (CPSC) – in development
Voluntary Sector HR Council Feasibility Study (VSHRC) – currently conducting study to assess feasibility of having such a sector council

Appendix 4: Kenniscentra in the Netherlands

Kenniscentra	Sector
KC Handel	Retail distribution and wholesale trade
KOC Nederland	Beauty care and hairdressing
LOB HTV	Hospitality, catering, leisure, tourism and bakery
SVO	Meat sector
OVDB	Social services and welfare
Ecabo	Economics and office work
Bouwradius	Building and construction group
GOC	Printing and communications
Innovam Group	Cars, motorbikes and bicycles
Intechnum	Installation technology
SBW	Civil engineering
SH&M	Wood and furniture industry
LIFT Group	Textile and clothing
SOM	Metal industry
SVGB	Health technology occupations
SVS	Decorating and advertising
VaPro	Processing industry
VEV	Electrical engineering
VOC	Bodyworks
VTenL	Transport and logistics

Appendix 5: Industry Training Organisations (ITOs) in New Zealand

<p>AGRICULTURE ITO Farming, wool handling, classing & shearing, stock & station, fencing, water supply & wastewater, agribusiness, poultry Farmer, farm hand, stock manager, shearer, agribusiness advisor</p>	<p>AVIATION, TRAVEL & TOURISM ITO Aeronautical engineering, air crew, airport operations, rental car services, tourist operators, casinos, travel agents, tour wholesalers & booking offices Aeronautical engineer, airport ground crew, tour operator, visitor information, gaming operator</p>	<p>APPAREL & TEXTILE ITO Carpet ,clothing & textile manufacturing, dry cleaning, laundry Machinist, drycleaner, laundry operator</p>
<p>BOATING ITO Boat building, marine sales Boat builder</p>	<p>BUILDING & CONSTRUCTION ITO Carpentry, concrete, construction, plastering, interior systems, floor & wall tiling Builder, plasterer, tiler, foreman, labourer</p>	<p>BUILDING SERVICE CONTRACTORS OF NZ Contract cleaning, caretaking, security, document destruction, pest control, rubbish removal Cleaner, caretaker, security officer</p>
<p>COMMUNITY SUPPORT SERVICES ITO Elderly care, disability support services, diversional therapy nurse aides, carers, care assistants, diversional therapists, activities officers</p>	<p>COMPETENZ Food & beverage processing, engineering, refrigeration, heating, air conditioning, locksmithing, fire alarms & protection systems Refridgeration engineer, gunsmith, locksmith, baker, winemaker, factory supervisor, welder</p>	<p>ELECTRICITY SUPPLY ITO Power production, transmission & maintenance Electrician, line mechanic, cable jointer or layer, call centre operator, plant operator</p>
<p>ELECTROTECHNOLOGY ITO Telecommunications, security, call centre operations, electrical appliance repair, electronic manufacturing Electrical engineer, call centre manager, security guard, telecommunications technician</p>	<p>EQUINE ITO Horse breeding, racing, farriering, stable practice, equestrian coaching Horse breeder, trainer, racecourse assistant, farrier, stud groom, stable foreman</p>	<p>NZ EXTRACTIVES ITO Quarrying, mining, drilling, explosives, tunnelling Miner, explosives engineer</p>
<p>FIRE & RESCUE SERVICES ITO Structural and industrial, vegetation, airports and industrial emergency response, and workplace emergency risk management. Fire crew volunteer (urban and rural), road and rope rescue services</p>	<p>NZ FLOORING ITO Sanding & finishing, carpet laying, vinyl & wood installation, retail/wholesale sales & support Carpet or vinyl layer, wood flooring installer, retail sales or admin</p>	<p>FOREST INDUSTRIES TRAINING Planting, harvesting, wood processing, wood product manufacturing Skid worker, saw doctor, quarantine officer, production manager</p>
<p>FUNERAL SERVICES TRAINING TRUST OF NZ Embalming, funeral directing & services</p>	<p>FURNITURE ITO Furniture manufacturing, finishing, upholstery, bedding, steel furniture, retail</p>	<p>HAIRDRESSING ITO Cutting, colouring, barbering, salon management Hairdresser, salon owner or manager, barber</p>

Embalmer, funeral director or assistant	Carpenter, upholsterer, retail assistant	
HORTICULTURE ITO Plant and forest nursery, fruit & vegetable production, floristry, landscaping, arboriculture Arborist, florist, orchardist, market gardener, plant nursery worker, garden centre	HOSPITALITY STANDARDS INSTITUTE Hotels & accommodation, cookery, food & beverage service, business management Chef, bar person, waiter, kitchen assistant, front desk, hotel manager	INFRATRAN Road & pavement construction & maintenance, demolition, agricultural spraying, surveying, property valuation Civil construction worker, top dresser, surveyor
JOINERY ITO Glass & glazing, aluminium & laminate fabrication Glazier, joiner, craftsperson	LOCAL GOVERNMENT ITO Animal control, pest & plant control, council committee management Animal control officer,	MASTER PLUMBERS, GASFITTERS & DRAINLAYERS ITO Plumbing, gasfitting, drainlaying, concrete roof tiling, cladding Plumber, gasfitter, roofer, drainlayer
MOTOR ITO Automotive engineering, panel beating, grooming, sail making, canvas fabrication, painting Automotive mechanic, panel beater, car groomer	NZ ITO Dairy manufacturing, research livestock improvement, meat processing, fellmongery Share milker, livestock manager, butcher	NZ JOURNALISTS' TRAINING ORGANISATION Journalism across all media Newspaper or TV reporter, magazine editor, radio news announcer
PAINTING ITO Painting & decorating, coatings, sign making, masonry, bricklaying Painter, mason, brick layer, sign writer	PHARMACY ITO Community or hospital pharmacy Pharmacist	PLASTICS & MATERIALS PROCESSING ITO Plastics production, glass container manufacturing, paint, ink & resin manufacturing, pharmaceutical manufacturing (excluding medicines) Plastics process technician, plastics engineer
POWER CRANE ASSOCIATION Power crane operation, rigging and slinging loads Power crane operator	PRINTING & ALLIED INDUSTRIES TRAINING COUNCIL Printing, binding, finishing, administration, carton making, graphic communication Digital or offset printer operator, binder	PUBLIC SECTOR TRAINING ORGANISATION Conservation, customs, meat inspection, public sector services, forensic photography, intelligence analysis Ranger, customs officer, public servant, police forensic photographer, SIS
REAL ESTATE INSTITUTE OF NZ INC. Real estate services Real estate agent, property manager	RETAIL ITO Retail & wholesale, merchandising, stock control Retail assistant or manager	RETAIL MEAT ITO Boning & cutting, packing, meat retail Butcher, meat retail assistant
NZ ROAD TRANSPORT & LOGISTICS ITO Truck transport, bus & coach, taxi, courier, logistics, distribution, warehousing, ports and stevedores Fleet manager, specialist driver, delivery yard manager, tour bus	SEAFOOD ITO Aquaculture, seafood processing & retailing, vessel operations Shellfish farmer, factory trawler technician, fisherman, deck hand	SPORT, FITNESS & RECREATION ITO Community recreation, snow sports, coaching, fitness Swimming coach, fitness instructor, ski patrol, recreation officer

operator		
NZ SPORTS TURF ITO Turf management, green keeping Green keeper, turf manager, cricket pitch curator, grounds person	TE KAIAWHINA AHUMAHU (SOCIAL SERVICES) Social & youth work, mental health, counselling Social worker, counsellor, youth worker	

Appendix 6: Sector Education and Training Authorities (SETAs) in South Africa

Financial & Accounting Services SETA (FASSET)	Banking SETA (BANKSETA)
Chemical Ind. (CHIETA)	Clothing Textiles Footwear & Leather SETA (CTFL)
Construction E & T Authority (CETA)	Diplomacy, Intel, Defence, and Trade & Industry SETA (DIDTETA)
Education Training & Dev. Practices SETA (ETDP SETA)	Energy SETA (ESETA)
Food & Beverages Man Ind SETA (FOODBEV)	Forest Ind SETA (FIETA)
Health & Welfare SETA (HWSETA)	Information Systems, Elect. & Telecom Tech. Ins SETA (ISETT)
Insurance SETA (INSETA)	Local Government Water & Related Services SETA (LGWSETA)
Media, Advert, Publ. Printing and Packaging Seta (MAPPP)	Seta for Mining and Minerals Sector (MQA)
Man. Eng and Related Services (MERSETA)	Police, Private Security, Legal and Correctional Serv. SETA (POSLEC)
Primary Agriculture SETA (PAETA)	Public Service Sector SETA (PSETA)
Secondary Agriculture SETA (SETASA)	Services SETA (SERVICES)
Tourism and Hospitality SETA (THETA)	Transport SETA (TETA)
Wholesale & Retail SETA (W&RSETA)	

Appendix 7: Sector Skills Councils (SSCs) in the UK

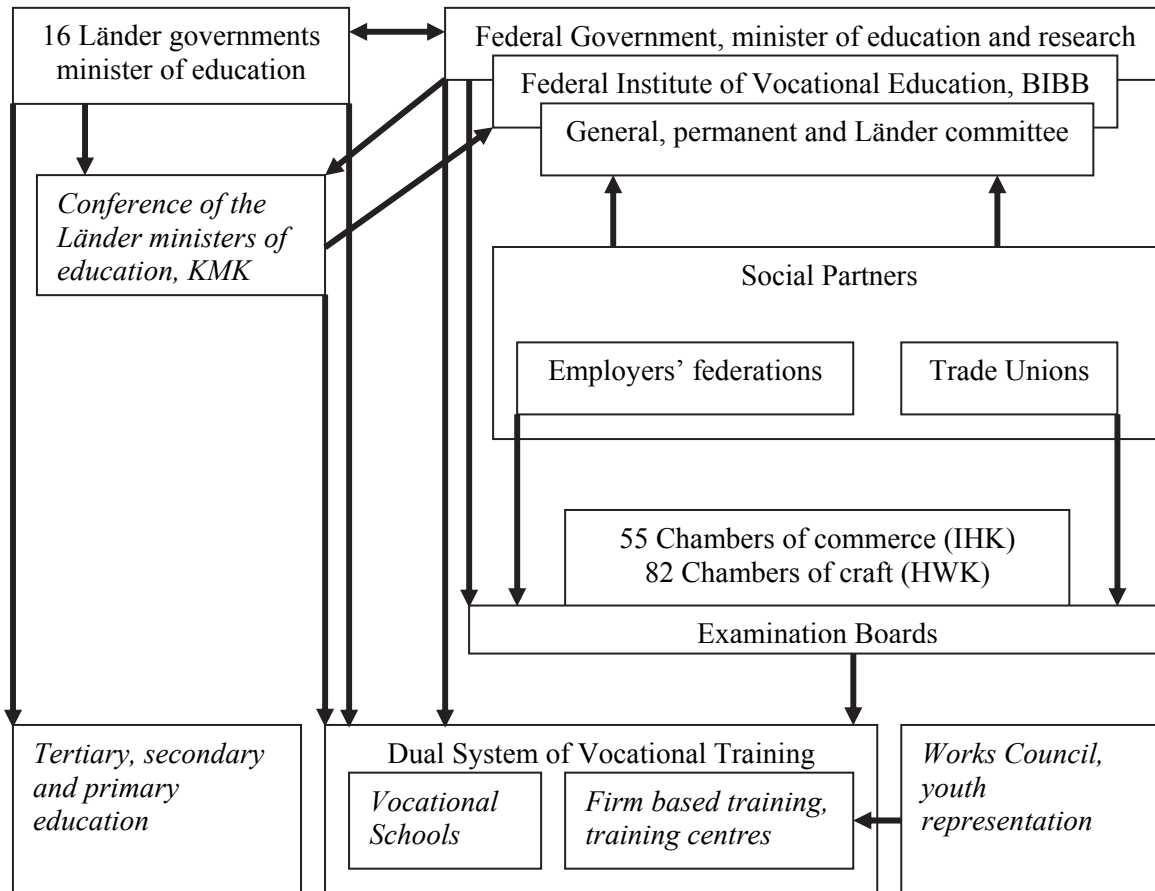
SSC	Contact	Description
Lantra	www.lantra.co.uk	Environmental and land-based industries
Cogent	www.cogent-ssc.com	Chemicals, nuclear, oil and gas, petroleum and polymer industries
Proskills UK	www.proskills.org.uk	Process and manufacturing of extractives, coatings, refractories, building products, paper and print
Improve Ltd	www.improveltd.co.uk	Food and drink manufacturing and processing
Skillfast-UK	www.skillfast-uk.org	Apparel, footwear and textile industry
SEMTA	www.semta.org.uk	Science, engineering and manufacturing technologies
Energy & Utility Skills	www.euskills.co.uk	Electricity, gas, waste management and water industries
ConstructionSkills	www.citb-constructionskills.co.uk	Development and maintenance of the Built Environment
SummitSkills	www.summitskills.org.uk	Building services engineering (electro-technical, heating, ventilating, air conditioning, refrigeration and plumbing)
Automotive Skills	www.automotiveskills.org.uk	Retail motor industry
Skillsmart Retail	www.skillsmartretail.com	Retail industry
People 1st	www.people1st.co.uk	Hospitality, leisure, travel and tourism
Goskills	www.goskills.org	Passenger transport
Skills for Logistics	www.skillsforlogistics.org	Freight logistics industry
Financial Services	www.fssc.org.uk	Financial services industry
Asset Skills	www.assetskills.org	Property, housing, cleaning and facilities management
e-skills UK	www.e-skills.com	IT, telecoms and contact centres
Government Skills (in development)	n.a.	Central government
Skills for Justice	www.skillsforjustice.com	Custodial care, community justice and police
Lifelong Learning UK	www.lifelonglearninguk.org	Community-based learning and development, further education, higher education, library and information services, work-based learning
Skills for Health	www.skillsforhealth.org.uk	NHS, independent and voluntary health organisations
Skills for Care & Development	www.skillsforcare.org.uk	Social care including children, families and young children
Skillset	www.skillset.org	Broadcast, film, video, interactive media and photo imaging
Creative & Culture Skills	www.ccskills.org.uk	Arts, museums and galleries, heritage, crafts and design
SkillsActive	www.skillsactive.com	Sport and Recreation, Health and Fitness, Playwork, the Outdoors and Caravans

Appendix 8: A Brief History of US Workforce Systems

The following is a brief chronological description about the massive changes that took place in the last few decades:

- ❖ Area Development Act, 1958 - Training under ADA was for the unemployed who were made redundant due to automation or structural change. Training programmes were centrally administered by the Federal Government.
- ❖ Manpower Development and Training Act, 1962 - Under MDTA, training moved its emphasis from retraining the unemployed to tackling poverty and disadvantaged groups, e.g. welfare recipients and unemployed youth. MDTA began a new arrangement in which the Federal Government contracted the administration and training service to local providers. Localisation led to multitudes of programmes some of which overlapped with each other.
- ❖ Comprehensive Employment and Training Act, 1973 - Attempts were made to simplify the variety of programmes through devolving the management of training services to local states and localities. These were unsuccessful because of allegations of corruption and waste.
- ❖ Job Training Partnership Act, 1982 - JTPA signalled the first genuine attempt to localise training services at the state and localities levels. JTPA also introduced a radically new element into training provision, namely private sector involvement in the management of local funds. Although localisation and private sector involvement were successfully implemented, the multitudes of programmes for different targeted groups remained a major issue. This led to the general criticism that JTPA is confusing for the employers and users of training schemes.
- ❖ Workforce Investment Act, 1998 - WIA simplified training provision through a 'OneStop' Centre system which would combine all the services into one management in every local community - irrespective of training was for youth, unemployed or workers in work. Through the local Workforce Investment Boards, local management now identifies various funding sources - federal, state or local - to spend on various training provision, as it sees fit. Two demand-led features emerge under the WIA. Firstly, WIBs are mandated to be 'employer-led' and training is therefore linked to the specific needs of the local businesses. Secondly, the introduction of the 'Individual Training Account' means that through a voucher system, trainees exercise their training purchase at one of the designated providers.

Appendix 9: The German Dual Training System



Source: Clarke and Herrmann, 2004: 140

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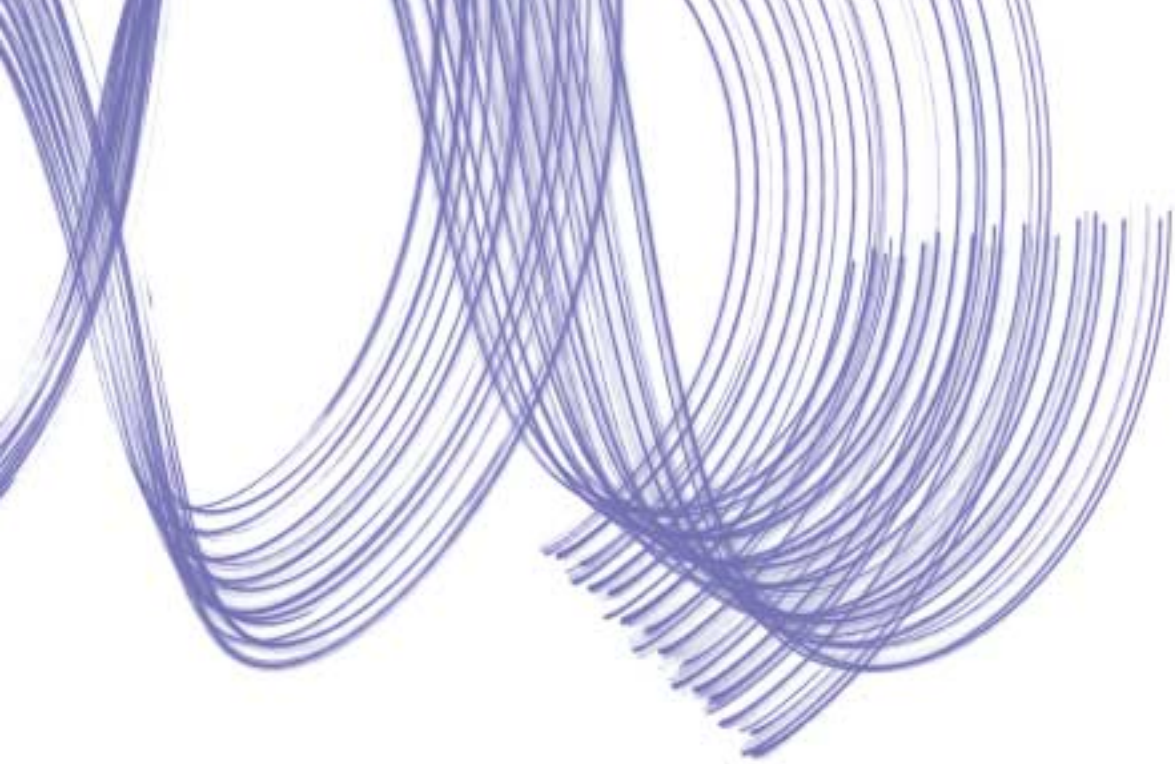
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