Inter*Trade*Ireland

Skills mapping scoping study: comparability of qualifications in Northern Ireland and the Republic of Ireland

February 2003

Contents

Glossary

AQA	Assessment and Qualifications Alliance
BIM	Irish Sea Fisheries Board
BTEC	Business & Technology Education Council
CCEA	Northern Ireland Council for the Curriculum, Examinations and Assessment
CEDEFOP	European Centre for the Development of Vocational Training
CBI	Confederation of British Industry
CoEA	Certificate of Education Achievement
DEL	Department for Education and Learning
DfES	Department for Education and Skills
DIT	Dublin Institute of Technology
ENIC	European National Information Centre
EURES	European Employment Services
FAS	Training and Employment Authority
FE	Further Education
FETAC	Further Education and Training Awards Council
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
GNVQ	General National Vocational Qualification
GOML	Graded Objectives in Modern Languages
HE	Higher Education
HETAC	Higher Education and Training Awards Council
IBEC	Irish Business and Employers Confederation
ICTU	Irish Congress of Trade Unions
IEEF	Irish Engineering Enterprises Federation
ISCED	International Standard Classification of Education
LCVP	Leaving Certificate Vocational Programme
NARIC	National Academic Recognition Information Centre
NIERC	Northern Ireland Economic Research Centre
NQAI	National Qualifications Authority of Ireland
NQF	National Qualifications Framework (UK)
NFQ	National Framework of Qualifications (Ireland)
NVQ	National Vocational Qualification
NSMC	North South Ministerial Council
OCR	Oxford Cambridge and RSA Examinations
OECD	Organisation for Economic Co-operation and Development
OU	Open University
QAA	Quality Assurance Agency for Higher Education
QCA	Qualifications and Curriculum Authority
QUB	Queens University Belfast
SSDA	Sector Skills Development Agency
UCAS	Universities and Colleges Admissions Service
ULEAC	University of London Examinations & Assessment Council
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UU	University of Ulster
VCE	Vocational Certificate of Education

I Executive Summary

I.1 In 2002 InterTradeIreland commissioned a study of the mapping of qualifications between Northern Ireland and the Republic of Ireland. This report presents the key findings from the study, which can be summarised as follows:

- There is clear support at European level for the recognition of academic and vocational qualifications between jurisdictions;
- (In order to understand any potential qualifications mapping). It is essential to understand the administrative / organisational framework;
- The ability to conduct a formal North-South qualifications mapping exercise depends on there being clear qualifications frameworks *within* each jurisdiction;
- In Northern Ireland, the National Qualifications Framework (NQF)[1], which is currently under review, is based on the UK framework, and is maintained by the Qualifications and Curriculum Authority (QCA)[2];
- The formal qualifications framework is currently being developed in the Republic of Ireland, and is expected to be completed in February 2003; and
- A number of informal or proxy mapping exercises do exist. These include the exercises undertaken by the UK National Academic Recognition Information Centre (NARIC) and the European Employment Services (EURES) Cross-border Partnership. While the EURES exercise only provides the broad mapping of qualification types (e.g. A levels and Leaving Certificates), NARIC does provide more detailed mapping on an individual qualification basis.

I.2 Given that the NFQ for the Republic of Ireland has yet to be finalised, and the UK NQF is currently under review, it would, be unwise to attempt to construct a formal North-South mapping exercise at this stage. However, once the both frameworks have been established and become 'embedded', such an exercise should be conducted as a matter of urgency, and the results disseminated widely.

I.3 When conducting a mapping exercise, there are a number of key considerations which, in our view, should be borne in mind going forward:

- clearly defined purpose;

[1] The NQF provides a three-category, five-level framework for all classes of qualification..

[2] The QCA is the organisation responsible for the quality assurance of standards in education and training in the UK.

- clear and transparent criteria;
- unambiguous reporting; and
- dissemination of results.

I.4 Research by the Priority Skills Unit (Northern Ireland) and The Expert Group on Future Skill Needs (Republic of Ireland) has indicated that there is evidence of skills shortages in a number of key sectors in both Northern Ireland and Republic of Ireland. As part of the current study, the study team conducted a consultation exercise with a number of industrial bodies North and South to investigate whether a lack of recognition of qualifications represented a barrier to cross-border mobility. Amongst the key findings from this exercise are the following:

- Engineering and IT were identified as two sectors in which there was a relatively free flow of labour between jurisdictions, and also as sectors in which, particularly at higher education level, there was generally a strong mutual recognition of qualifications;
- Tourism was identified as a sector in which, generally speaking, mutual understanding and recognition of qualifications on a North-South basis was relatively poor. This was in a context of the demand for labour and skills in the tourism sector remaining relatively buoyant; and
- Construction was identified as a sector in which the flow of labour between jurisdictions, particularly from North to South, had increased in recent years. Mutual recognition of qualifications was described as 'mixed'.

II Introduction

Background and Terms of Reference

I.5 InterTradeIreland have recognised the need to develop a North-South mapping exercise in relation to vocational and professional qualifications. Consequently in 2002, InterTradeIreland undertook a scoping study aimed at taking forward this key recommendation in relation to the mapping of qualifications. The original objectives of the study were to:

- establish the scope and robustness of North-South qualifications mapping exercises that had previously been conducted;
- explore the methodologies used in previous international qualifications mapping exercises to highlight any accepted approaches / standards to take;
- consider the potential to develop a robust approach to qualifications mapping North-South; and
- develop a strategy that InterTradeIreland could adopt in order to distribute the information to stakeholders, and use the results of any qualifications mapping exercise to address the policy objectives of InterTradeIreland.

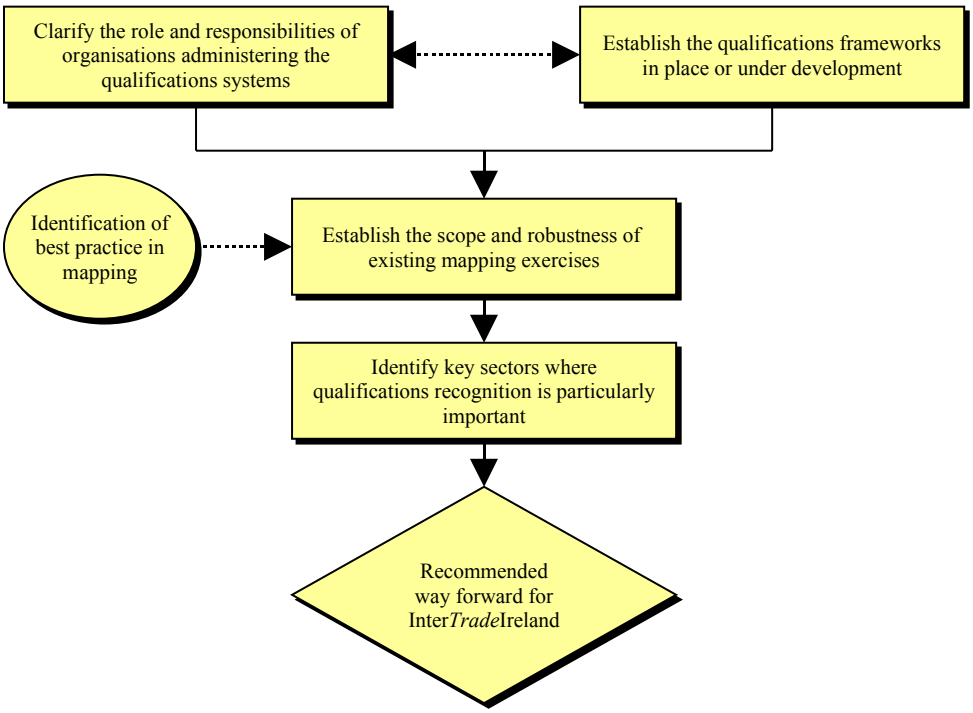
I.6 As part of the initial research, it became clear that considerable work is currently ongoing in terms of developing a framework for qualifications in the Republic of Ireland, which is scheduled to be completed in early 2003. While some preliminary mapping exercises have been undertaken, it was agreed that efforts to develop a formal mapping of qualification on a North-South basis should be postponed until both frameworks have been finalised.

I.7 The initial research also indicated that there appears to be a distinct lack of understanding among the general business community in relation to:

- The roles and responsibilities of the organisations involved in the administration of the qualification system in each jurisdiction; and
- The qualification frameworks in place or under development in each jurisdiction.

I.8 Within this context, the final Terms of Reference for the study which, evolved during our research, are illustrated in Figure 2.1.

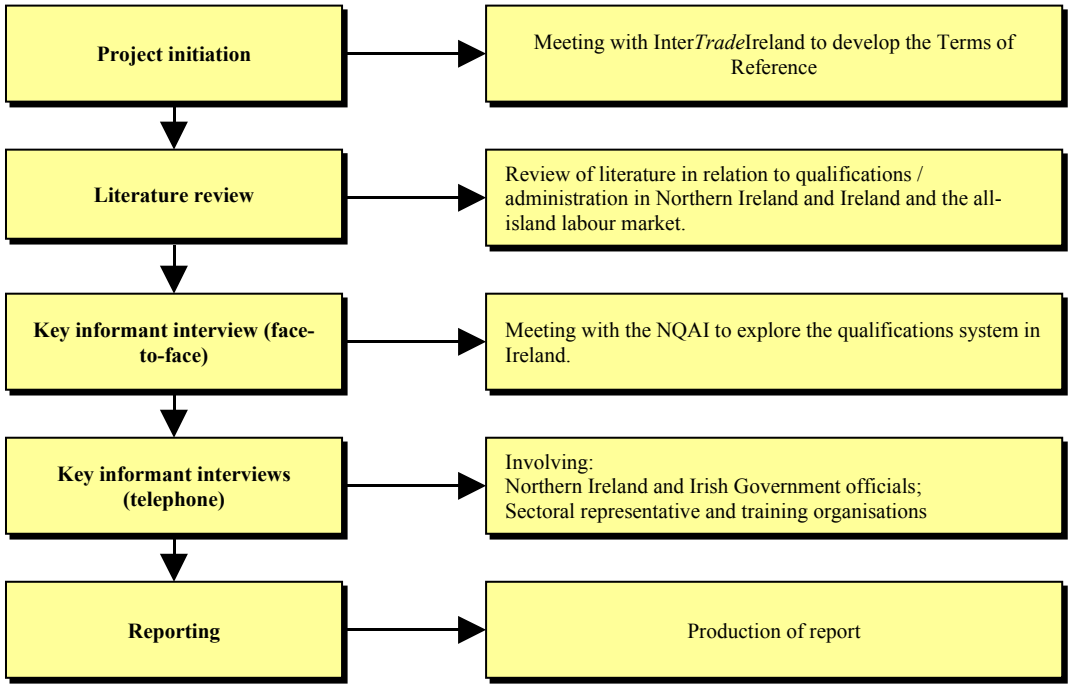
Figure 2.1: Terms of Reference



Overview of methodology

I.9 We adopted a primarily desk-based approach to addressing the Terms of Reference. This was augmented by a series of key informant interviews with a range of key stakeholders. An overview of the key activities of undertaken as part of the approach is shown in Figure 2.2.

Figure 2.2: Key activities of our methodology



Structure of Report

I.10 The remainder of this report is structured as follows:

- Section III provides a summary of the EU policy context of the study;
- Section IV presents the framework of qualifications in place / under development, and the organisations responsible for administering the qualifications system in Northern Ireland and the Republic of Ireland;
- Section V considers the scope and robustness of the North-South qualifications mapping exercises that have previous been conducted;
- Section VI explores some of key sectors in which the promotion of cross-border mobility and qualifications recognition may be particularly important; and
- Section VII presents a summary of our findings and sets out a series of recommendations for the way forward.

III EU policy context

I.11 At a European level, non- recognition of qualifications is acknowledged by policy makers as a major obstacle for individuals seeking employment and / or education in an EU country other than that of their origin. The mutual academic recognition of qualifications between countries has been promoted by the EU by means of a number of international conventions. The most relevant of these are outlined below:

- **The European Convention on the Equivalence of Diplomas Admission to Universities (Paris, 1953).** This convention established the principle of admitting students to universities in the receiving country on the basis of credentials that give admission to universities in the home country;

- **The Convention on the Recognition of Qualifications concerning Higher Education in the Europe Regions (Lisbon, 1997).** Most of the previous conventions on education dated from the 1950s, and 1960s. It was acknowledged that Higher Education in Europe had changed dramatically since then, and the conventions had not changed accordingly. Consequently this convention was developed by the Council of Europe and UNESCO, and adopted by national representatives meeting in Lisbon during 1997. Among the main points of the Convention are the following:

    - Holders of qualifications issued in one country shall have adequate access to an assessment of these qualifications in another country;

    - Each country shall recognise qualifications - whether for access to higher education, for periods of study or for higher education degrees - as similar to the corresponding qualifications in its own system unless it can show that there are substantial differences between its own qualifications and the qualifications for which recognition is sought;

    - Recognition of a higher education qualification issued in another country shall have one or both of the following consequences: access to further higher education studies, including relevant examinations and preparations for a doctorate, on the same conditions as candidates from the country in which recognition is sought; and /or the use of an academic title, subject to the laws and regulations of the country in which recognition is sought;

    - In mobility and access to the labour market; and

    - Countries shall appoint a national information centre (the UK branch is situated in Cheltenham while the Republic of Ireland branch is situated in Dublin) and , one important task of which is to

offer advice on the recognition of foreign qualifications to students, graduates, employers, Higher Education institutions and other interested parties or persons.

- **The Convention on the European Area (Bologna, 1999).** This convention marked the formal commencement of a process to create a single Higher Education space in Europe with a joint declaration of the European Ministers of Education in Bologna. Associated with the process is the development of a more closely co-ordinated system of programmes of study and associated qualifications in the various countries. The declaration gave a commitment to promote the goals of the:
  - adoption of a system of easily readable and comparable degrees;
  - adoption of a system essentially based on two main cycles (i.e. undergraduate and graduate);
  - adoption of a system of credits;
  - promotion of mobility;
  - promotion of European cooperation in quality assurance; and
  - promotion of the European dimensions in Higher Education.

I.12 The EU has also introduced several instruments to tackle the obstacles to mobility posed by the lack of recognition of qualifications. In the area of vocational training, the EU established the **European Centre for the Development of Vocational Training (CEDEFOP)**, and subsequently adopted the European five-level framework of vocational training qualifications.[3] However, this framework has not been adopted by Member States on a widespread basis.

I.13 The network of **National Academic Recognition Information Centres (NARICs)** was created by the EU in 1984. The NARICs cover all the Member States of the EU, and associated countries in Central and Eastern Europe, Cyprus and Europe. These centres provide advice and information on the academic recognition of qualifications. A parallel network of European National Information Centres (ENICs) was set up by the Council of Europe and the UNESCO, and the joint NARIC-ENIC network covers a broad framework of countries. Other instruments introduced aiming at improving the transparency of qualifications include the European Credit Transfer System, and the Diploma Supplement, which includes both a graduate's personal achievements and a description of their national Higher Education system.

[3] By European Council decision, July 1985.

I.14 The declarations and instruments outlined above have contributed to improving mobility within an all-island context. Universities in Northern Ireland and the Republic of Ireland recognise academic qualifications awarded in the other jurisdiction in relation to admission to Higher Education. Furthermore, both the UK and the Republic of Ireland are included in the joint NARIC-ENIC network and have established centres that provide advice and information on the recognition of qualifications (See Section V).

I.15 In terms of the latest developments, the **Copenhagen Declaration,** November 2002, pledged increased co-operation in vocational education and training, and stated the intention to develop an integrated strategy, bringing together in a single user friendly tool, the instruments for transparency of certificates and diplomas discussed above. This responds to the declaration made in Barcelona to make European education and training a world benchmark by 2010. The process is being developed 'bottom up' with the full involvement of the social partners, and will support the development of qualifications and competences at a sectoral level.

IV The system of qualifications in Northern Ireland and the Republic of Ireland

Introduction

I.16 There have been suggestions that there is a lack of understanding among key stakeholders in both Northern Ireland and the Republic of Ireland in relation to the system of qualifications in each jurisdiction. In this Section we will provide an overview of the system of qualifications in both Northern Ireland and the Republic of Ireland. In relation to both jurisdictions, we will outline:

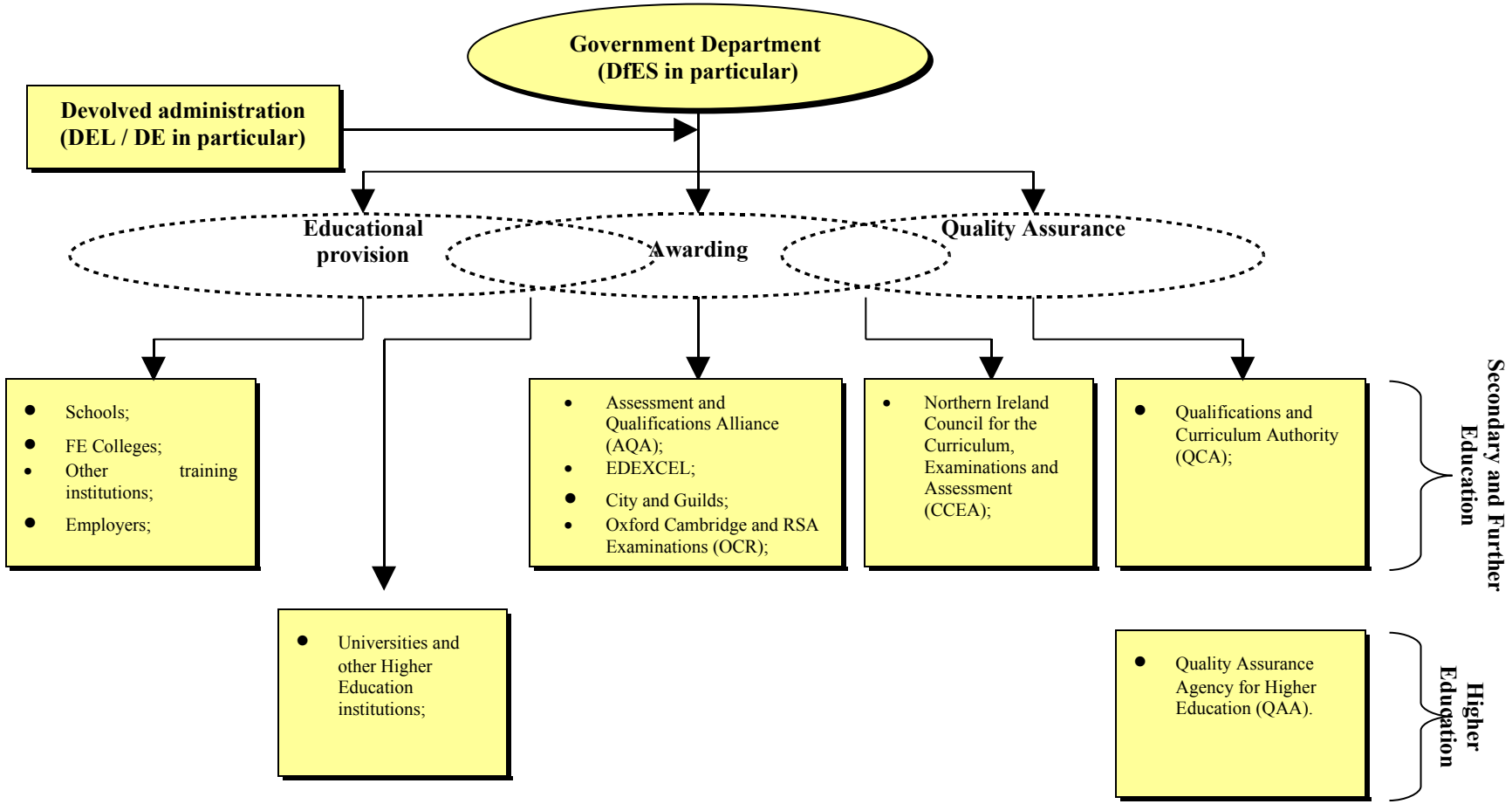
- The main **organisations** involved in the administration of the qualifications system. In particular we outline the functions of the various organisations in terms of:
  - *Education / training provision:* the provision of education / training programmes;
  - *Awarding*: the awarding of qualifications in recognition of the satisfactory completion of an education / training programme; and
  - *Quality Assurance*: the assessment and regulation of the quality and standard of qualifications.
- The **frameworks** for qualifications in place or under development.

Northern Ireland

Organisations involved in the administration of the qualifications system

I.17 There are a number of organisations involved in the administration of the qualifications system in Northern Ireland. An overview of some of the main organisations involved, and their functions in terms of education / training provision, awarding, and quality assurance is illustrated in Figure 4.1. It is important to be mindful that Figure 4.1 is a simplified representation of what is a complex system. The classification of the organisations is guided by what would be considered to be their main roles. However, it must be appreciated that most of the organisations undertake some degree of quality assurance, whether it be in the provision of education or awarding.

Figure 4.1: The administration of the qualifications system in Northern Ireland (based on UK model)



I.18 The Department for Education and Skills (DfES) is the central UK government department responsible for the formulation of national policy in relation to the provision of education and training. In the case of the devolved administration in Northern Ireland, the Department of Education (DE) is responsible for the management of primary and secondary level education, while the Department for Employment and Learning (DEL) is responsible for the policy and funding of the further and higher education sectors.

I.19 The system is somewhat complicated by the interaction of the overarching national bodies and the regional administration in Northern Ireland. A brief description of some of the main organisations fulfilling these educational provision, awarding, and quality assurance roles is given in Table 4.1 and a fuller description is provided at Annex A.

Table 4.1: Organisations responsible for the provision, awarding and quality assurance of qualifications in Northern Ireland

Secondary, Further, and Higher Education providers
Education provision in Northern Ireland is delivered by the schools system, 16 Further Education Colleges and the Queens University Belfast, University of Ulster, and the Open University.
Assessment and Qualifications Alliance (AQA)
The AQA was formed following the merger of the Associated Examining Board and the Northern Examinations and Assessment Board and is the largest of the English unitary awarding bodies. It offers a range of qualifications including: GCSE; GCE; GNVQ; VCE; and Entry Level.
EDEXCEL
Edexcel was the first of the three unitary awarding bodies to be established to offer both academic and vocational qualification including: GCSE; GCE; VCE; GNVQ; NVQ; Adult Literacy and Numeracy qualifications at Entry levels, levels 1 & 2; Key skills; BTEC Firsts, Nationals, Higher Nationals and short courses.
Oxford Cambridge and RSA Examination (OCR)
OCR offers a range of academic and vocational qualifications including: AS and A Level; GNVQ; Key Skills; GCSE; Certificate of Achievement; RSA Own Brand schemes; and NVQ.
City and Guilds
City and Guilds is the leading provider of vocational qualifications in the UK, and offers over 400 qualifications suitable for all levels of skill and ability in all occupational sectors from agriculture, catering and hairdressing to IT, management and plumbing. City and Guilds awards almost 50 per cent of all NVQs in the UK.
Northern Ireland Council for the Curriculum, Examinations and Assessment (CCEA)
CCEA provides advice on and support to DE in relation to all aspects of the curriculum, examinations and assessment. It also is responsible for assessment of pupils at Key Stages 1, 2 and 3 and accreditation of Records of Achievement. CCEA conducts public examinations such as GCSE, GCE, Certificate of Education Achievement (CoEA) and Graded Objectives in Modern Languages (GOML). CCEA is the regulatory authority for examinations in Northern Ireland including GNVQs and vocational A'levels.
Qualifications and Curriculum Authority (QCA)
The QCA is the national organisation responsible for the quality assurance of standards in education and training in England. The QCA also accredits qualifications into a national framework (NQF). Furthermore in Northern Ireland the QCA has statutory powers to regulate NVQs.
Quality Assurance Agency for Higher Education (QAA)
The QAA provides an integrated quality assurance service for UK Higher Education. Its mission is to promote public confidence that quality of provision and standards of awards in Higher Education are being safeguarded and enhanced.

Qualification frameworks

I.20 As outlined in table 4.1, one of the key roles of the QCA is to place qualifications into a national qualifications framework (NQF). The UK NQF is an instrument which attempts to rationalise the high-level relationships between qualifications offered in the UK, including Northern Ireland. The NQF, which is currently under review, provides a three-category, five-level framework for all classes of qualifications and is illustrated in Table 4.2.

Table 4.2: National Qualifications Framework (UK)

Levels of attainment	Category of qualifications		
	General qualifications	Vocationally-related qualifications	Occupational qualifications
Higher level / 5			e.g. NVQ Level 5
Higher level / 4			e.g. NVQ Level 4
Advanced level / 3	e.g. AEAs /A level / AS	e.g. VCE A level /AS Double Award	e.g. NVQ Level 3
Intermediate level / 2	e.g. GCSE grade A*-C	e.g. Intermediate GNVQ / Vocational GCSE	e.g. NVQ Level 2
Foundation level / 1	e.g. GCSE grade D-G	e.g. Foundation GNVQ / Vocational GCSE	e.g. NVQ Level 1
Entry level	Entry level can provide a basis for progression to qualifications across the framework at foundation level.		

Source: QCA

I.21 The NQF does not use specific descriptors for each level , i.e. descriptors that detail the common features of qualifications at that level. There are criteria for certain types of qualifications being included within the framework, but there are no common descriptors that define levels across the whole framework. However in the case of NVQs, there are level descriptors that detail the common features of those qualifications. Furthermore, it is worth noting that the Northern Ireland Credit Accumulation and Transfer System (NICATS), a system under development that will allow small blocks of learning to be assessed and given credit, will be based on level descriptors.

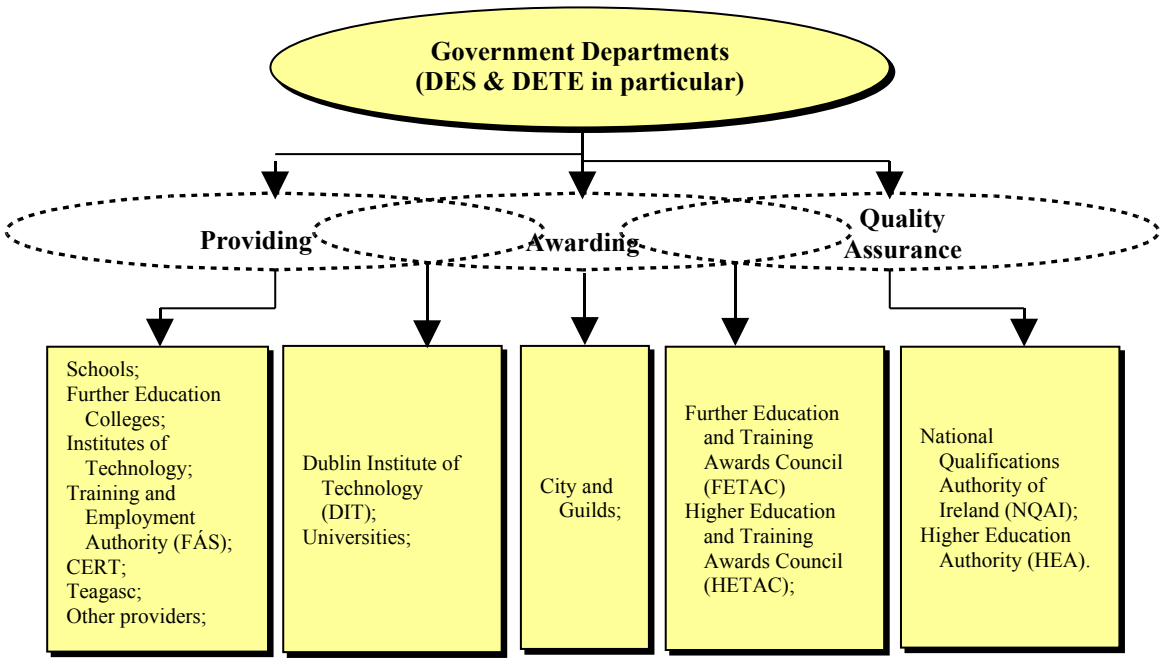
I.22 Table 4.2 includes those qualifications which are considered most common in the UK. It is important to be mindful, however, that the framework and the accreditation process are designed to admit qualifications other than these. The different awarding bodies are encouraged to submit their qualifications to the QCA for approval and inclusion in the NQF.

Republic of Ireland

Organisations involved in the administration of the qualifications system

I.23 There are also a number of organisations involved in the administration of the qualifications system in the Republic of Ireland. The organisation of the qualification system in Republic of Ireland is, in a sense, not as complex as that in Northern Ireland. An overview of some of the main organisations involved in the Republic of Ireland and their functions in terms of education / training provision, awarding, and quality assurance is provided in Figure 4.2.

Figure 4.2: The administration of the qualifications system in the Republic of Ireland



I.24 A brief description of some of the main organisations fulfilling these educational provision, awarding, and quality assurance roles is given in Table 4.3 and a fuller description is provided at Annex B.

Table 4.3: Organisations responsible for the provision, awarding and quality assurance of qualifications in Republic of Ireland

Schools and National Vocational Colleges
Schools, and National Vocational Colleges are the providers of non-tertiary education in the Republic of Ireland. Attendance at full-time education is compulsory for all children between 6 and 16 years of age. The second-level education sector comprises secondary, vocational, community and comprehensive schools. Secondary schools are privately owned and managed.
Institutes of Technology
The Republic of Ireland has 13 Institutes of Technology which are an important regional resource for education, specialist skills development and technology capability. They offer a mix of further education provision and higher education provision to post-secondary students. They are committed to providing R & D, technology transfer and innovation support services to business and industry in their regions.
Training and Employment Authority (FÁS)
FÁS, established in January 1988, provides a wide range of services to the labour market in Republic of Ireland. Its functions are training and re-training, designated apprenticeships, recruitment service, employment schemes, placement and guidance services, assistance to community groups, advice for people returning to Republic of Ireland and those seeking employment elsewhere in the EU, and consultancy and human resource related services, on a commercial basis, outside the State (FÁS International Consulting Ltd.). FÁS provides training and employment programmes, for employers, employees and the unemployed.
CERT
CERT is the national body responsible for training and development in the Irish tourism and hospitality industry. Their mission is to foster the attainment of world class service throughout the industry by building capability and promoting the principles of best practice. They provide a wide range of services such as, tourism and hospitality skills training, continuous professional development, company development, career promotion, strategic research, and new product development.
Teagasc
Teagasc provides integrated research, advisory and training services for the agriculture and food industry in Republic of Ireland. They are a semi-state organisation established under legislation enacted by the Irish Government. A board of 11 members is appointed by the Minister for Agriculture and Food and has representatives from the farming organisations, the food industry, the universities, the Department of Agriculture, Food and Rural Development and Teagasc staff.
City and Guilds
City and Guilds is a leading provider of vocational qualifications in the Republic of Ireland. Established in 1878, it offers a range of qualifications suitable for all levels of skill and ability in all occupational sectors from agriculture, catering and hairdressing to IT, management and plumbing.
Dublin Institute of Technology (DIT)
DIT became an autonomous university-level institution under the DIT Act, 1992. It provides third-level education to some 22,000 students making it the largest such establishment in Republic of Ireland. It is committed to the provision of research, product development and consultancy services for industry and society while continuing to have regard to the technological, commercial, social and cultural needs of the community it serves. In addition to its teaching programmes, the Institute is strongly committed to research and development activities and has established a number of specialised units and campus companies in support of these.
University sector
There are seven universities in Republic of Ireland. They are essentially concerned with undergraduate and post-graduate degree programmes together with basic and applied research. In recent years some universities have introduced semesterisation and modularisation of courses, giving greater flexibility to

students.

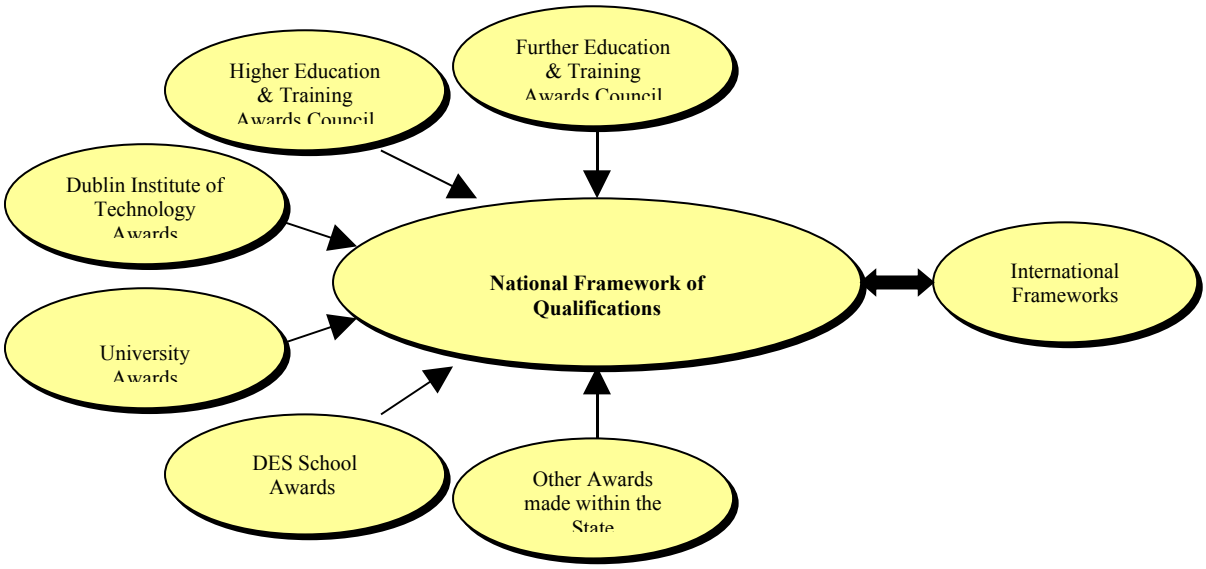
Further Education and Training Awards Council (FETAC)
FETAC's mission is to make quality assured awards in accordance with national standards within the national framework, creating opportunities for all learners in further education and training to have their achievements recognised, and providing access to systematic progression pathways.
Higher Education and Training Awards Council (HETAC)
HETAC is the qualifications awarding body for third-level educational and training institutions outside the university sector. It is the legal successor to the National Council for Educational Awards (NCEA). HETAC's main functions include setting standards for higher education and training awards, validation of higher education and training programmes, monitoring of institutional quality assurance procedures, delegation of awarding powers to recognised institutions, and ensuring that student assessment procedures are fair and consistent.
Higher Education Authority (HEA)
The HEA is the planning and development body for higher education in the Republic of Ireland. It was set up on an ad-hoc basis in 1968, and was given statutory powers in the Higher Education Authority Act of 1971. The principal functions of the HEA are: to further the development of Higher Education; to maintain a continuous review of the demand and need for Higher Education; to assist in the coordination of state investment in Higher Education and to prepare proposals for such investment; to allocate among universities and designated institutions the grants voted by the Oireachtas; and to promote the attainment of equality of opportunity in Higher Education and democratisation of Higher Education.
National Qualifications Authority of Republic of Ireland (NQAI)
The NQAI was established in February 2001. The Authority itself has three principal objects: the establishment and maintenance of a framework of qualifications for the development, recognition and award of qualifications based on standards of knowledge, skill or competence to be acquired by learners; the establishment and promotion of the maintenance and improvement of the standards of awards of the further and higher education and training sector, other than in the existing universities; and the promotion and facilitation of access, transfer and progression throughout the span of education and training provision.

Qualification frameworks

I.25 As outlined above, the NQAI was established in February 2001 with the establishment and maintenance of a national qualifications framework as one of its three principle objectives.

I.26 It is envisaged that when the framework is developed it will be inclusive, as much as possible, of all key awards in Republic of Ireland, as illustrated in Figure 4.3.

Figure 4.3: Proposed coverage of the Irish NFQ



Source: *Towards a National Framework of Qualifications – A Discussion Document*, NQAI, November 2001.

I.27 Since its formation, the NQAI has made significant progress in framework development, producing a number of policy documents including:

- *Towards a National Framework of Qualifications – A Discussion Document*, (November 2001);
- *Towards a National Framework of Qualifications – Establishment of Policies and Criteria*, (April 2002);
- *Towards a National Framework of Qualifications – Inclusion of Professional and International Awards*, (May 2002); and
- *Framework of Qualification – A Review of Developments Outside the State*, (June 2002).

I.28 In practical terms, there are a number of areas where there has been significant progress in the development of the NFQ. These areas, include:

- **Policies and criteria for the division of knowledge, skill and competence into sub-strands:** The Authority established an integrated set of basic values and principles that would underpin the development of the NFQ: equality and accessibility, comprehensiveness and coherence, transparency and simplicity, quality, and relevance. The

policies and criteria relate to the three strands of learning outcomes that are to be used for setting standards – knowledge, know-how and skill, and competence. The Authority has identified a number of sub-strands within these main strands that can be considered the component structures of the three kinds of learning outcomes. These sub-strands are detailed in Table 4.4.

Table 4.4: Key strands and sub-strands of the Irish qualifications framework

Main-strands	Sub-strands
Knowledge	Breadth
	Kind
Know-how and skill	Range
	Selectivity
Competence	Context
	Role
	Learning to learn
	Insight

Source: **www.nqai.ie/**

- **The number of levels:** The Authority has determined that the framework will consist of 10 levels. The sub-strands of knowledge, skill and competence have been used to generate the 10 level indicators.

- **The grid of level indicators:** The grid shows how the outcomes in each of the eight sub-strands progress across the ten levels. The level indicators set out in the grid are intended to enable the Authority to place award-types at appropriate levels in the framework based on the mix of learning outcomes they contain.

- **Policies and criteria for the determination of award-types:** An award type is a class of named award sharing common features and level. There is at least one award type at each level in the framework. For each award-type a wide range of named awards will be developed. It is through the determination of award-types and descriptors for these that the Authority will set the overall standards of the awards of the two councils and the Dublin Institute of Technology.

I.29 These developments are summarised in Annex C. The timescale that is now envisaged by the Authority involves the publication in early 2003, of:

- an outline national framework of qualifications - this will include level indicators and award-type descriptors; and

- policies and procedures to promote access, transfer and progression.

V Existing North-South qualifications mapping

European Employment Services (EURES) Cross-border Partnership

I.30 EURES aims to facilitate the free movement of workers within the countries of the European Economic Area. Partners in the network include public employment services, trade unions and employer organisations. The partnership is coordinated by the European Commission. In cross-border regions, special structures have been set up to meet the special needs of these areas, together with the normal objectives of EURES, in which labour mobility is highest. A recent publication by PricewaterhouseCoopers[4] estimated that approximately 2,079 people migrated from the Republic of Ireland to Northern Ireland in 1999, while approximately 2,874 migrated from Northern Ireland to the Republic of Ireland in the same year.

I.31 The EURES Cross-border Partnership on the island has been established to facilitate those who wish to commute daily or weekly across the border in order to earn a living. It does this by attempting to overcome at least some of the obstacles which people face, particularly through the provision of information concerning, for example, taxation, state benefits and education / training. There are six organisations, from both sides of the border, involved in the Partnership. These are :

- An Foras Aiseanna Saothair (FÁS);
- Chamberlink;
- Confederation of British Industry (CBI);
- Irish Business and Employers Confederation (IBEC);
- Irish Congress of Trade Unions (ICTU); and
- Department for Employment and Learning (DEL).

I.32 In an effort to address the information gaps that exists in relation to the qualifications systems in Northern Ireland and the Republic of Ireland, the cross-border partnership has provided a mapping of some of the broad qualifications types available in Northern Ireland and the Republic of Ireland. This is detailed in Table 5.1.

[4] The report, *Study of Obstacles to Mobility* (November 2001), was written in partnership with International Economic Consultants (INDECON) on behalf of the North / South Ministerial Council.

Table 5.1: High level mapping of Irish qualifications onto the UK NQF

Equivalent NQF (UK) level	Irish qualifications
5	Degree / Post Graduate
4	National Diploma
3	National Certificate Leaving Certificate Leaving Certificate Applied National Vocational Certificate – Level 2 National Craft Certificate Senior Trade Certificate
2	Post Leaving Certificate Course (PLCs) Junior Certificate National Vocational Certificate – Level 1
1	National Foundation Certificate

I.33 This represents quite an informal and general mapping exercise. As such it doesn't provide any detailed information on specific qualifications. There isn't any national agreement in relation to these equivalencies, and, given the process of change that is ongoing in relation to qualifications in the Republic of Ireland and the review of the UK NQF, it is advisable to treat any comparisons with caution.

NARIC

I.34 As we outlined previously, a network of National Academic Recognition Information Centres (NARICs) which provide advice and information on the academic recognition of qualifications was created by the EU in 1984. There are Centres in both the UK and the Republic of Ireland, although it is our understanding that while the UK Centre is well-established, the Centre in the Republic of Ireland, which has been operating in the Higher Education Authority, has not undertaken such a widespread role as in the UK and its services are not as fully developed. Responsibility for the Centre in the Republic of Ireland is to be transferred to the NQAI with effect from February 2003.

I.35 The UK NARIC uses benchmarking procedures in order to provide UK and overseas clients, mainly private companies recruiting foreign personnel or foreign individuals seeking employment in the UK, with information about the comparability of qualifications. This is done using bespoke procedures within a broad quality framework for each particular circumstance. In this respect their approach would be broadly comparable with that adopted by the work done by UCAS[5], though their remit is considerably broader. However they report to individual clients rather than providing general frameworks of comparison.

I.36 The UK NARIC's 'Global Qualifications' software provides information on the UK qualification equivalencies for over 180 countries, including the Republic of Ireland. This information can be subscribed to at a price of around £750.

I.37 As with the EURES mapping exercise, there is no national agreement in relation to these equivalencies, and given the process of change that is ongoing in relation to qualifications in the Republic of Ireland and the review of the UK NQF, it is advisable to treat these comparisons with caution also.

International comparative studies

I.38 The OECD has paid particular attention to comparable educational statistics over the last decade. Their publication *Education at a Glance* contains a comparative review of education systems to the end of the 1990s. The OECD classifies national programmes based on the International Standard Classification of Education (ISCED-97), in terms of three broad stages of education, namely, primary, secondary and tertiary. However, the descriptors used in the ISCED-97 classification system refer to the common features in the provision of a certain level, and are not specifically linked to outcomes.

I.39 A description of ISCED-97 levels, classification criteria and sub-categories are presented in Table 5.2 for information. Fuller detail can be found in Annex D.

Table 5.2: The ISCED-97 classification framework

[5] The UCAS tariff is a mapping framework intended to report achievement for the purposes of entry to Higher Education in the UK. The tariff aims to:

- Establish agreed equivalence between levels of achievement in different qualifications, for example GCE A and AS level, VCE A and AS level, Scottish Advanced Highers and Highers, free standing mathematics units at level 3, and key skills at levels 2, 3 and 4;
- allocate numerical values, in the form of tariff points, to differing levels of achievement in different qualifications; and
- enable Higher Education admissions tutors, and others, to make balanced comparisons between applicants with differing kinds of achievement.

Educational level	What it refers to	Some other terms commonly used	International standard classification
Early childhood education	Programmes designed primarily to introduce pre-school children from 3 years of age to a school type environment. May be based in school or other centre	Pre-primary, kindergarten nursery, pre-school	"ISCED 0"
Primary education	First stage of basic schooling (to age 11 or 12)	Elementary school	"ISCED 1"
Lower secondary education	Second stage of basic schooling (up to age 14 or 15)	Junior high school	"ISCED 2"
Upper secondary education	Stage leading up to a final secondary qualification (typically age 18 or 19)*	Senior high school, Lycee, Gymnasium sixth form / further education	"ISCED 3, 4"
Tertiary education	Programmes significantly more advanced in content and qualifications than upper secondary studies	Higher education, college education	"ISCED 5A, 5B, 6"
University level education	Tertiary studies leading to a first degree, at least at bachelor's level or equivalent. Does not always take place at universities		"ISCED 5A"

Note: * = some post-secondary study is classified as upper secondary because the content is similar to that of other programmes at this level.
Source: OECD, *Education at a glance – OECD indicators 2001*

Developing North-South qualifications mapping

I.40 In the preceding paragraphs, we have outlined some of the qualification mapping exercises that have been previously undertaken. However, our research has indicated that despite the best efforts of the bodies responsible for conducting these exercises, the results may not represent an accurate North-South mapping of qualifications. Furthermore, the NQA of Ireland has yet not finalised the Republic of Ireland's NFQ and the UK NQF is under review. Given that the relationships and level equivalencies between qualifications *within* the island have not been firmly established, any mapping exercise conducted by an external organisation will involve a high level of uncertainty. Therefore, all of these mapping exercises involve an element of subjective judgement that will undoubtedly introduce a margin of error.

I.41 Therefore, we would recommend that a formal North-South mapping exercise be postponed until the NFQ of Ireland has been finalised. Once this is completed, we suggest that the administrations in both jurisdictions build on the informal co-operation in relation to the NFQ review and develop an agreed approach to undertaking a mapping exercise. It will also be important to be mindful of any developments that emerge from the review of the UK NQF. There are a number of key methodological considerations that must be borne in mind in conducting this exercise. These include:

- **Clearly defined purpose:** the purpose of the mapping activity needs to be clearly defined. A key issue for InterTradeIreland is to ensure that

those responsible for defining the purpose of, and undertaking the North-South mapping exercise are mindful that the results must make a practical improvement in the transparency of qualifications for businesses.

- **Clear and transparent criteria:** any mapping procedure must be based on clear and transparent criteria that are easily understood by the end users of the information produced by the mapping process. Such a set of criteria is needed to ensure that end users have confidence in the procedures being used.

- **Unambiguous reporting:** unambiguous reporting is essential. Information from the mapping process should be conveyed in as simple a form as possible. End users do not have time to read lengthy descriptions. A single page, table or diagram that acts as an aide-memoir should be one of the key outputs from the mapping process. More detailed information with details of the complexities of the mapping exercise should also be made available.

- **Dissemination of results:** there could be a number of different elements to the mapping exercise. In the first instance, the mapping could refer to levels in general. Building on this, specific types of award could be mapped and subsequently this could lead to the direct recognition of explicitly named awards in particular fields of learning. Therefore, it may be appropriate to adopt a phased approach to release the results as they become available, (i.e. in the first instance, the results in relation to levels in general, and then in relation to specific awards). The roles of the organizations disseminating the results of any mapping exercise need to be clearly defined. We would envisage that InterTradeIreland would play an important role in the dissemination of these results to the business community. Practically this could involve posting information or links on the InterTradeI website, and the publication / distribution of reference material.

VI Priority skill areas

Introduction

I.42 In this Section we explore some of the key sectors in which the promotion of cross-border mobility and qualifications recognition may be particularly important to the business sector. In order to identify these key areas, we will in the first instance review existing research on skills shortages in Northern Ireland and the Republic of Ireland.

Skills monitoring in Northern Ireland

I.43 Established in early 1999, the Northern Ireland Skills Task Force has the remit to advise government on the demand and supply for skills in the Northern Ireland economy. In addition to monitoring the current skills needs of the economy, the Skills Task Force established the Priority Skills Unit within the Northern Ireland Economic Research Centre (NIERC) to undertake detailed research on current and future skills needs of employers in specific industries[6]. The Priority Skills Unit was also commissioned to take forward research into the following five priority skills areas:

- Information Technology;
- Electronic Engineering;
- Mechanical Engineering;
- Construction; and
- Tourism.

Information technology

I.44 The Priority Skills Unit published its study of the Northern Ireland labour market for IT skills in 2000. It found that recruitment of graduate project leaders and project/strategic planners posed the greatest difficulties. As a result of these shortages almost 50% of firms reported that their ability to develop new products was severely impeded. However, the analysis did not find significant skills shortages for recently graduated staff.

[6] NIERC, *A study of the Northern Ireland market for Mechanical Engineering skills report,* December 2002.

Electronic Engineering

I.45 In 2001 the Priority Skills Unit published its study on the Electronic Engineering sector* and found that demand for electronic engineering skills was very high with unfilled vacancies at all levels (particularly for technicians and professional engineers). It found that there was a high level of competition for staff between firms, which was likely to have caused wage inflation resulting in smaller companies experiencing particular difficulties in recruitment and or retainment of staff.

Mechanical Engineering

I.46 NIERC published it's latest report on Northern Ireland skills needs in December 2002, covering the Mechanical Engineering sector. They found that compared to either the electronics or IT sectors, there appeared to be a significantly lower likelihood that performance levels within the mechanical engineering industry would be constrained as a result of unfilled vacancies. The highest rate shortage was found at technician level, however the small size of the group suggested that the gap could be bridged by relatively small increases in the supply of qualified labour. Demand and supply projections undertaken by NIERC suggested that it was unlikely that Northern Ireland would experience graduate level shortages. Shortages were forecast for craft level, however it was thought that a 'ramping up' of level 3 education and training provision would be one potential response.

Construction

I.47 At present, NIERC are involved in discussions over further research on the fourth priority skills area of construction.

Tourism

I.48 Also close to publication, by the Department for Education and Learning, is a study into the skills needs of the Tourism sector. This report should be available in early 2003.

Skills monitoring in the Republic of Ireland

I.49 The issue of skills needs and the development of a national strategy in the Republic of Ireland are dealt with by the Business Education Partnership (set up in November 1997). The Expert Group on Future Skills Needs is one of the Partnership's three bodies. The aim of the Expert Group on Future Skills Needs is to carry out analysis of the future skills needs, and to develop policy proposals to meet these needs. The group is made up of various stakeholders such as business people, educationalists and training providers, policy makers, public servants, members of the industrial promotion agencies and social partners. The objectives of the group are to:

- Identify, in a systematic way, the skills needs of different sectors and to advise on the actions needed to address them;

- Develop estimating techniques that will assist in anticipating future skills needs;

- Advise on the promotion of education/continuous training links with business at national and local levels;

- Consider strategic issues in developing partnerships between business and the education/continuous training sectors in meeting the skills needs of business; and

- Advise on how to improve the awareness of job seekers in sectors where there are demands for skills, of the qualifications required, and of how they can be obtained.

I.50 In terms of the overall quality of labour available in the Republic of Ireland, the Expert Group state that the proportion of students relative to the overall labour force is beginning to decrease, which will hamper their efforts to adapt to future changes in skills needs. Therefore there is a need to ensure that students are equipped with up-to-date and transferable skills.

I.51 The Expert Group on Future Skill Needs has identified a number of sectors that are currently experiencing skill shortages. In particular, they believe that attention should be given to the following five sectors:

Construction

I.52 In their publication *Prospects for 2002 and Beyond*, they state that the largest year on year rise of vacancies was in the Construction sector, where the incidence of vacancies almost doubled to 34% in 1999/00. On the other hand, the Expert Group on Future Skills Needs predicted that in the short term there would be an overall easing of labour shortages, as the demand for labour weakens considerably. Certain construction occupations may continue to experience labour shortages and one of two forthcoming reports by the Group will focus on this issue.

Manufacturing

I.53 The Expert Group also states in *Prospects for 2002 and Beyond* that in the manufacturing sector, over 50% of firms recorded at least one vacancy. Although a declining sector, manufacturing still commands much attention, and skills needs have to be tackled.

Information Technology

I.54 It is expected that the IT sector will experience a slow down (resulting from September 11th and the global economic downturn). However, it is envisaged that this will be short lived and that the sector will still continue to require large amounts of relevant skills.

Engineering

I.55 The engineering sector was also highlighted as an area facing a future mismatch between the supply and demand of skills. A study into this sector is due to be published in 2003.

Research and development

I.56 The Expert Group also cited R&D as an area where there will be a mismatch between the supply and demand of skills. In particular they stated that the mismatch is concentrated in Science and with people possessing PhDs. More specifically they highlighted physics, biology, and chemistry related skills as the areas under most threat. Currently, the Science Foundation of Ireland and the various Health Boards are trying to encourage persons from these sectors into a career in R&D.

All-island skills issues

I.57 While there is considerable work in monitoring and forecasting skills shortages in each jurisdiction, the linkages between these exercises are limited. As such it is difficult to assess, in any robust way, the skills pressures facing the 'all-island' economy as a whole. However, it is possible, in the case of those sectors where recent research has been conducted in both jurisdictions, to tease out some of the common issues.

I.58 It is suggested that the IT sector will recover from the current slow-down, which is expected to be short-lived. This, most likely, will lead to an increase in the demand for labour with the relevant skills in the future. With problems already expressed in relation to some particular skill-sets, more significant skills shortages could potentially be experienced in both jurisdictions.

I.59 A similar problem is evident in the engineering sectors as both jurisdictions have either found evidence of existing skill shortages or have estimated a future mismatch between supply and demand.

I.60 In terms of demand for construction, the research suggests that the island economy will experience a slow down. However with the rate of growth in recent years and the obvious incidence of vacancies in the South, there is likely to be continued shortages at certain occupational levels.

Consultation with sectoral bodies

I.61 The previous discussion highlights a number of sectors in both jurisdictions that are facing some degree of skill shortages. In order to explore this further, the study team undertook a series of consultations with the relevant industrial bodies and sectoral training organisations (see Table 6.1 for a list of those consulted). Consultations focused on a range of issues relating to the demand and supply of skills, and the transparency of qualifications (see Box 6.1 below for an overview of the key issues discussed). In addition the team also consulted with those organisations representing other sectors which were not specifically identified as experiencing skills shortages by either the Priority Skills Unit (Northern Ireland), or the Expert Group on Future Skill Needs (Republic of Ireland), but which nevertheless are important to the all-island economy. While this does not represent a thorough consultation exercise, which would have been outside the scope of this study, it provides some useful insights into the views of the business community. A summary of our findings from these consultations is presented in Table 6.2.

Table 6.1: Consultation list

Sector	Northern Ireland	Republic of Ireland
IT	Momentum; Software Training Council; and Engineering Training Council.	Information and Communication Technologies
Electrical engineering		Irish Engineering Enterprises Federation (IEEF) and The Engineering Industry Federation
Mechanical Engineering	Engineering Employers Federation	
Construction	Construction Employers Federation; and Construction Industry Training Board	Construction Industry Federation
Manufacturing	CBI / IBEC Joint Business Council	Irish Business and Employers Confederation (IBEC)
Tourism	Northern Ireland Hotels Federation; and Tourism and Training Trust	CERT
Finance	Northern Ireland Bankers Association	Bankers Federation
Health	Department of Health, Social Services and Public Safety	Health Service Agency
Textiles	Northern Ireland Textile & Apparel Association	IBEC – Irish Clothing and Textiles Association
Retail	Federation of the Retail licensed trade	

- Is the industry in general, experiencing skill shortages / recruitment difficulties at present?
- Has the industry been experiencing any problems or do you envisage any problems occurring with skill shortages in any specific area in the future?
- What type of qualifications do the employees in your industry generally have (academic / vocational / professional)?
- Is there much cross-border movement of labour in your industry?
- Is there a general understanding of what the equivalent qualifications are in Northern Ireland / Republic of Ireland?
- Would employers tend to recognise an equivalent qualification from Northern Ireland / Republic of Ireland?
- Would workers with these qualifications need to take more training or exams in order to work in Northern Ireland / Republic of Ireland?
- Would it be worthwhile having one awarding body to award qualifications, and therefore the [illegible] workers in Northern Ireland / Republic of Ireland?

I.62 The views expressed during the consultations revealed a lack of awareness in relation to qualifications on a cross-border basis. In many instances the consultees had only a general level of awareness of equivalent qualifications in the other jurisdiction. Many commented that they did not perceive there to be a significant lack of transparency, however this perception may reflect, to some extent, the lack of awareness of the specific difficulties experienced at the level of the individual business. Furthermore, the comments made include a number of significant generalisations that no doubt mask some of the complexities associated with qualification recognition. Table 6.2 provides a summary of views expressed during the consultations.

Table 6.2: Key findings from telephone consultations split by sector

Sector	Specific Issues	Recognition
IT	This sector is currently experiencing skill shortages and recruitment difficulties. It is obvious that in Northern Ireland the shortages being encountered are for experienced staff at all levels. In Republic of Ireland there is a general feeling that there may not be enough students in ICT or ICT-related courses to provide a sufficient supply of labour in the future. In terms of cross-border movement, there was evidence of flows from Northern Ireland to Republic of Ireland in previous years, but more recently the nature and extent of these movements is less obvious. There does not seem to be any formal linkages between training bodies from Northern Ireland and Republic of Ireland. With regards to educational attainment, most people in this sector require at least an IT or IT related degree.	There is a general understanding of what the equivalent qualifications are in both jurisdictions, especially among employers. In this case, workers who migrate between countries do not have to undergo any specific training or examinations to work.
Engineering	This sector was experiencing skill shortages and recruitment difficulties. As for the IT sector, the shortages being encountered by engineering employers were for experienced staff at all levels. However, recent redundancies in the sector have eased these problems. There is concern that if the industry grows further (perhaps from foreign direct investment) there will not be a sufficient supply of labour in the future. There is a feeling that there is less and less young people taking science in second and third level education. In terms of cross-border movement, again there was evidence of flows from Northern Ireland to Republic of Ireland in previous years. However, more recently it is less obvious if there is any significant movements in this sector. There are no formal linkages between the training bodies however there are some informal linkages, such as a major project in Dundalk in 2003. With regard to educational attainment, many people in this sector require at least an engineering degree. However Technicians, Tool Makers and CNC operators require City and Guilds, Diplomas, BTECs and NVQs at all levels (but particularly level 3).	Again there is a general understanding of the qualifications in both jurisdictions. In this case, workers who migrate between the two countries do not have to undergo any specific training or examinations to work (i.e. the Modern Apprenticeship in Northern Ireland equates to the National Craft Certificate in Republic of Ireland).
Construction	The Construction Employers Federation cited a recent survey in Northern Ireland which found that many employers described the supply of labour in this sector as unsatisfactory and that there was difficulty in recruiting. However for certain types of jobs, for example labourers, brick layers and joiners, the difficulty in recruiting had eased slightly in recent times. Nevertheless there are still some skill shortages present. In the Republic of Ireland, the consultations found that the industry has been experiencing skills shortages and recruitment difficulties over the past 10 years as employment has more or less doubled. Expectations for the industry are for a brief contraction in the coming years. However the demand and difficulties in recruitment for qualified workers will continue. The type of qualifications accepted in this sector in Northern Ireland (for the type of employees noted) are NVQs. The Construction Skills Register (CSR) accredits workers to different levels based on the NVQ system. The CSR card records all qualifications and health and safety training. The equivalent in the Republic of Ireland is the Safe Pass, awarded by FÁS.	There seems to be mutual recognition of qualifications in both Northern Ireland and the Republic of Ireland. In Republic of Ireland there is a growing demand for those with vocational qualifications, on top of which there is also a growing demand for school leavers with their Leaving Certificate.
Manufacturing	There seems to be some recruitment difficulties at present from a suggested mismatch between the supply and demand for labour. There seems to be a growing unwillingness to take up unskilled jobs in	There didn't seem to be much recognition between the two jurisdictions except in the

	manufacturing. There are problems in specific occupations as opposed to the sector. For example, problems have arose in general operative employment. In general it was thought that employment in manufacturing was still fairly high and training was perhaps required for the more high-tech sectors. There is a growing feeling that there needs to be greater numbers of people with degrees in the areas of science. Also cited as important were language and marketing skills.	case of degrees.
Tourism	Consultation revealed that it is well known that the sector is experiencing difficulties. Specifically, there are recruitment difficulties and skill shortages for kitchen staff (from kitchen hands to chefs to kitchen managers). Key skills cited during the course of the consultation were interpersonal, communication, team working, languages and a growing importance of basic IT skills. Both training bodies work closely together on cross-border arrangements and programmes that train management and offer best practice advice. In terms of qualifications, kitchen staff require recognised qualifications like NVQs. In Republic of Ireland most kitchen staff need to undertake the Certificate in Culinary Skills before working in a kitchen. At management level there are numerous college courses that award certificates, diplomas and degrees.	At present the degree of understanding of qualifications in Northern Ireland and the Republic of Ireland is low and as such views were expressed that there was not much cross-border movement. Concern was expressed that Irish employers do not understand the UK NVQ system. Although there is belief that the qualifications are similar and that the two jurisdictions are working ever increasingly closer to solve these issues.
Food	This sector does not seem to be experiencing any skill shortages at present. Available jobs are being taken up by foreign workers, and with the slowdown of the economy in Republic of Ireland, it is believed that there will be a sufficient supply of labour with the relevant skills in the future. The skills required in this industry range from basic butchery skills, management, and accountancy to marketing. Around 60 - 70% of the workforce is made up of operatives who do not require any qualifications.	There does not seem to be much awareness of qualifications in Northern Ireland and the Republic of Ireland. However this may be due to the fact that much of the labour demanded does not require specific qualifications.
Science	The general view expressed during the consultations was that the science sector always encounters skill shortages and recruitment difficulties, especially in times of growth. There seems to be cycle of skill shortages mapping the growth of the economy. At present the focus is on the shortage of bio-chemists, in particular, those with a first class honour degrees. Although it is difficult to forecast the supply of labour with relevant skills, reservations over whether there will be enough skills in the future were expressed. In general, workers in this sector tend to have qualifications at a degree level or above.	There seems to be a fair degree of recognition of qualifications between Northern Ireland and the Republic of Ireland, due to the high level of qualifications required. However Northern Ireland workers tend to be more academic-based as opposed to those in the Republic of Ireland who tend to be more industry-based.
Finance	There seems to be skill shortages and recruitment difficulties in the sector though these pressures have eased with the slow down in the Irish economy. Turnover of staff in the industry was cited at 40% per year. The key areas of skill shortages were in risk and return, valuation of assets and liabilities and lending decisions. However there was a belief that there will be a sufficient supply of labour in the future. Most qualifications required are finance or economic related degrees, although there are a large number with finance and economic related diplomas and certificates.	It is believed that there is sufficient understanding of qualifications from both Northern Ireland and the Republic of Ireland due to the tendency for them to be at or above degree level. The Institute of Bankers is an all-Ireland body that awards a number of further qualifications in the sector which improves cross-border movement and

		recognition.
Health	There is evidence of recruitment and retention difficulties in the sector. However a series of workforce planning initiatives (which are ongoing) in Northern Ireland aim to tackle these issues. In particular the industry is experiencing shortages of nurses, radiographers and speech and language specialists. In relation to the future, there is a belief that there are plenty of people willing to train in order to work in the sector, though provision of training needs to increase. Provision is increasing in the Republic of Ireland and the requirement of the Leaving Certificate for administration staff has been scrapped. Qualifications in the sector tend to be at least degree level, except for auxiliary staff which tend to require a low NVQ level qualifications in a health related subjects or Leaving Certificates.	There is an EC Directive that promotes mutual recognition of qualifications. However, for this to have effect, a worker needs to register with the relevant professional body.
Textiles	There are skill shortages at operative level, management level, basic IT and marketing. There is a belief that the skill needs of the sector are changing which is requiring workers to have some degree of basic IT skills. Shortages also seem to be geographical in nature with some areas having more problems than others. There is also concern that in relation to technicians, there are not enough young people taking the relevant NVQs, causing the average age of this type of worker to rise. In most cases workers do not require formal qualification and instead undergo training by the individual firms. However some operative levels (e.g. stitchers) require NVQ level 1 and 2, while some management will require NVQ level 3.	There was mixed reports over recognition of qualifications. However it was believed that there would not a problem over cross-border mobility.

VII Summary of findings and recommendations

I.63 This report presents the key findings from the study, which can be summarised as follows:

- There is clear support at European level for the recognition of academic and vocational qualifications between jurisdictions as reflected, for example, in the recent Copenhagen Declaration;

- In order to understand any potential qualifications mapping, it is essential to understand the administrative / organisational framework (i.e. the roles and responsibilities of the different organisations involved in education & training provision, the awarding of qualifications, and quality assurance). Our report provides a description of such organisations and the linkages between them. A key role for InterTradeIreland could be to improve the awareness of these organisations in each jurisdiction;

- The ability to conduct a formal North-South qualifications mapping exercise depends on there being clear qualifications frameworks *within* each jurisdiction;

- In Northern Ireland, the National Qualifications Framework (NQF) is based on the UK framework, and is maintained by the QCA. In contrast to other frameworks that have been developed internationally, the NQF does not use specific descriptors for each level (i.e. descriptors which detail the common features of qualifications at that level);

- In the Republic of Ireland the qualifications system is currently undergoing a period of change. An outline national framework of qualifications is expected to be produced in February 2003. However the National Qualifications Authority for Ireland has made significant progress to this end since their formation in 2001 in relation to, for example, the coverage of an NFQ for the Republic of Ireland, and the criteria by which the framework will be parameterised;

- Given that the NFQ for Ireland has yet to be finalised it would, in our view, be unwise to attempt to construct a formal North-South mapping exercise at this stage. However, once the Republic of Ireland framework has been established and become 'embedded' (by early 2003), such an exercise should be conducted as a matter of urgency, and the results disseminated widely;

- Notwithstanding the fact that a formal North-South mapping exercise cannot be conducted until the NFQ in the Republic of Ireland has been established, a number of informal or proxy mapping exercises do exist. These have generally been driven by the policy imperatives at

European level, discussed above, focused on facilitating the free flow of labour between member states. These existing mapping exercises provide some interesting comparisons and, in our view, should be used to supplement, or enhance the results of a formal mapping exercise when it is conducted;

- When conducting such an exercise, there are a number of key considerations which, in our view, should be borne in mind going forward:

1. **Clearly defined purpose:** The purpose of the mapping activity needs to be clearly defined. A key issue for InterTradeIreland is to ensure that those responsible for defining the purpose of, and undertaking the North-South mapping exercise are mindful that the results must make a practical improvement in the transparency of qualifications for businesses;

2. **Clear and transparent criteria:** Any mapping procedure must be based on clear and transparent criteria that are easily understood by the end users of the information produced by the mapping process. Such a set of criteria is needed to ensure that end users have confidence in the procedures being used;

3. **Unambiguous reporting:** Unambiguous reporting is essential. Information from the mapping process should be conveyed in as simple a form as possible. End users (i.e. businesses) may not have time to read lengthy descriptions. A single page table or diagram that acts as an aide-memoir should be one of the key outputs from the mapping process. Detailed information should also be made available to those who require it; and

4. **Dissemination of results:** The roles of the organizations disseminating the results of any mapping exercise need to be clearly defined. We would envisage that InterTradeIreland would play an important role in the dissemination of these results to the business community. Practically this could involve posting information or links on the InterTradeIreland website, and the publication / distribution of reference material. Furthermore, it may be appropriate to adopt a phased approach to release the results as they become available (i.e. in the first instance, the results in relation to levels in general, and then in relation to specific awards).

- There is evidence of skills shortages in a number of key sectors in both Northern Ireland and Republic of Ireland. As part of the current study, the study team conducted a consultation exercise with a number of industrial bodies, North and South, in order to identify the key issues facing the respective sectors, and whether or not the transferability of qualifications represented a key issue. Amongst the key findings from this exercise are the following:

1. Engineering and IT were identified as two sectors in which there was a relatively free flow of labour between jurisdictions, and also as sectors in which, particularly at Higher Education level, there was generally a strong mutual recognition of qualifications;

2. Tourism was identified as a sector in which, generally speaking, mutual understanding and recognition of qualifications on a North-South basis was relatively poor. This was in a context of the demand for labour and skills in the tourism sector remaining relatively buoyant. It may be appropriate to address individual qualifications related to this sectors early in the mapping process; and

3. Construction was identified as a sector in which the flow of labour between jurisdictions, particularly from North to South, had increased in recent years. Mutual recognition of qualifications was described as 'mixed'.

4. Similarly, there may be a case to map qualifications related to construction sooner rather than later.

Annex A: Description of qualification-related organisations in Northern Ireland

A description of some of the key organisations associated with the provision of education and training, the awarding of qualifications, and the quality assurance of qualifications in Northern Ireland is provided in the subsequent paragraphs.

Secondary and Further Education (FE) providers

There are three main strategic objectives for the FE Sector:

- to support regional economic development and, in particular, to provide the skills necessary for the knowledge-based economy;
- to increase participation and widen access to those previously under-represented in the sector; and,
- to improve the quality of provision and enhance standards of performance.

DEL draws on the services of the Department of Education's Education and Training Inspectorate for inspections of FE colleges in relation to the quality of teaching and learning. FE is defined in legislation as full-time and part-time education (other than Higher Education (HE) for persons over compulsory school age.

The Further Education (Northern Ireland) Order 1997 provided for the incorporation of colleges, the effect of incorporation being to remove colleges from the 5 Education and Library Boards' management. Northern Ireland's 16 colleges became free standing incorporated bodies on 1 April 1998. Responsibility for the management of colleges now rests with the 16 Governing Bodies. Colleges own the property and other assets they use, employ their own staff, and are responsible for all the services they require. The Principal or Director is also Accounting Officer for the college. DEL is responsible for the strategic planning and funding of the sector on a regional basis.

At present, there are 16 colleges. In 1990/00, there were around 24,000 full-time students and 65,000 part-time students enrolled on vocational courses. In addition, there are approximately 60,000 students on non-vocational courses which include adult basic education and a wide range of leisure time/hobby courses. The range of courses provided by colleges span from adult basic education, through a range of vocational and academic programmes at levels 2 and 3 to Higher Education programmes.

One of the most important contributions the FE sector makes to economic development relates to vocational education and training. The sector has witnessed an overall increase of almost 7% in total enrolments between 1997/98 and 2000/01. In the same period enrolments have risen sharply by over 54% in the six skill areas identified as areas of skills needs: computing; construction; electronics; hospitality, catering and tourism; manufacturing engineering and software engineering.

Universities and other Higher Education institutions

In Northern Irelands Higher Education (HE) is delivered, firstly, through three universities:

- Queen's University Belfast (QUB);
- University of Ulster (UU) which has campuses at Coleraine, Belfast, Londonderry and Jordanstown; and
- The Open University (OU), a UK-wide Distance Learning Centre which now offers its courses internationally.

Secondly, Stranmillis University College and St Mary's University College are both primarily teacher training colleges, although in recent years both have diversified their curricula to offer other degree courses. Thirdly, a number of Further Education Colleges, now offer HE courses.

The various institutions cater for about 55,000 students:

- Some 44,000 at the three Universities, roughly 20,000 each at QUB and UU and about 4,000 at the Open University;
- Roughly 1,000 each at Stranmills and St Mary's University Colleges; and
- 11,000 pursuing HE courses in FE Colleges.

At Post-Graduate level, world-class research and development is undertaken much of which brings major economic benefits, not only to Northern Ireland but internationally. The Universities have an excellent track record and have several research areas benchmarked in the upper echelons of the UK-wide Research Assessment Exercise[7] which regularly monitors University research performance.

[7] Examples include of these excellent research areas include:

- Electrical and Electronic Engineering, Mechanical, Aeronautical and Manufacturing Engineering and Physics at Queens University Belfast; and
- Biomedical Sciences, Built Environment and Law at University of Ulster.

At the University of Ulster one of the major areas of research strength lies in bioscience and technology. This has led to the formation of a spin-out company, UUTech Limited, which is making significant strides in technology transfer development.

Both Queen's and the University of Ulster are also combining their efforts to make a success of the Northern Ireland Science Park, a venture which aims to provide a mechanism for the commercialisation of the Northern Ireland research base. Practical steps are being undertaken to ensure this focus on Research and Development, and links with the world of business, are being developed. There has been substantial recent development in these areas and extra places in universities and colleges are being allocated to growth areas such as software development and engineering.

Assessment and Qualifications Alliance (AQA)

The Assessment and Qualifications Alliance (AQA) came into existence in April 2000 following the merger of the Associated Examining Board and the Northern Examinations and Assessment Board and is the largest of the three English unitary awarding bodies.

AQA offers a range of qualifications and services, including GCSE, GCE, GNVQ, VCE and Entry Level, which are studied by over three-quarters of a million students in a wide range of centres across the United Kingdom, including Northern Ireland.

EDEXCEL

Edexcel was the first of the three unitary awarding bodies to be established to offer both academic and vocational qualifications, following the Stafford Review of exam standards in 1995. They were formed in 1996 by the merger of the Business & Technology Education Council (BTEC)**,** the country's leading provider of vocational qualifications, and the University of London Examinations & Assessment Council (ULEAC)**,** one of the major exam boards for GCSEs and A levels. EDEXCEL offer a wide range of qualifications at the various levels including: GCSE; GCSE in vocational subjects; GCE; Advanced VCE; GNVQ; NVQ; Adult Literacy and Adult Numeracy qualifications at Entry levels, levels 1 & 2; Key skills; BTEC Firsts, Nationals, Higher Nationals and short courses.

Oxford Cambridge and RSA Examinations (OCR)

OCR's (Oxford Cambridge and RSA Examinations) purpose is to develop, promote and provide a flexible range of qualifications which recognise the achievements of learners through all the phases of life and work. OCR's complete range of high quality academic and vocational qualifications includes: AS and A Level; GNVQ, and Key Skills; GCSE; Certificate of Achievement; RSA 'Own Brand' schemes; NVQ. OCR work with QCA to ensure that the range of qualifications is as coherent as possible, without sacrificing their individual strengths. Support materials and comprehensive training programmes are available for all major qualifications.

City and Guilds

City and Guilds is the leading provider of vocational qualifications in the UK., and offers over 400 qualifications suitable for all levels of skill and ability in all occupational sectors from agriculture, catering and hairdressing to IT, management and plumbing. City and Guilds awards almost 50 per cent of all NVQs in the UK.

Northern Ireland Council for the Curriculum, Examinations and Assessment (CCEA)

CCEA is the Northern Ireland Council for the Curriculum, Examinations and Assessment. It was set up by government to provide advice on and support for what is taught in schools and colleges in Northern Ireland and how it is assessed. CCEA is also responsible for assessment of pupils at Key Stages 1, 2 and 3 and accreditation of Records of Achievement. CCEA conducts public examinations such as GCSE, GCE, Certificate of Education Achievement (CoEA) and Graded Objectives in Modern Languages (GOML) for students aged 16 to 19 and beyond. CCEA is also responsible for the regulation of GNVQs and vocational A levels in Northern Ireland.

CCEA's remit is set out in The Education (Northern Ireland) Order 1998. CCEA has a statutory responsibility to:

- Keep under review all aspects of the curriculum, examinations and assessment;
- Give advice to the Department of Education (Northern Ireland) about the curriculum, assessment, examinations and external qualifications;
- Publish and distribute information about the curriculum, assessment and examinations;
- Carry out consultation with the educational community in Northern Ireland about proposed changes to legislation governing the curriculum, examinations and assessment; and

- Conduct and moderate examinations and assessment, ensuring that standards are equivalent in these areas to other parts of the United Kingdom.

Sector Skills Development Agency

The Sector Skills Development Agency (SSDA) funds, supports and champions the new UK-wide network of influential employer-led Sector Skills Councils (SSCs). These SSCs are independent, UK wide organisations developed by groups of employers in industry or business sectors of economic or strategic significance. SSCs are employer-led and actively involve trade unions, professional bodies and other stakeholders in the sector. SSCs are licensed by the Secretary of State for Education and Skills, in consultation with Ministers in Scotland, Wales and Northern Ireland, to tackle the skills and productivity needs of their sector throughout the UK.

Each SSC will agree sector priorities and targets with its employers and partners to address four key goals:

- Reducing skills gaps and shortages;
- Improving productivity, business and public service performance;
- Increasing opportunities to boost the skills and productivity of everyone in the sector's workforce, including action on equal opportunities; and
- Improving learning supply, including apprenticeships, higher education and national occupational standards.

The development of the SSC is at quite and early stage, and the network is being pioneered by a small number of 'trailblazer SSCs', none of which is located in Northern Ireland.

Qualifications and Curriculum Authority (QCA)

The QCA is the national organisation responsible for the quality assurance of standards in education and training. They work with other stakeholders in the education system in the UK to maintain and develop the school curriculum and associated assessments, and to accredit and monitor qualifications in schools, colleges and at work.

The direct role of the QCA in Northern Ireland is narrower than that in England. However, the QCA does collaborate with other regulatory authorities in the devolved regions including the Council for the Curriculum, Examinations and Assessment in Northern Ireland.

Furthermore QCA in Northern Ireland has statutory powers to regulate NVQs in Northern Ireland. Statutory regulation of NVQs is used to safeguard the public interest in these awards, to ensure fairness for candidates and to maintain public confidence in NVQs. As part of its regulatory function QCA first accredits (approves) and then monitors NVQs against a set of criteria which governs how an NVQ is assessed, by whom and under what conditions.

The QCA also accredits qualifications into a national framework (discussed in the subsequent paragraphs). It keeps the 2,000 qualifications within the framework under review to ensure that they are all needed and are of high quality. Their regulatory work with about 150 awarding bodies is designed to ensure that their administration, marking and awarding procedures run smoothly.

Quality Assurance Agency for Higher Education (QAA)

The QAA was established in 1997 to provide an integrated quality assurance service for UK higher education, and is an independent body funded by subscriptions from universities and colleges of higher education, and through contracts with the main higher education funding bodies.

Its mission is to promote public confidence that quality of provision and standards of awards in higher education are being safeguarded and enhanced.

The core business of the QAA is to review the quality and standards of UK higher education. This involves auditing the way in which each university and college manages the overall quality and standards of its provision; and by reviewing academic standards and the quality of teaching and learning in each subject area. QAA reviews result in reports that are available to the public, on the organisation's web site (www.qaa.ac.uk). They also publish a *Code of practice for the assurance of academic quality and standards in higher education* (the *Code of practice*), the national frameworks for higher education qualifications, and statements of subject benchmark standards. All of these provide public information about UK higher education, and points of reference for QAA reviews.

Annex B: Description of qualification-related organisations in the Republic of Ireland

Schools, Colleges, and Institutes of Technology

Attendance at full-time education is compulsory for all children between six and sixteen years of age. Although children in the Republic of Ireland are not obliged to attend school until the age of six, almost all children begin school in the September following their fourth birthday. The general aims of primary education are:

- To enable the child to live a full life as a child and to realise his or her potential as a unique individual;
- To enable the child to develop as a social being through living and co-operating with others and so contribute to the good of society; and
- To prepare the child for further education and lifelong learning.

The second-level education sector comprises secondary, vocational, community and comprehensive schools. Secondary schools are privately owned and managed. The trustees of the majority of these schools are religious communities or Boards of Governors. Vocational schools are administered by Vocational Education Committees while community and comprehensive schools are managed by Boards of Management of differing compositions.

Second-level education consists of a three-year junior cycle followed by a two or three-year senior cycle. The Junior Certificate examination is taken on completion of a Junior Certificate course of three years duration. The principal objective of the Junior Cycle is for students to complete broad, balanced and coherent courses of study in a variety of curricular areas relevant to their own personal development and to allow them to achieve a level of competence in these courses which will enable them to proceed to senior cycle education.

A three-year Senior Cycle has been introduced as an option for second-level schools. One of the aims of the restructured Senior Cycle is to encourage students to continue in full-time education after the compulsory school leaving age by providing a range of programmes suited to their abilities, aptitudes and interests.

The Transition Year, which has been one of the major innovations in Irish education, provides an opportunity for students to experience a wide range of educational inputs and work experience.

The Leaving Certificate examination is held at the end of the Senior Cycle in post-primary schools. It is the terminal examination of post primary education. The Senior Cycle caters for pupils in the 15 to 18 year old age group. Students normally sit for the examination at the age of 17 or 18, after 5 or 6 years of post-primary education. Pupils following the established Leaving Certificate programme must take at least five subjects, including Irish.

The Leaving Certificate Vocational Programme (LCVP) can be described as a Leaving Certificate with a strong vocational dimension. The core of the LCVP includes the following elements which students must take:

- Two Leaving Certificate subjects to be chosen from one of the LCVP subject groupings;
- A Leaving Certificate Modern European Language or a Vocational Language Module;
- Mandatory Link Modules; and
- LCVP students must take at least five Leaving Certificate subjects – one of which must be Irish.

The Leaving Certificate Applied is a distinct, self-contained two-year Leaving Certificate programme aimed at preparing students for adult and working life. It is a person-centred programme involving a cross-curricular approach rather than a subject based structure. The framework of the Leaving Certificate Applied consists of a number of modules grouped under three general headings of General Education, Vocational Education, and Vocational Preparation.

The Republic of Ireland has thirteen Institutes of Technology which are an important regional resource for education, specialist skills development and technology capability. They are committed to providing R&D, technology transfer and innovation support services to business and industry in their regions. Each college has developed a range of programmes to encourage and facilitate co-operation with industry.

Training and Employment Authority (FAS)

FÁS the Training and Employment Authority, was established in January 1988, under the Labour Services Act 1987 to provide a wide range of services to the labour market in Republic of Ireland. Its functions are:

- Training and re-training;
- Designated apprenticeships;
- Recruitment service;
- Employment schemes;

- Placement and guidance services;
- Assistance to community groups;
- Advice for people returning to Republic of Ireland and those seeking employment elsewhere in the EU; and
- Consultancy and human resource related services, on a commercial basis, outside the State (through FÁS International Consulting Ltd.).

Their mission, as set out in the FÁS *Statement of Strategy 2002 - 2005* is to increase the employability, skills and mobility of job seekers and employees to meet labour market needs, thereby promoting competitiveness and social inclusion. FÁS provides a range of training and employment programmes, aimed at employers, employees and unemployed people. Expenditure in 2001 amounted to €821.4 million and their activities are funded by the Irish Government, the National Training Fund and the European Union.

The statutory functions of the organisation also include the collection and publication of information relating to the labour market and the provision, to the Minister, of information, reports, etc. on matters within FÁS remit.

FÁS is divided into 8 regions comprising 20 Training Centres and 62 Employment Offices.

CERT

CERT is the national body responsible for training and development in the Irish tourism and hospitality industry. Their mission is to foster the attainment of world class service throughout the industry by building capability. They seek to achieve this by adopting and promoting the principles of best practice. They provide a wide range of services to both industry clients and students of tourism and hospitality. These include:

- Tourism and Hospitality Skills Training;
- Continuous Professional Development;
- Company Development;
- Career Promotion;
- Strategic Research; and
- New Product Development.

CERTs services are provided directly through a network of regional CERT training centres and also by dedicated tourism and hospitality schools within the national education system. The company is governed by a Council, which is appointed by the Minister for Arts, Sport and Tourism.

Irish Agriculture and Food Development Authority (Teagasc)

Teagasc provides integrated research, advisory and training services for the agriculture and food industry in the Republic of Ireland. They are a semi-state organisation established under legislation enacted by the Irish government. A board of 11 members is appointed by the Minister for Agriculture and Food and has representatives from the farming organisations, the food industry, the universities, the Department of Agriculture, Food and Rural Development and Teagasc staff.

Being a client-based organisation Teagasc operates in partnership with all sectors of the agriculture and food industry and with rural development agencies. They have developed close alliances with research, advisory and training agencies throughout the world and are continuously seeking to expand their international contacts.

Around 75% of Teagasc's yearly budget comes from the Irish exchequer and EU funding with the balance generated from earned income. Some 40% of the budget is devoted to research with the remainder split half and half between advisory and training services.

Irish Sea Fisheries Board (BIM)

The Irish Sea Fisheries Board, or Bord Iascaigh Mhara (BIM), was established under the Sea Fisheries Act 1952 as the state agency with primary responsibility for developing the sea fishing and aquaculture industry. Its aim is to promote the sustainable development of the industry and its contribution to the national economy by stimulating investment, technological innovation, enterprise and growth. The industry is of particular significance to the economic development of the coastal regions of Republic of Ireland.

BIM works closely with fishermen, fish farmers, processors, marketers and the service sector to support the development of the industry from primary production stage through to marketing. Their approach is to focus on the growth opportunities in the sectors while seeking to alleviate constraints, which impede development. This is achieved by implementing a series of integrated development programmes providing advisory, financial, technical, marketing and training support. These programmes are organized through four divisions namely Aquaculture Development, Fisheries Development, Market Development and Marine Services.

BIM’s development programmes are funded mainly by the Exchequer, the European Union and the private sector, where appropriate.

Dublin Institute of Technology (DIT)

The Dublin Institute of Technology is a higher educational institution, providing full-time and part-time educational programmes across the whole spectrum of higher education. It is committed to the provision of research, product development and consultancy services for industry and society while continuing to have regard to the technological, commercial, social and cultural needs of the community it serves.

DIT became an autonomous university-level institution under the DIT Act, 1992. It provides third-level education to some 22,000 students making it the largest such establishment in Republic of Ireland. As such DIT plays a leading role in technological and business education in Republic of Ireland. Its technological strengths are centred in the faculties of Engineering, Science, Business, Tourism & Food and the Built Environment. It has also a substantial involvement in the area of Applied Arts with particular strengths in music, art & design, media, modern languages, legal studies and social science.

It is closely involved with the latest developments in technology in all areas, while maintaining a continuing commitment to industrial, economic and cultural development.

In addition to its teaching programmes, the Institute is strongly committed to research and development activities and has established a number of specialised units and campus companies in support of these. Members of staff of the Institute provide consultative and other advisory services relating to their specialised fields, throughout Republic of Ireland and internationally, through research and consultancy links which have been developed through EU and other programmes.

University Sector

There are seven universities in Republic of Ireland:

- University College Cork - National University of Ireland, Cork;
- University College Dublin, National University of Ireland, Dublin;
- National University of Ireland, Galway;
- National University of Ireland, Maynooth;
- The University of Dublin (Trinity College);
- The University of Limerick; and
- Dublin City University.

The universities are essentially concerned with undergraduate and post-graduate degree programmes together with basic and applied research. In recent years some universities have introduced semesterisation and modularisation of courses, giving greater flexibility to students.

Typically teaching at undergraduate level is by way of a programme of lectures supplemented by tutorials and, where appropriate, practical demonstration and laboratory work. Masters degrees are usually taken by course work, research work or some combination of both. Doctoral degrees are awarded on the basis of research.

Further Education and Training Awards Council (FETAC)

The Further Education, Training and Awards Council's mission is to make quality assured awards in accordance with national standards within the national framework, creating opportunities for all learners in further education and training to have their achievements recognised, and providing access to systematic progression pathways. FETAC's main functions include:

- **To make and promote Awards:** single statutory awarding body for further education and training. FETAC incorporates the certification work of BIM, FAS, NCVA, NTCB, and Teagasc;
- **To determine standards for Awards:** standards for awards determined by FETAC in partnership with education, training and industry;
- **To validate programmes:** programmes in public and privately funded education and training validated;
- **To monitor and evaluate the quality of programmes:** quality of programmes in public and private education and training monitored; and
- **To facilitate access transfer and progress:** FETAC awards will be placed within an emerging NFQ. This framework includes further and higher education and training awards. This will greatly extend opportunities for access, transfer and progression for all learners.

Higher Education and Training Awards Council

HETAC awards qualifications at all levels of higher education and training up to PhD level. HETAC's main functions include:

- Setting standards for higher education and training awards;
- Validation of higher education and training programmes;
- Monitoring of institutional quality assurance procedures;
- Delegation of awarding powers to recognised institutions;

- Ensuring that student assessment procedures are fair and consistent; and

- Ensuring that arrangements are in place in commercial education and training institutions to protect learners where programmes validated by HETAC cease to be provided.

HETAC (the Higher Education and Training Awards Council) was established by the Irish Government on 11 June 2001, under the Qualifications (Education and Training) Act 1999. HETAC is the qualifications awarding body for third-level educational and training institutions outside the university sector. It is the legal successor to the National Council for Educational Awards (NCEA). NCEA has played its part in the economic development of the country for more than a quarter of a century, and the demand for people with NCEA qualifications has grown dramatically. The status and value of NCEA qualifications is assured and in fact will continue to grow.

HETAC may delegate authority to make awards to Recognised Institutions under the Act. Recognised Institutions currently comprise the Institutes of Technology. In assuming the main functions of NCEA, HETAC will continue to take a modern, progressive approach to third-level education. While it will undertake the validation of programmes, and set and monitor standards, HETAC will take a more strategic view of quality assurance in higher education and training. It is also charged with ensuring that student assessment procedures within institutions are fair and consistent, and ensuring academic and financial protection for students in commercial educational institutions providing programmes validated by HETAC.

HETAC will also monitor the educational needs of the economy for all extra-university higher education and training bodies and institutions. The aim is to contribute to national economic prosperity by ensuring the supply of people with the right qualifications at the right time.

Higher Education Authority

The HEA is the planning and development body for higher education in Republic of Ireland. It was set up on an ad hoc basis in 1968, and was given statutory powers in the Higher Education Authority Act of 1971. The principal functions of the HEA are:

- to further the development of HE;
- to maintain a continuous review of the demand and need for Higher Education;
- to assist in the coordination of state investment in HE and to prepare proposals for such investment;
- to allocate among universities and designated institutions the grants voted by the Oireachtas; and
- to promote the attainment of equality of opportunity in HE and democratisation of HE.

NQAI

The NQAI was established in February 2001. The Authority itself has three principal objects:

- The establishment and maintenance of a framework of qualifications for the development, recognition and award of qualifications based on standards of knowledge, skill or competence to be acquired by learners;
- The establishment and promotion of the maintenance and improvement of the standards of awards of the further and higher education and training sector, other than in the existing universities; and
- The promotion and facilitation of access, transfer and progression throughout the span of education and training provision.

In effect the way that the Authority will undertake to meet these objects is two-fold:

- By establishing and maintaining a framework of qualifications which will facilitate the development of procedures for access, transfer and progression throughout education and training; and
- It will work closely with the new awards Councils on their validation, award making and quality assurance processes.

The first object of the Authority is to establish and maintain a framework of qualifications for the development, recognition and award of qualifications in the State, based on standards of knowledge, skill or competence to be acquired by learners. Related to this the Authority has the function of establishing the policies and criteria on which the framework of qualifications shall be based. It is important to note that the Authority is not an awarding body. A further key function of the Authority is to determine whether any particular programme of education and training is higher education and training, or further education and training, or whether the standard of knowledge, skill or competence to be acquired by learners for the purposes of awards is at the level of a further education and training award or a higher education and training award. Building on the framework, the Authority also has a number of other explicit functions in relation to liasing with bodies to facilitate recognition of international awards in Republic of Ireland and of Irish awards internationally.

The second object of the Authority is to establish and promote the maintenance and improvement of the standards of further education and training awards and higher education and training awards of the FETAC, HETAC and the Dublin Institute of Technology. This object in turn is linked to the function of the Authority to determine the procedures which the Councils need to follow in the performance of their functions and the Authority's review role in this regard. It is also linked to the quality assurance procedures of the Awards Councils and the quality assurance responsibilities of the Authority in relation to the Dublin Institute of Technology. Linked to this is the appeals role of the Authority in relation to validation refused or withdrawn, or delegation of authority refused or withdrawn by an awards council.

The third object of the Authority is to promote and facilitate access, transfer and progression. Building on this, the Authority has the function of determining the procedures to be implemented by providers of programmes of education and training for access, transfer and progression, and publishing these procedures. Under the terms of the 2001 Act, providers with programmes validated by either of the two Councils as well as the Dublin Institute of Technology are required to implement the procedures. The role of the Authority is also to facilitate and advise the universities in implementing these procedures and to review the implementation of the procedures by the universities, in consultation with the Higher Education Authority.

Under the 2001 Act, both the FETAC and the HETAC are independent bodies with their own functions. There are separate interdependent roles set out for the Authority and the awards Councils. The objects of the Act cannot be attained other than by co-operation between the three bodies and indeed, full involvement from a range of other stakeholders.

ANNEX C:

10-level indicators which form the basis of the Republic of Ireland NFQ

	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
Knowledge – *Breadth*	Elementary Knowledge	Knowledge that is narrow in range	Knowledge moderately broad in range	Broad range of knowledge	Broad range of knowledge	Specialised knowledge of a broad area	Specialised knowledge across a variety of areas	An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning	A systematic understanding of knowledge, at, or informed by, the forefront of a field of learning	A systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of a field of learning
Knowledge – *Kind*	Demonstrable by recognition or recall	Concrete in reference and basic in comprehension	Mainly concrete in reference and with some comprehension of relationship between knowledge elements	Mainly concrete in reference and with some elements of abstraction or theory	Some theoretical concepts and abstract thinking, with significant depth in some areas	Some theoretical concepts and abstract thinking, with significant underpinning theory	Recognition of limitations of current knowledge and familiarity with sources of new knowledge; integration of concepts across a variety of areas	Detailed knowledge and understanding in one or more specialised areas, some of it at the current boundaries of the field(s)	A critical awareness of current problems and/or new insights, generally informed by the forefront of a field of learning	The creation and interpretation of new knowledge, through original research, or other advanced scholarship of a quality to satisfy review by peers
Know-how and skill – *Range*	Demonstrate basic practical skills, and carry out directed activity using basic tools.	Demonstrate limited range of basic practical skills, including the use of relevant tools	Demonstrate a limited range of practical and cognitive skills and tools	Demonstrate a moderate range of practical and cognitive skills and tools	Demonstrate a broad range of specialised skills and tolls	Demonstrate comprehensive range of specialised skills and tools	Demonstrate specialised technical, creative or conceptual skills and tools across an area of study	Demonstrate mastery of a complex and specialised area of skills and tools; use and modify advanced skills and tools to conduct closely guided research, professional or advance technical activity	Demonstrate a range of standard and specialised research or equivalent tools and techniques of enquiry	Demonstrate a significant range of the principle skills, techniques, tools, practices and/or materials which are associated with a field of learning, develop new skills, techniques, tools, practices and/or materials
Know-how and skill – *Selectivity*	Perform processes that are repetitive and predictable	Perform a sequence of routine tasks given clear direction	Select from a limited range of varied procedures and apply known solutions to a limited range of predictable problems	Select from a range of procedures and apply known solutions to a variety of predictable problems	Evaluate and use information to plan develop investigative strategies and to determine solutions to varied unfamiliar problems	Formulate responses to well defined abstract problems	Exercise appropriate judgement in planning, design, technical and/or supervisory functions related to products, services, operations or processes	Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing	Select from complex and advanced skills across a field of learning, develop new skills to a high level, including novel and emerging techniques	Respond to abstract problems that expand and redefine existing procedural knowledge
Competence – *Context*	Act in closely defined and highly structured contexts	Act in a limited range for predictable and structured contexts	Act within a limited range of contexts	Act in familiar and unfamiliar contexts	Act in a range of varied and specific contexts, taking responsibility for the nature an quality of outputs; identify and apply skill and knowledge to a wide variety of contexts	Act in a range of varied and specific contexts involving creative and non routine activities; transfer and apply theoretical concepts and/or technical or creative skills to a range of contexts	Utilise diagnostic and creative skills in a range of functions in a wide variety of contexts	Use advanced skills to conduct research or advanced technical or professional activity, accepting accountability for all related decision making, transfer and apply diagnostic and creative skills in a range of contexts	Act in a wide and often unpredictable variety of professional levels and ill defined contexts	Exercise personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent contexts
Competence – *Role*	Act in a limited range of roles	Act in a range of roles under direction	Act under direction with limited autonomy; function within familiar, homogeneous groups	Act with considerable amount of responsibility and autonomy	Exercise some initiative and independence in carrying out defined activities; join and function within multiple complex and heterogeneous groups	Exercise substantial personally autonomy and often take responsibility for the work of others and/or for the allocation of resources; form and function within multiple, complex and heterogeneous groups	Accept accountability for determining and achieving personal and/or group outcomes, take significant or supervisory responsibility for the work of others in defined areas of work	Act effectively under guidance in a peer relationship with qualified practitioners, lead multiple complex and heterogeneous groups	Take significant responsibility for the work of individuals and groups, lead and initiate activity	Communicate results of research and innovation to peers, engage in critical dialogue, lead and originate complex social processes
Competence – *Learning to Learn*	Learn to sequence learning tasks; learn to access and use a range of learning resources	Learn to learn in a disciplined manner in a well structured and supervised environment	Learn to learn within a managed environment	Learn to take responsibility for own learning within a supervised environment	Learn to take responsibility for own learning within a managed environment	Learn to evaluate own learnings and identify needs within a structured learning environment; assist others in identifying learning needs	Take initiative to identify and address learning needs and interact effectively in a learning group	Learn to act in variable and unfamiliar learning contexts. Learn to manage learning tasks independently, professionally and ethically	Learn to self evaluate and take responsible for continuing academic/professional development	Learn to critique the broader implications of applying knowledge to particular contexts
Competence – *Insight*	Begin to demonstrate awareness of independent role for self	Demonstrate awareness of independent role for self	Assumed limited responsibility for consistency of self understanding and behaviour	Assume partial responsibility for consistency of self understanding and behaviour	Assume full responsibility for consistency of self understanding and behaviour	Express in internalised, person world view, reflecting engagement with others	Express an internalised, personal world view, manifesting solidarity with others	Express a comprehensive, internalised, personal world view manifesting solidarity with others	Scrutinise and reflect on social norms and relationships and act to change them	Scrutinise and reflect on social norms and relationships and lead action to change then

Source: http://www.nqai.ie/levelindicators.pdf

ANNEX D:
Description of ISCED-97 levels, classification criteria, and sub-categories

O	PRE-PRIMARY LEVEL OF EDUCATION	Main Criteria	Auxiliary criteria		Sub-categories	
	Initial stage of organised instruction, designed primarily to introduce very young children to a school-type environment.	Should be centre or school based, be designed to meet the educational and development needs of children at least 3 years of age, and have staff that are adequately trained (i.e. qualified to provide an educational programme for the children).	Pedagogical qualifications for the teaching staff; implementation of a curriculum with educational elements.			
1	**PRIMARY LEVEL OF EDUCATION**	**Main Criteria**	**Auxiliary criteria**			
	Normally designed to give students a sound basic education in reading, writing and mathematics.	Beginning of systematic studies characteristic of primary education, e.g. reading, writing and mathematics. Entry into the nationally designated primary institutions or programmes. The commencement of reading activities alone is not a sufficient criteria for classification of an education programmes at ISCED 1.	In countries where the age of compulsory attendance (or at least the age at which virtually all students begin their education) comes after the beginning of systematic study in the subjects noted, the first year of compulsory attendance should be used to determine the boundary between ISCED 0 and ISCED 1.			

2	LOWER SECONDARY LEVEL OF EDUCATION	Main Criteria	Auxiliary criteria		Destination for which the programmes have been designed to prepare students		Programme orientation
	The lower secondary level of education generally continues the basic programmes of the primary level, although teaching is typically more subject-focused, often employing more specialised teachers who conduct classes in their field of specialisation.	Programmes at the start of Level 2 should correspond to the point where programmes are beginning to be organised in a more subject-oriented pattern, using more specialised teachers conducting classes in their field of specialisation. If this organisational transition point does not correspond to a natural split in the boundaries between national educational programmes, then programmes should be split at the point where national programmes begin to reflect this organisational change.	If there is no clear break-point for this organisational change, however, then countries should artificially split national programmes into ISCED 1 and 2 at the end of 6 years of primary education. In countries with no system break between lower secondary and upper secondary education, and where lower secondary education lasts for more than 3 years, only the first 3 years following primary education should be counted as lower secondary education.	**A**	Programmes designed to prepare students for direct access to Level 3 in a sequence which would ultimately lead to tertiary education, that is entrance to ISCED 3A or 3B.	**1**	Education which is not designed explicitly to prepared participants for a specific class of occupations or trades or for entry into further vocational/technical education programmes. Less than 25% of the programme content is vocational or technical.
				B	Programmes designed to prepare students for direct access to programmes at Level 3C.	**2**	Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. It does not lead to a labour-market relevant qualification. Content is at least 25% vocational or technical.
				C	Programmes primarily designed for direct access to the labour market at the end of this level (sometimes referred to as "terminal" programmes).	**3**	Education which prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour market relevant vocational qualification.

3	UPPER SECONDARY LEVEL OF EDUCATION	Main Criteria	Modular programmes		Destination for which the programmes have been designed to prepare students		Programme orientation
	The final stage of secondary education in most OECD countries. Instruction is often more organised along subject matter lines than at ISCED Level 2 and teachers typically need to have a higher level, or more subject specific, qualification than at ISCED 2. There are substantial differences in the typical duration of ISCED 3 programmes both across and between countries, typically ranging from 2 to 5 years of schooling.	National boundaries between lower secondary and upper secondary education should be the dominant factor for splitting Levels 2 and 3. Admission into educational programmes usually requires the completion of ISCED 2 for admission, or a combination of basic education and life experience that demonstrates the ability to handle ISCED 3 subject matter.	An educational qualification is earned in a modular programme by combining blocks of courses, or modules, into a programme meeting specific curricular requirements. A single module, however, may not have a specific educational or labour market destination or a particular programme orientation. Modular programmes should be classified at Level "3" only, without reference to the educational or labour market destination of the programme.	**A**	ISCED 3A: programmes at Level 3 designed to provide direct access to ISCED 5A.	**1**	Education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational/technical education programmes. Less than 25% of the programme content is vocational or technical.
				B	ISCED 3B: programmes at Level 3 designed to provide direct access to ISCED 5B.	**2**	Education mainly designed as an introduction to the world of work and as preparation for further vocational or technical education. It does not lead to a labour market relevant qualification. Content is at least 25% vocational or technical.
				C	ISCED 3C: programmes at Level 3 lead directly to labour market, ISCED 4 programmes or other ISCED 3 programmes.	**3**	Education which prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour market, relevant vocational qualification.

4	POST SECONDARY NON-TERTIARY	Main Criteria	Types of programmes that can fit into Level 4		Destination for which the programmes have been designed to prepare students		Programme orientation
	These programmes straddle the boundary between upper secondary and post secondary education from an international point of view, even though they might clearly be considered as upper secondary or post secondary programmes in a national context. They are often not significantly more advanced than programmes at ISCED 3 but they serve to broaden the knowledge of participants who have already completed at programme at Level 3. The students are typically older than those in ISCED 3 programmes.	Students entering ISCED 4 programmes will typically have completed ISCED 3. Programme duration: ISCED 4 programmes typically have a full time equivalent duration of between 6 months and 2 years.	The first type are short vocational programmes where either the content is not considered "tertiary" in many OECD countries or the programme did not meet the duration requirement for ISCED 5B – at least 2 years FTE since the start of Level 5. These programmes are often designed for students who have completed Level 3, although a formal ISCED Level 3 qualification may not be required for entry. The second type of programmes are nationally considered as upper secondary programmes, even though entrants to these programmes will have typically already completed another upper secondary programme (i.e. second cycle programmes).	**A**	Programmes at Level 4, designed to provide direct access to ISCED 5A.	**1**	Education which is not designed explicitly to prepare participants for a specific class of occupations or trades or for entry into further vocational/technical education programmes. Less than 25% of the programme content is vocational or technical.
				B	Programmes at Level 4, designed to provide direct access to ISCED 5B.	**2**	Education mainly designed as an introduction to the work of work and as preparation for further vocational or technical education. It does not lea to a labour market relevant qualification. Content is at least 25% vocational or technical.
				C	Programmes at Level 4 not designed to lead directly to ISCED 5A or 5B. these programmes lead directly to labour market or other ISCED 4 programmes.	**3**	Education which prepares participants for direct entry, without further training, into specific occupations. Successful completion of such programmes leads to a labour market relevant vocational qualification.

5	FIRST STAGE OF TERTIARY EDUCATION	Classification criteria for level and sub-categories (5A and 5B)			Cumulative theoretical duration of tertiary		Position in the national degree and qualifications structure
	ISCED 5 programmes have an educational content more advanced than those offered at Levels 3 and 4.	Entry to these programmes normally requires the successful completion of ISCED Level 3A or 3B or a similar qualification at ISCED Level 4A or 4B.					
5A	ISCED 5A programmes that are largely theoretically based and are intended to provide sufficient qualifications for gaining entry into advanced research programmes and professions with high skills requirements.	The minimum cumulative theoretical duration (at tertiary level) is of three years (FTE). The faculty must have advanced research credentials. Completion of a research project or thesis may be involved.	The programmes provide the level of education required for entry into a profession with high skills requirements or an advanced research programme.	**A**	Duration categories: Medium: 3 to less than 5 years Long: 5 to 6 years Very Long: more than 6 years	**A**	Categories: Intermediate, First, Second, Third and further.
5B	ISCED 5B programmes that are generally more practical / technical / occupationally specific than ISCED 5A programmes.	Programmes are more practically oriented and occupationally specific than programmes at ISCED 5A and they do not prepare students for direct access to advanced research programmes. They have a minimum of two years' full time equivalent duration.	The programme content is typically designed to prepare students to enter a particular occupation.	**B**	Duration categories: Short: 2 to less than 3 years Medium: 3 to less than 5 years Long: 5 to 6 years Very Long: more than 6 years	**B**	Categories: Intermediate, First, Second, Third and further.
6	**SECOND STAGE OF TERTIARY EDUCATION (LEADING TO AN ADVANCED RESEARCH QUALIFICATION)**						
	This level is reserved for tertiary programmes that lead to the award of an advanced research qualification. The programmes are devoted to advanced study and original research.	The level requires the submission of a thesis or dissertation of publishable quality that is the product or original research and represents a significant contribution to knowledge. It is not solely based on course work.	It prepares recipients for faculty posts in institutions offering ISCED 5A programmes, as well as research posts in government and industry.				

Source: OECD, *Education at a glance – OECD indicators 2001*