PART I

TECHNICAL ASPECTS OF DESIGNING AND REDESIGNING PROGRAMMES/AWARDS FOR INCLUSION IN THE NATIONAL FRAMEWORK OF QUALIFICATION (NFQ)

PART 1 CONTENTS

TECHNICAL ASPECTS OF DESIGNING AND REDESIGNING PROGRAMMES / AWARDS FOR INCLUSION IN THE NATIONAL FRAMEWORK OF QUALIFICATIONS (NFQ)

ABSTRACT

This first part of the university sector Framework Implementation Network (FIN) report addresses some of the technical aspects that are associated with designing new or redesigning existing[1] programmes for inclusion in the National Framework of Qualifications (referred to as 'the Framework' or the 'NFQ' in the remainder of this document), including level indicators, major and non-major award-types, award-type descriptors, and credit allocation. It addresses learning outcomes mainly in terms of how they, as a construct, contribute to the formation of a programme, and the importance of designing appropriate teaching, learning and assessment methods (these topics are picked up in greater detail in sections 2 and 3 of this report). The essential linkage of the Framework with quality assurance activities is emphasised. The relationship of the Irish Framework with the Framework for Qualifications of the European Higher Education Area, more commonly referred to as the 'Bologna Framework', and the European Qualifications Framework (EQF) is also examined. Web links to key references and language, and further sources of information, are included within the text and at the end of each topic.

INTRODUCTION

Drawing on the experience of academics and administrators, and those supporting teaching and learning across higher education institutions, this opening section of the report aims: to provide some guidance for addressing the challenges presented by the Framework as they relate to the design or redesign of programmes; identify the common characteristics of programmes that are recognised through the Framework; compile, for ease of reference, the technical information required when designing or redesigning programmes to be included in the Framework; and, consider how the Framework can be used sensibly as a benchmarking tool that aids consistency and the recognition of qualifications. It also recounts, and attempts to respond to, some of the questions that have been posed by higher education practitioners in the course of designing and adapting programmes for inclusion in the NFQ.

Programmes are designed and updated in line with local, national and international developments and the existence of the Framework does not make this process any less dynamic. An ongoing dialogue will be required within and across higher education institutions regarding the most effective means of implementing the Framework in this environment. The university sector Framework Implementation Network's working group on the technical aspects of designing programmes for inclusion in the Framework, hopes that this opening section will contribute to the important discussions to be had in this regard in the coming months and years amongst and between academics and administrators.

A NOTE ON LANGUAGE

This first section of the report uses the words 'programme' and 'award' throughout. In the majority of cases a programme delivered by a university, or by a linked college in which it makes awards, is also the award that the learner receives on its successful completion, e.g., a learner who undertakes a BSc (Hons) Government programme is also awarded a BSc (Hons) Government by the university, having successfully completed the programme. In this regard, the words 'programme' and 'award' are used in this section interchangeably.

[1] The intention of this section is to provide assistance for those who are designing new programmes but also for those who are redesigning or adapting existing programmes. The latter occurs where a programme was written prior to the introduction of the Framework, learning outcomes, credit etc. and now needs to be rearticulated in these terms. In some cases the programme designer may determine that an extensive redesign is required, in other instances the level of adaption needed may be less. In either case the process will have similar aspects to the design of new programmes but the process may be different. The working group has been cognisant of these differing circumstances and has sought to reflect them within the following sections.

SECTION A: NFQ ARCHITECTURE AND THE CHARACTERISTICS OF HIGHER EDUCATION PROGRAMMES THAT IT RECOGNISES

AN OVERVIEW OF THE ARCHITECTURE OF THE FRAMEWORK

The Qualifications (Education and Training) Act 1999 first articulated, in a national context, the requirement to develop a qualifications framework based on outcomes of knowledge, skill and competence. The Framework was primarily established to provide a reference point to compare and contrast qualifications for the purposes of easing access and progression arrangements for the learner and increasing the recognition of awards; providing a means of recognising varying sizes of learning; and, reinforcing and supporting the national policy approach towards the creation of a lifelong learning society. The concept of lifelong learning recognises that learning takes place in formal, non-formal and informal settings that include the workplace, involvement in social and community activities, and learning through life experience generally. A major objective of the Framework is to enable the recognition of these learning achievements, to support the development of alternative pathways to qualifications (or awards), and to promote the recognition of prior learning.

The National Qualifications Authority of Ireland (NQAI) set out the architecture of the Framework in 2003 in its documents Policies and Criteria for the Establishment of the National Framework of Qualifications and Determinations for a National Framework of Qualifications. The essential elements are set out below:

- The Framework has ten levels, which incorporate schools, further and higher education and training qualifications. A representation of these levels through a 'fan diagram' is available in appendix A1.
- There are overarching level indicators at each level of the Framework with associated sub-strands of knowledge, skill and competence appropriate to the achievement of an award at each of these levels. These indicators are expressed in terms of learning outcomes and are included in appendix A2. Major awards at each level are further defined through major award-type descriptors; those relating to higher education are included in appendix A3. In the universities, major award-type descriptors are the reference point for developing learning outcomes at the programme and module level of Major awards. Level indicators are the reference level for developing programme and module learning outcomes for non-major awards.[2]
- There are two overall types of award in the Framework: Major awards and Non-Major awards.
- Major awards have a larger volume and breadth associated with them than non-major awards. There are currently 16 major award-types included across the ten levels of the Framework.
- There are three classes of non-major award: minor, special purpose and supplemental. The award-type descriptors for these classes of award are included in appendix A4; the descriptors are broad in nature in order to be able to incorporate a wide range and variation of programme provision. These awards capture smaller or more narrow pieces of learning and are described by the NQAI as follows:
  - *Minor awards* recognise partial completion of the outcomes of a Major Award
  - *Supplemental awards* recognise learning that is additional to a Major Award
  - *Special purpose awards* recognise relatively narrow or purpose-specific achievement

Therefore, minor awards and supplemental awards always have a relationship with at least one major award, whilst a special-purpose award may share some outcomes with a major award but can also be a stand-alone award.

- Further education and training awards are made at levels 1-6 of the Framework, higher education and training awards are made from levels 6-10

[2] The Higher Education and Training Awards Council (HETAC) has developed standards in a number of fields of learning which have evolved from the Framework's generic major award-type descriptors and are referred to by its providers and by the Institutes of Technology.

- Awards included in the Framework are expected to indicate the access, transfer and progression arrangements (ATP) associated with them (see Access, Transfer and Progression and Credit, p. 7)
- Awards recognised through the Framework are subject to quality assurance processes (see Quality Assurance, p. 8).
- At levels 6-10 of the NFQ there are 7 major award-types that apply to the design of higher education and training awards, they are:

Level 6:	Higher Certificate
Level 7:	Ordinary Bachelor Degree
Level 8:	Honours Bachelor Degree Higher Diploma
Level 9:	Masters Degree Postgraduate Diploma
Level 10:	Doctorate

KNOWLEDGE, SKILL AND COMPETENCE AND ASSOCIATED SUB-STRANDS OF THE NFQ

The 2003 NQAI document *Policies and Criteria for the Establishment of the National Framework of Qualifications* sets out further information on the nature of the knowledge, skill and competence outcomes, and the associated sub-stands, upon which the Framework is constructed. The relevant section has been reproduced in italics below and provides useful guidance on the application of these concepts to the design of programme and module learning outcomes, a topic that is further elaborated upon in section 2 of this report:

Division of knowledge, skill and competence into sub-strands [3]

The Authority has determined that there are three general strands of learning outcome that will be used in setting standards. These strands are knowledge, know-how and skill, and competence. It is necessary to analyse the learning outcomes within these strands more fully. A number of substrands have been identified within these main strands that can be considered as the component structures of the three kinds of learning outcome. They identify the sources of order within the kinds of learning outcomes associated with awards at the various levels of the Framework. The substrands are based on the concepts introduced in the understandings of knowledge, skill and competence.

The main strands of learning outcome are divided into sub-strands as follows:

- *knowledge*
- *breadth*
- *kind*
- *know-how and skill*
- *range*
- *selectivity*
- *competence*
- *context*
- *role*
- *learning to learn*
- *insight*

[3] Policies and Criteria for the Establishment of the National Framework of Qualifications National Qualifications Authority of Ireland (2003) pgs 20-25.

The sub-strands can be summarised as aiming to answer the following questions

- *What nature or quality of knowing has the learner engaged in?*
- *How extensive are the physical, intellectual, social and other skills demonstrated by the learner?*
- *How complicated are the problems that a learner can tackle using the skills acquired and how does a learner tackle them?*
- *In what contexts is a learner able to apply his/her knowledge and skills?*
- *How much responsibility can the learner take, personally and in groups, for the application of his/her knowledge and skills?*
- *To what extent can the learner identify the gaps in his/her learning and take steps to fill those gaps?*
- *How far has the learner integrated the intellectual, emotional, physical and moral aspects of his/her learning into his/her self-identity and interaction with others?*

Knowledge – breadth

Knowledge outcomes are associated with facts and concepts; that is, they refer to knowledge of, or about, something. The more diverse, complex and varied the facts and concepts, the greater the breadth of knowledge and this is a matter of level. Breadth is be distinguished from the number of different facts and concepts learned, which relates to volume.

Knowledge – kind

The representation of facts and concepts, including ideas, events or happenings, is cumulative. The more facts and concepts are layered on top of each other, and draw successively upon each other to construct meaning, the higher the level of learning. This process is typically associated with progressively greater abstraction from concrete phenomena into theory.

Know-how and skill – range

Skills, in both their execution and the demonstration of underpinning procedural knowledge, encompass the use of many different kinds of tool. 'Tool' refers to any device or process that facilitates individuals having some effect on their physical, informational or social environment. Tools include cognitive and social processes as well as physical implements. Tools, and the skills to use them, range from commonplace or familiar to novel or newly-invented. The sheer number of skills acquired is a matter of volume, rather than of level. The diversity of skills is a feature of this strand that contributes to differentiation in level. The completeness of the set of skills (and associated know how) in respect of an area of activity is another feature that helps indicate the level.

Know-how and skill – selectivity

The performance of tasks depends on the learner having an appropriate understanding of the environment in which the tasks are performed and being aware of his/her own ability and limitations, while at the same time being able to correctly judge the fit between the demands and ability. Whereas the range of know-how and skill refers to what a learner can do, selectivity (which might also be called procedural responsiveness) refers to the judgement that the learner exercises in carrying out procedures, through selecting from the range of know-how and skills available to him/her, in accordance with his/her appraisal of the demands of the task.

Competence – context

Human situations, whether occupational or general social and civic ones, supply the context within which knowledge and skill are deployed for practical purposes. Such situations range in complexity and hence in the demands they place upon the person acting in them. Highly defined and structured situations or contexts constrain the behaviour of the individual and require lower levels of learning. The range of responses required, and hence the extent to which a broader range or higher level of knowledge and skill have to be drawn upon also depends on how predictable the context is. Acting effectively and autonomously in complex, ill-defined and unpredictable situations or contexts requires higher levels of learning.

Competence – role

For many purposes, joining and functioning in various kinds of group is a key component in putting knowledge and skill to effective use. Joining a group successfully requires individuals to adopt appropriate roles within the group. This requires the application of social skills and an understanding of the tasks of the

group. Higher levels of competence are associated with playing multiple roles as well as with roles requiring leadership, initiative and autonomy. Higher competence is also associated with participation in more complex and internally diverse groups.

Competence – learning to learn

This strand encompasses the extent to which an individual can recognise and acknowledge the limitations of his/her current knowledge, skill and competence and plan to transcend these limitations through further learning. Learning to learn is the ability to observe and participate in new experiences and to extract and retain meaning from these experiences. While drawing on other aspects of knowledge, skill and competence, this substrand places an emphasis on the relationship of the learner to his/her own learning processes. This provides a basis for abstraction and generalisation that, in principle, facilitates regarding this as a separate sub-strand of competence.

Competence – insight

Insight refers to ability to engage in increasingly complex understanding and consciousness, both internally and externally, through the process of reflection on experience. Insight involves the integration of the other strands of knowledge, skill and competence with the learner's attitudes, motivation, values, beliefs, cognitive style and personality. This integration is made clear in the learners' mode of interaction with social and cultural structures of his/her community and society, while also being an individual cognitive phenomenon. A learner's self understanding develops through evaluating the feedback received from the general environment, particularly other people, and is essential to acting in the world in a manner that is increasingly autonomous.

Status of the sub-strands

Not all the sub-strands are equally familiar to current users of awards. The sub-strands within knowledge and know-how and skill have long formed the basis for awards. Context and role competence are familiar for users of some types of award. The competence of learning to learn makes explicit, as outcomes, certain kinds of learning that would previously have been considered as properties of programmes and, as such, are bound up in the learning process, rather than elements to be explicitly certified in awards. Insight is perhaps the most innovative sub-strand. It is not clear to what extent this sub-strand has been taken up as an explicit objective of education and training programmes or incorporated in the design of awards. There are considerable difficulties in devising appropriate methods for assessing the attainment of such outcomes. Nevertheless, it seems desirable to make provision for such outcomes within the Framework. It is likely that this substrand will need further refinement as education and training practice and associated awarding practice develops. This sub-strand will need to be developed iteratively in association with practitioners.

ACCESS, TRANSFER AND PROGRESSION AND CREDIT

One of the main aims of the Framework, and a statutory function of the NQAI, is to improve access, transfer and progression arrangements for the learner across education and training. The allocation of credit to individual modules and programmes as a whole is one means of supporting this objective.

The volume associated with higher education and training awards is expressed in terms of the allocation of European Credit Transfer System (ECTS) compatible credit. In 2004, the NQAI published the document Principles and Operational Guidelines for the Implementation of a National Approach to Credit in Irish Higher Education and Training. Developed in conjunction with representatives from higher education and training, these principles and guidelines set out the range of credits associated with the higher education and training major award-types in the Framework apart from the research Master's Degree and the taught or research Doctoral Degree [4] (these are similarly not associated with credit in the Bologna Framework *see section C, pg 32)*. The document also indicates the national agreement that one credit notionally equates to 20-30 hours of student effort.

CREDIT AND MAJOR AWARD-TYPES	
Level 6 Higher Certificate	120 credits
Level 7 Ordinary Bachelor Degree	180 credits
Level 8 Honours Bachelor Degree	180-240 credits
Level 8 Higher Diploma	60 credits
Level 9 Postgraduate Diploma	60 credits
Level 9 Masters Degree (Taught)	60-120 credits

In January 2006, the universities and the NQAI also agreed the credit ranges and associated qualification titles for non-major awards in the university sector. It was decided that the title Certificate would be used for non-major awards up to but not including 60 credits, and that the title Diploma would be used for non-major awards of 60 credits or more.

Recognition of prior learning (RPL) is becoming an increasingly important aspect of access, transfer and progression arrangements and of the drive towards establishing a lifelong learning society. The NQAI has published Principles and Operational Guidelines for the Recognition of Prior Learning in Further and Higher Education and Training. These principles and guidelines include the recognition of prior experiential and/or accredited learning for access to a programme, advanced access to a programme and for a full award. The role that RPL might play in admission arrangements should be considered and documented at the programme design stage. If redesigning a programme, it is an equally suitable time to review the programme entry, exit and progression arrangements.

Increasing use of the Diploma Supplement has also aided recognition and progression internationally. A Europass Diploma Supplement is issued to graduates of higher education institutions along with their degree or diploma. It provides additional information on a graduates award, including the level of the award on the National Framework of Qualifications (NFQ). The Diploma Supplement also contains information on the referencing of the Irish NFQ to the Bologna and EQF Frameworks (see p. 31).

[4] It should be noted that while nationally no credit has been assigned to the research Master's Degree or the research Doctoral Degree awards, a number of universities have allocated credit within their institutions to these qualifications.

QUALITY ASSURANCE

The universities have primary responsibility for their own quality assurance systems. They established the Irish Universities Quality Board (IUQB, www.iuqb.ie) in 2002 to organise the periodic review of the effectiveness of the quality assurance procedures in place in the universities as required by Section 35(4) of the Universities Act, 1997. The Higher Education Authority (HEA) has a statutory function to review and report on the quality assurance procedures developed by the universities and to be consulted by the universities in their review of the effectiveness of quality assurance procedures.

Increasingly, the quality assurance processes in place in the universities refer to the appropriate design and positioning of awards within the Framework. The joint Irish Universities Association (IUA) and IUQB document *A Framework for Quality in Irish Universities* which was updated in 2007, put the placement of programmes in the Framework as a key element of the quality assurance self-assessment process. As part of the Self-Assessment Report for an Academic Unit, the following is set out for the Curriculum Development Review aspect:

> *Details of programmes and modules are provided, including specific reference to the positioning of each associated qualification in the National Framework of Qualifications, with sufficient information provided to allow the reviewers to understand the appropriateness of the level and type of the award …The Unit also describes the processes by which the curricula of its programmes are developed and reviewed on a periodic basis. The benchmarking of the programmes against similar programmes elsewhere in Ireland and internationally is an important option. [Section 6.6, pg. 55]*

The IUQB's 2009 document *Institutional Review of Irish Universities* incorporates the Framework for Quality in Irish Universities and thus links quality assurance practices to the implementation of the Framework:

> *The Main Review Visit will be used by the team to confirm the processes employed by the university for assuring the effectiveness of its quality management process in accordance with national and European requirements. The team will receive and consider evidence on the …ways the university has been working to ensure that it has in place procedures (including, for example, internal reviews and its external examiner processes) designed to evaluate how the learning outcomes are achieved for programmes that have been placed in the National Framework of Qualifications (NFQ) [Section 35, pg. 12]*

The documents A Framework for Quality in Irish Universities and Institutional Review of Irish Universities are both written in a manner that is consistent with the *Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)* which were adopted by European Ministers for Education at their 2005 Ministerial meeting in Bergen. They include standards and related guidelines for internal institutional approval, monitoring and periodic review of programmes and the external review of same.

THE IRISH HIGHER EDUCATION QUALITY NETWORK (IHEQN)

There are several actors involved in carrying out quality assurance activities across the higher education sector; each acting in accordance with their respective legislative provisions. The Irish Higher Education Quality Network (IHEQN) was established in 2003 to provide a forum for the principal national stakeholders involved in the quality assurance of higher education and training to discuss quality in a national and international context, to work towards the development of a common national position on key quality assurance issues and to inform the debate on those same issues at a European level. It includes representation from all of the awarding bodies and agencies involved in quality assurance and the Department of Education and Science (DES), the Irish Universities Association (IUA), Institutes of Technology Ireland (IOTI) and higher education and training providers. The Network also provides the opportunity to work with the Union of Students in Ireland (USI) to develop the input of students into quality assurance processes. As a result of this collaboration, the IHEQN has published *Principles of Good Practice in Quality Assurance/Quality Improvement for Irish Higher Education and Training; Principles for Reviewing the Effectiveness of Quality Assurance Procedures in Irish Higher Education and Training; Principles for Student Involvement in Quality Assurance/Enhancement; and Provision of Education to International Students: Code of Practice and Guidelines for Irish Higher Education Institutions.*

The university sector Framework Implementation Network and the IHEQN have collaborated in the last academic year through Bologna Expert seminars on the design and quality assurance of discipline specific learning outcomes. These were organised in conjunction with the HEA and supported by the European Commission.

USEFUL LINKS:

NFQ Architecture

Policies and Criteria for the Establishment of the National Framework of Qualifications: http://www.nqai.ie/publication_oct2003b.html

NFQ Determinations (including level indicators and major award-type descriptors)

http://www.nfq.ie/nfq/en/public_resources/Nat_qual_authority.html

Award-type descriptors for non-major awards: http://www.nfq.ie/nfq/en/public_resources/Nat_qual_authority.html

Level Indicators diagram only: http://www.nfq.ie/nfq/en/documents/GridofLevelIndicators.pdf

The Universities and the National Framework of Qualifications (IUA, 2005) http://www.iua.ie/publications/documents/publications/2005/RegistrarReport.pdf

Access, Transfer and Progression

NQAI Access, Transfer and Progression policies and procedures: http://www.nfq.ie/nfq/en/public_resources/policies_procedures.html

Principles and Operational Guidelines for the Implementation of a National Approach to Credit in Irish Higher Education and Training: http://www.nfq.ie/nfq/en/public_resources/princip_guidelines.html

Principles and Operational Guidelines for the Recognition of Prior Learning in Further and Higher Education and Training: http://www.nfq.ie/nfq/en/public_resources/princip_guidelines.html

European ECTS Users' Guide (2008): http://www.eua.be/eua/jsp/en/upload/ECTS_DS_Users_guide_en.1094119167134.pdf

Quality Assurance

Irish Universities Quality Board www.iuqb.ie

A Framework for Quality Assurance in the Universities: http://www.iuqb.ie/info/iuqb_publications.aspx

Institutional Review in Irish Universities (IRIU): http://www.iuqb.ie/info/iuqb_publications.aspx

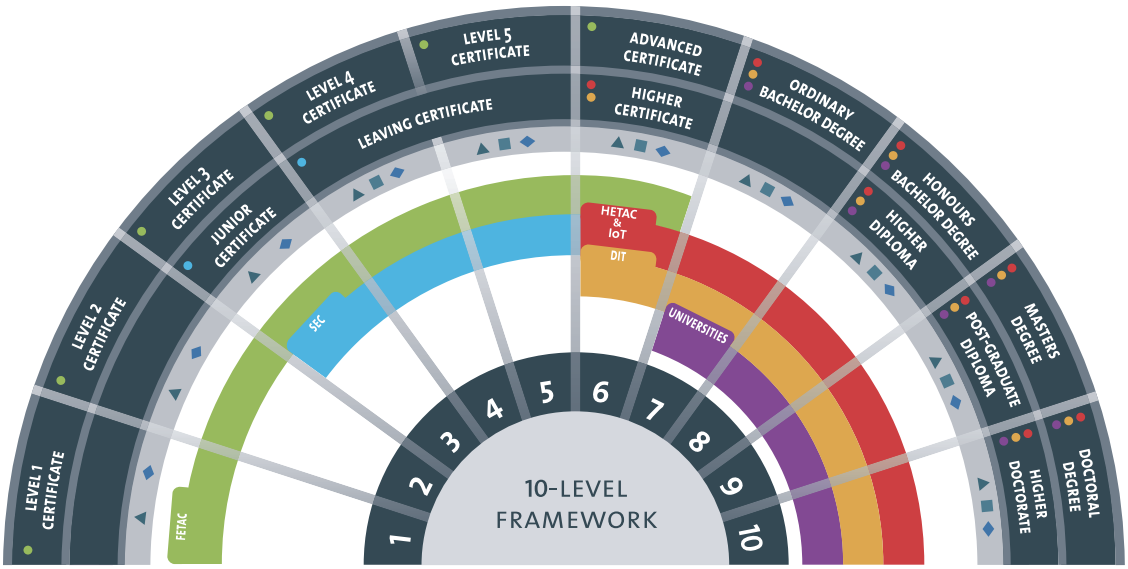
Irish Higher Education Quality Network www.iheqn.ie

Standards and Guidelines for Quality Assurance in the European Higher Education Area: http://www.enqa.eu/pubs_esg.lasso

APPENDIX 1: NATIONAL FRAMEWORK OF QUALIFICATIONS

National Framework of Qualifications

Údarás Náisiúnta Cáilíochtaí na hÉireann
National Qualifications Authority of Ireland



AWARDING BODIES

- FETAC - Further Education and Training Awards Council
- SEC - State Examinations Commission *(Department of Education & Science)*
- HETAC - Higher Education and Training Awards Council
- IoT - Institutes of Technology *(make their own awards at specified levels under Delegated Authority from HETAC)*
- DIT - Dublin Institute of Technology
- Universities

AWARDS IN THE FRAMEWORK

There are four types of award in the National Framework of Qualifications:

- **Major Awards:** are the principal class of awards made at a level
- **Minor Awards:** are for partial completion of the outcomes for a Major Award
- **Supplemental Awards:** are for learning that is additional to a Major Award
- **Special Purpose Awards:** are for relatively narrow or purpose-specific achievement

NDP Transforming Ireland
Funded by the Irish Government under the National Development Plan, 2007-2013.

For further information consult: www.nqai.ie www.nfq.ie www.qualrec.ie

National Framework *of* Qualifications GRID OF LEVEL INDICATORS

National Framework of Qualifications
Creatoibre Náisiúnta na gCáilíochtaí

	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** *Breadth*
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.	**Knowledge** *Kind*
Know-How & 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 or 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 tools.	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 advanced technical activity.	Demonstrate a range of standard and specialised research or equivalent tools and techniques of enquiry.	Demonstrate a significant range of the principal 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 & Skill** *Range*
Know-How & 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 and develop investigative strategies and to determine solutions to varied unfamiliar problems.	Formulate responses to well-defined abstract problems.	Excercise appropriate judgement in planning design, technical and/or supervisory functions related to products, services operations or processes.	Excercise 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.	**Know-How & Skill** *Selectivity*
Competence *Context*	Act in closely defined and highly structured contexts.	Act in a limited range of 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 and quality of outputs; identify and apply skill and knowledge to a 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.	Excercise personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent contexts.	**Competence** *Context*
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, homogenous 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 personal autonomy and often take responsibility for the work of others and/or for 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** *Role*
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 learning 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 responsibility for continuing academic/professional development.	Learn to critique the broader implications of applying knowledge to particular contexts.	**Competence** *Learning to Learn*
Competence *Insight*	Begin to demonstrate awareness of independent role for self.	Demonstrate awareness of independent role for self.	Assume 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 an internalised, personal 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 them.	**Competence** *Insight*

This 10-Level grid of Level Indicators forms part of the determination of the National Framework of Qualifications under Section 7(a) of the Qualifications (Education and Training) Act, 1999

Note: The outcomes at each level include those of all the lower levels in the same sub-strand.

APPENDIX 3: HIGHER EDUCATION AND TRAINING MAJOR AWARD-TYPE DESCRIPTORS

Higher Certificate award-type descriptor

Title	Higher Certificate
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	6
Volume	Large
Knowledge - breadth	Specialised knowledge of a broad area
Knowledge - kind	Some theoretical concepts and abstract thinking, with significant underpinning theory
Know-how and skill - range	Demonstrate comprehensive range of specialised skills and tools
Know-how and skill - selectivity	Formulate responses to well-defined abstract problems
Competence - context	Act in a range of varied and specific contexts, taking responsibility for the nature and quality of outputs; identify and apply skill and knowledge to a wide variety of contexts
Competence - role	Exercise substantial personal 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
Competence – learning to learn	Take initiative to identify and address learning needs and interact effectively in a learning group
Competence - insight	Express an internalised, personal world view, reflecting engagement with others
Progression & Transfer	Transfer to programme leading to an Advanced Certificate (Award-type **h**) Progression to a programme leading to an Ordinary Bachelor Degree (award-type **j**) or to an Honours Bachelor Degree (award-type **k**).
Articulation	

Ordinary Bachelor Degree award-type descriptor

Title	Ordinary Bachelor Degree
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	7
Volume	Large
Knowledge - breadth	Specialised knowledge across a variety of areas
Knowledge - kind	Recognition of limitations of current knowledge and familiarity with sources of new knowledge; integration of concepts across a variety of areas
Know-how and skill - range	Demonstrate specialised technical, creative or conceptual skills and tools across an area of study
Know-how and skill - selectivity	Exercise appropriate judgement in planning, design, technical and/or supervisory functions related to products, services, operations or processes
Competence - context	Utilise diagnostic and creative skills in a range of functions in a wide variety of contexts
Competence - role	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
Competence – learning to learn	Take initiative to identify and address learning needs and interact effectively in a learning group
Competence - insight	Express an internalised, personal world view, manifesting solidarity with others
Progression & Transfer	Progression to programme leading to an Honours Bachelor Degree (Award-type **k**) or to a Higher Diploma (Award-type **l**). Progression internationally to some second cycle (i.e. "Bologna masters") degree programmes.
Articulation	

Honours Bachelor Degree award-type descriptor

Title	Honours Bachelor Degree
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	8
Volume	Large
Knowledge - breadth	An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning
Knowledge - kind	Detailed knowledge and understanding in one or more specialised areas, some of it at the current boundaries of the field(s)
Know-how and skill - range	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 advanced technical activity
Know-how and skill - selectivity	Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing
Competence - context	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
Competence - role	Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups
Competence – learning to learn	Learn to act in variable and unfamiliar learning contexts; learn to manage learning tasks independently, professionally and ethically
Competence - insight	Express a comprehensive, internalised, personal world view manifesting solidarity with others
Progression & Transfer	Transfer to programmes leading to Higher Diploma (Award-type **l**). Progression to programmes leading to Masters Degree or Post-graduate Diploma (Award-types **m** or **n**), or in some cases, to programmes leading to a Doctoral Degree (Award-type **o**). Progression internationally to second cycle (i.e. "Bologna masters") degree programmes
Articulation	

Higher Diploma award-type descriptor

Title	Higher Diploma
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	8
Volume	Medium
Knowledge - breadth	An understanding of the theory, concepts and methods pertaining to a field (or fields) of learning
Knowledge - kind	Detailed knowledge and understanding in one or more specialised areas,some of it at the current boundaries of the field
Know-how and skill - range	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 advanced technical activity
Know-how and skill - selectivity	Exercise appropriate judgement in a number of complex planning, design, technical and/or management functions related to products, services, operations or processes, including resourcing
Competence - context	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
Competence - role	Act effectively under guidance in a peer relationship with qualified practitioners; lead multiple, complex and heterogeneous groups
Competence – learning to learn	Learn to act in variable and unfamiliar learning contexts; learn to manage learning tasks independently, professionally and ethically
Competence - insight	Express a comprehensive, internalised, personal world view manifesting solidarity with others
Progression & Transfer	Progression to programmes leading to Masters Degree or Post-graduate Diploma (Award-types **m** or **n**)
Articulation	From an Ordinary Bachelor Degree (Award-type **j**) , or from an Honours Bachelor Degree (Award-type **k**), into a new field of learning

Masters Degree award-type descriptor

Title	Masters Degree
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training
Level	9
Volume	Large
Knowledge - breadth	A systematic understanding of knowledge at, or informed by, the forefront of a field of learning
Knowledge - kind	A critical awareness of current problems and/or new insights, generally informed by the forefront of a field of learning
Know-how and skill - range	Demonstrate a range of standard and specialised research or equivalent tools and techniques of enquiry
Know-how and skill - selectivity	Select from complex and advanced skills across a field of learning; develop new skills to a high level, including novel and emerging techniques
Competence - context	Act in a wide and often unpredictable variety of professional levels and ill defined contexts
Competence - role	Take significant responsibility for the work of individuals and groups; lead and initiate activity
Competence – learning to learn	Learn to self-evaluate and take responsibility for continuing academic/professional development
Competence - insight	Scrutinise and reflect on social norms and relationships and act to change them
Progression & Transfer	Progression to programmes leading to Doctoral Degree (Award-type **o**), or to another Masters Degree or to a Post-graduate Diploma (Award-types **m** or **n**)
Articulation	

Post-graduate Diploma award-type descriptor

Title	Post-graduate Diploma
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	9
Volume	Medium
Knowledge - breadth	A systematic understanding of knowledge, at, or informed by, the forefront of a field of learning
Knowledge - kind	A critical awareness of current problems and/or new insights, generally informed by the forefront of a field of learning
Know-how and skill - range	Demonstrate a range of standard and specialised research or equivalent tools and techniques of enquiry
Know-how and skill - selectivity	Select from complex and advanced skills across a field of learning; develop new skills to a high level, including novel and emerging techniques
Competence - context	Act in a wide and often unpredictable variety of professional levels and ill defined contexts
Competence - role	Take significant responsibility for the work of individuals and groups; lead and initiate activity
Competence – learning to learn	Learn to self-evaluate and take responsibility for continuing academic/professional development
Competence - insight	Scrutinise and reflect on social norms and relationships and act to change them
Progression & Transfer	May exempt from part of the programme leading to a Masters Degree (Award-type **m**)
Articulation	

Doctoral Degree award-type descriptor

Title	Doctoral Degree
Class of Award-type	Major
Purpose	This is a multi-purpose award-type. The knowledge, skill and competence acquired are relevant to personal development, participation in society and community, employment, and access to additional education and training.
Level	10
Volume	Large
Knowledge - breadth	A systematic acquisition and understanding of a substantial body of knowledge which is at the forefront of a field of learning
Knowledge - kind	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 a significant range of the principal 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	Respond to abstract problems that expand and redefine existing procedural knowledge
Competence - context	Exercise personal responsibility and largely autonomous initiative in complex and unpredictable situations, in professional or equivalent contexts
Competence - role	Communicate results of research and innovation to peers; engage in critical dialogue; lead and originate complex social processes
Competence – learning to learn	Learn to critique the broader implications of applying knowledge to particular contexts
Competence - insight	Scrutinise and reflect on social norms and relationships and lead action to change them
Progression & Transfer	
Articulation	

APPENDIX 4: NON-MAJOR AWARD-TYPE DESCRIPTORS

Award-Type Descriptor 'Minor Award-Type'

Class of Award	Minor award
Purpose	Multi-purpose award-type that recognises attainment of part of a major award and which has relevance in its own right.
Level	Generally, the same level as the major award to which it is linked
Volume	Variable - smaller than the major award of which it is a part
Comprehensiveness	Variable
Knowledge - breadth	Variable
Knowledge - kind	Variable
Know-how and skill - range	Variable
Know-how and skill - selectivity	Variable
Competence - context	Variable
Competence - role	Variable
Competence – learning to learn	Variable
Competence - insight	Variable
Progression & Transfer	Transfer to programmes leading to attainment of a part of one or more major awards Transfer to programmes leading to special purpose awards
Articulation	
Link to other Awards	Learning outcomes form part of those of a major award

Award-Type Descriptor 'Special Purpose Award-Type'

Class	Special Purpose
Purpose	To meet specific, relatively narrow focused legislative, regulatory, economic, social or personal learning requirements
Level	Any Level – best-fit
Volume	Variable - between small and medium
Comprehensiveness	Usually limited to a small number of sub-strands
Knowledge - breadth	Variable
Knowledge - kind	Variable
Know-how and skill - range	Variable
Know-how and skill - selectivity	Variable
Competence - context	Variable
Competence - role	Variable
Competence – learning to learn	Variable
Competence - insight	Variable
Progression & Transfer	Transfer to programmes leading to major or minor awards at the same level or above Transfer to programmes leading to supplemental awards at the same level Transfer/progression to programmes leading to related special purpose awards at the same level or above
Articulation	
Link to other Awards	Learning outcomes may form part of those of a major award, minor award or supplemental award

Award-Type Descriptor 'Supplemental Award-Type'

Class	Supplemental
Purpose	For learners who have already obtained a major or special purpose award. May be for refreshing/updating and continuous education and training with respect to an occupation/profession.
Level	Generally, the same level as the major or special purpose award to which it is linked
Volume	Variable - between small and medium
Comprehensiveness	Variable
Knowledge - breadth	Variable
Knowledge - kind	Variable
Know-how and skill - range	Variable
Know-how and skill - selectivity	Variable
Competence - context	Variable
Competence - role	Variable
Competence – learning to learn	Variable
Competence - insight	Variable
Progression & Transfer	Progression to programmes leading to major awards at the next level in a related field of learning
Articulation	From major or special purpose award at the same level
Link to other Awards	Learning outcomes are closely linked to those of a major award or of a special purpose award – they generally reflect a deepening of learning, up-dating or specialisation

SECTION B: RELATING THE ARCHITECTURE OF THE NFQ TO THE PROGRAMME DESIGN PROCESS - FIRST PRINCIPLES

INTRODUCTION

Taking into consideration the architecture of the Framework outlined above and its relevance to the design of new, and the modification of existing higher education programmes, there are some first principles, which are worthy of consideration when undertaking these processes. These are articulated in italics and elaborated upon below. The first and second sections look at issues of particular relevance to major awards and non-major awards respectively. The third section considers matters common to the design or redesign of both major and non-major awards.

MAJOR AWARDS

DEVELOPING PROGRAMME LEARNING OUTCOMES

Each major award to be included in the Framework should be designed around a series of programme outcomes, which are expressed in Framework terms (i.e., uses the appropriate Framework award-type descriptor with its eight sub-strands of knowledge, skill and competence)

The Framework's level indicators are intended to provide the overarching reference point for the standard required of an award at a given level. Major awards at each level are further defined through major award-type descriptors incorporating sub-strands of knowledge, skill and competence. Some progress is being made in higher education to translate these award-type descriptors into field specific indicators using the language of a particular discipline to provide a context for the elaboration of the descriptors. Examples of progress to date in this regard can be located in section 2 of this report *Principles for Designing Discipline Specific Learning Outcomes.*

In order for an award to be accurately included in the Framework, it should express its overall intended outcomes in terms of the appropriate knowledge, skill and competence associated with a particular Framework award-type, thus creating the programme learning outcomes. This ensures that there is a clear and transparent correlation between the programme, the appropriate Framework major award-type descriptor and the associated Framework level.

While the award-type descriptors have been designed as generic indicators of knowledge, skill and competence that apply regardless of the field of learning, they will not necessarily be represented equally in the programme learning outcomes. This is a matter for the programme designer and will very much depend on the nature of a given programme.

A major award that incorporates exit awards[1] should express the learning outcomes for each of the programmes that it incorporates as well as for the overall award, and these should be stated with reference to the related Framework award-type descriptors

Some major awards incorporate one or more exit awards that the learner can attain at a given point or points; other programmes are structured as ab initio awards.[2] In terms of the former, examples would be an Honours Bachelor Degree that allows learners to choose to exit, upon appropriate assessment, with a Higher Certificate or an Ordinary Bachelor Degree. Equally a Master's Degree might incorporate a Postgraduate Diploma as an exit award.

In these cases, the awards incorporated into an overall award should be treated as part of the whole, but also in their own right. As a result, any award that it is possible to achieve must have its own overall programme outcomes articulated for it and these should be included in the programme document.

[1] An exit award or qualification features a defined set of outcomes within a larger award and is available to a learner who achieves these outcomes and does not wish to complete the larger award.

[2] An ab initio award is one in which a learner is required to complete the programme from beginning to end in order to be awarded his/her qualification.

DEVELOPING MODULE LEARNING OUTCOMES

The learning outcomes articulated for the modules that make up the programme should reflect and elaborate upon the programme learning outcomes

Modules combine to make up a programme. Each one needs to be expressed in terms of learning outcomes and each should be contributing to the achievement of the overall programme learning outcomes. This construct lends an important coherence to a programme and provides the basis upon which effective and appropriate teaching and assessment can be based.

The knowledge, skill and competence, and associated sub-strands, that are related to the Framework level associated with a given major award, may or may not be reflected in all of the modules that make up that programme

The level of knowledge, skill and competence associated with each individual module will not necessarily reflect the overall Framework level of the programme. For instance, an Honours Bachelor Degree in a given discipline may contain a substantial amount of level 6 and 7 outcomes. The guidelines set out by the NQAI indicate that for major awards, at least 60 credits associated with a programme should have learning outcomes at the level at which the programme as a whole is included in the Framework.

ASSIGNING CREDIT

The credit allocated to the modules and the programme as a whole should be compatible with the European Credit Transfer System (ECTS) and the national guidelines for the operation of credit

The higher education and training awards included in the Framework incorporate credit which is compatible with the European Credit Transfer System (ECTS). The purpose of this is to contribute to the recognition and transparency of qualifications and the mobility of learners both nationally and internationally.

The allocation of credit to modules indicates the typical overall student workload associated with that module. In which case, the balance of emphasis on elements within the programme will need to be taken into consideration.

In the case of some awards there is a credit range in place (see p. 7), most notably the Honours Bachelor Degree has a range of 180 to 240 credits.

PROGRAMME/AWARD TITLES

The Major-Award type of a particular award should be reflected in the title of the award

In the case of major awards, programmes should make reference in their title to the award-type they lead to i.e., Honours Bachelor Degree (in x), Higher Diploma (in y) etc. This is important in terms of clarity and transparency for the learner, other education and training institutions and the employer. Where local traditions prevail however, the learner and the public should at least be provided with clear and instructive information regarding the award's status in Framework terms, including the level, award-type, associated credit and progression opportunities. The NQAI's short guide to marketing of Framework awards[3] includes some examples of communicating the details of programmes included in the Framework.

[3] http://www.nfq.ie/nfq/en/documents/userguide_marketing_final.pdf

DEVELOPING PROGRAMME LEARNING OUTCOMES

Each non-major award to be included in the Framework should be designed around a series of programme outcomes. These should be expressed in Framework terms by using the Framework's level indicators as a reference point

The Framework's level indicators provide the overarching reference point for the standard required of an award at a given level. These are the key reference points for the inclusion of non-major awards in the Framework. Minor, supplemental and special purpose awards may often specify standards for fewer than the eight sub-strands associated with a level. In some cases, their focus may be narrow and only a small number of sub-strands may be defined. If only one sub-strand is defined for the award then the level to which the award-type is allocated is decided on the basis of that strand. If more than one sub-strand is defined, a best-fit principle will apply. This will take into account the purpose and context for developing the award and, where relevant, its link to other awards.

ASSIGNING CREDIT

The credit allocated to the modules and the programme as a whole should be compatible with the European Credit Transfer System (ECTS) and the national guidelines for the operation of credit

The higher education and training awards included in the Framework incorporate credit, which is compatible with the European Credit Transfer System (ECTS). The purpose of this is to contribute to the recognition and transparency of qualifications and the mobility of learners (see *Access, Transfer and Progression* above) both nationally and internationally.

The allocation of credit to modules indicates the typical overall student workload associated with that module. In which case, the balance of emphasis of elements within the programme will need to be taken into consideration.

PROGRAMME/AWARD TITLES

The credit allocated to a non-major award should indicate the appropriate naming conventions for the programme

The amount of credit associated with a non-major award influences the programme name. Non-major awards up to, but not including 60 credits, should be called "Certificates". Non-major awards with a credit allocation of 60 or more should be called "Diplomas". This convention is consistent with the discussion document on the policy approach to the inclusion of university awards in the Framework[4] that was agreed by the NQAI and the universities and published in 2006.

[4] http://www.nfqnetwork.ie/_fileupload/Image/Towards%20the%20completion%20of%20Framework%20Implementation%20in%20the%20Universities.doc

ISSUES COMMON TO THE DESIGN OR REDESIGN OF MAJOR AND NON-MAJOR AWARDS

TEACHING, LEARNING AND ASSESSMENT

Teaching and learning, and assessment methods should be designed to ensure that the attainment of learning outcomes is achieved and can be demonstrated by the learner

Learning outcomes express the expected attainment of knowledge, skill and competence by a learner on successful completion of a given programme. Teaching, learning and assessment strategies need to be aligned appropriately with these learning outcomes in order to enable the learner to demonstrate their attainment.

In terms of assessment, section three of this report, focuses on assessment methods: how these can be built in as part of a combined programme design, teaching, learning and assessment strategy, and how they most appropriately relate to the demonstration of the sub-strands identified in the Framework levels and award-types.

FRAMEWORK FEATURES EVIDENT IN PROGRAMME DESIGN OR REDESIGN

A programme, whether designed or redesigned, should display all of the features necessary for its inclusion in the Framework

A major or non-major award intended for inclusion in the Framework may be constructed from the top down (i.e., identification of award-type, design of programme outcomes, design of module outcomes etc.), from the bottom up (combining existing modules in order to identify the programme outcomes and to link these to an award-type) or through a combination of both of these methods. A checklist of key issues is included in Appendix B1.

ACCESS, TRANSFER AND PROGRESSION

Access, transfer and progression arrangements associated with a programme should be clearly identified for the learner

One of the key objectives of the Framework is to improve access, transfer and progression arrangements for the learner. When designing or redesigning a programme for inclusion in the Framework the arrangements for accessing the programme (including through arrangements for the recognition of prior learning where possible), transferring from it, exiting from it, and progressing to other awards should be documented at the outset in programme materials and clearly communicated to the learner.

SUMMARY OF KEY ELEMENTS IN DESIGNING/REDESIGNING A MAJOR OR NON-MAJOR AWARD FOR INCLUSION IN THE FRAMEWORK

DESIGNING A MAJOR AWARD FOR INCLUSION IN THE FRAMEWORK

Programme learning outcomes articulated and mapped to appropriate award-type descriptor

↓↑

Module learning outcomes designed to collectively deliver programme learning outcomes

↓

Credit allocated to award (and modules) within range agreed for award-type

↓

Appropriate teaching, learning and assessment methodology designed

↓

Name of award reflects appropriate award-type

DESIGNING A NON-MAJOR AWARD FOR INCLUSION IN THE FRAMEWORK

Programme learning outcomes articulated and mapped to appropriate Framework level

↓↑

Learning outcomes for modules designed to collectively deliver programme learning outcomes

↓

Credit allocated to award (and modules) within range agreed for award-type

↓

Appropriate teaching, learning and assessment methodology designed

↓

Award named in accordance with credit allocated

APPENDIX B1: PROGRAMME DESIGN / REDESIGN: CHECKLIST OF KEY ISSUES

When designing a new programme or redesigning an existing programme for inclusion as a major award in the Framework, the following checklist may act as a reminder of the key elements to be included:

- Programme learning outcomes should be stated with reference to the related Framework award-type descriptor
- Programme learning outcomes should be articulated for any exit awards built into an award and should be stated with reference to the related Framework award-type descriptors
- Module learning outcomes should be articulated and should collectively lead to the achievement of programme learning outcomes
- The teaching methodologies chosen should reflect the programme and module learning outcomes
- The assessment methods chosen should enable learners to demonstrate the attainment of the programme and module learning outcomes
- Modules and the programme as a whole should be expressed in ECTS-compatible credits and in accordance with agreed credit ranges for Framework award-types
- The name of the award should be reflective of its award-type, e.g. Honours Bachelor Degree in x, Postgraduate Diploma in y
- The access, transfer and progression arrangements associated with a programme should be clearly described in the programme document and in related materials.

When designing a new programme or redesigning an existing programme for inclusion as a non-major award in the Framework:

- The programme should be identified as being minor, special-purpose or supplemental
- Programme learning outcomes should be stated with reference to the related Framework level indicators
- If the programme incorporates modules, the learning outcomes should be articulated and should collectively lead to the achievement of programme learning outcomes
- The teaching methodologies chosen should reflect the programme and module learning outcomes
- The assessment methods chosen should enable learners to demonstrate the attainment of the programme and module learning outcomes
- Modules and the programme as a whole should be expressed in ECTS-compatible credits and in accordance with agreed credit ranges for Framework non-major awards
- The name of a non-major award should be reflective of the amount of credit associated with it i.e., Certificate if up to, but less than 60 ECTS credits, and Diploma if between 60 and 120 ECTS credits
- The access, transfer and progression arrangements associated with a programme should be clearly described in the programme document and in related materials.

SECTION C: THE NFQ AND EUROPEAN QUALIFICATIONS FRAMEWORKS: IMPLICATIONS FOR PROGRAMME DESIGN

EUROPEAN FRAMEWORKS

It is important to understand that the Irish Framework is operating in a wider context, in both European and international terms. There are now two meta-frameworks in operation at a European level: the Framework for Qualifications of the European Higher Education Area, more commonly referred to as the 'Bologna Framework' and the European Qualifications Framework (EQF). The first is used to compare higher education qualifications in national frameworks of qualifications to the Bologna Framework cycles and the second is a 'lifelong learning' framework to which the levels of national qualifications frameworks are referenced. Both Frameworks are based on learning outcomes, and are consistent with the understandings and concepts underpinning the Irish NFQ.

The Bologna Framework emerged as part of the Bologna Process and is currently the better known of the two Frameworks in the higher education environment in Ireland. It is based on three cycle descriptors known as the 'Dublin descriptors'. Essentially these indicate the learning outcomes associated with first cycle (Bachelors Degree), second cycle (Masters Degree) and third cycle (Doctoral Degree) qualifications.

In contrast, and in order to fulfil its objective of recognising learning throughout one's life, the EQF is an eight level Framework which applies to all types of education and training qualifications, from school education to academic, professional and vocational. Each level is expressed in terms of learning outcomes. When each country in Europe has developed its national qualifications framework it will verify and reference it against the cycles/levels of the Bologna and EQF frameworks respectively. This process will establish how national qualifications/levels relate to these overarching Frameworks and thus to other national frameworks in Europe.

Ireland verified the compatibility of its National Framework of Qualifications with the Bologna Framework in 2006 and completed the referencing of its levels against those of the EQF in May 2009. Links to the reports on both of these processes are included at the end of this section. How Framework qualifications line up against the Bologna Framework cycles, and the EQF levels, is illustrated below. It is important to note that the comparability between the higher levels of the EQF (levels 6, 7 and 8) and the three cycles of the Bologna Framework has been confirmed at a European level:

Comparison of NFQ with Bologna Cycles / EQF Levels

EQF Levels	Bologna Framework	Irish NFQ Levels	Irish Major Award-Types
1		1	Level 1 Certificate
		2	Level 2 Certificate
2		3	Level 3 Certificate, Junior Certificate
3		4	Level 4 Certificate, Leaving Certificate
4		5	Level 5 Certificate, Leaving Certificate
5	Short Cycle within First Cycle	6	Advanced Certificate*, Higher Certificate
6	First Cycle	7 8	Ordinary Bachelor Degree Honours Bachelor Degree, Higher Diploma
7	Second Cycle	9	Masters Degree, Postgraduate Diploma
8	Third Cycle	10	Doctoral Degree, Higher Doctorate**

* The Advanced Certificate is a further education and training award and has not been verified against the Bologna Framework.

** The Higher Doctorate award is not based on a provider's programme and, as such, is not subject to validation but is assessed by the awarding body for each individual learner. Normally, the learner already holds a first doctorate or equivalent for some period of time prior to becoming a candidate for the higher doctorate. As a result, further references to this award-type have not been made in this section of the report.

IMPACT OF EUROPEAN FRAMEWORKS ON PROGRAMME DESIGN

A number of European initiatives have evolved which encourage cooperation amongst higher education colleagues across Europe on particular higher education topics and disciplines. The thematic networks that have developed as part of the Tuning project and in support of the Bologna Process are one such development. The EQF is also supporting academic and sectoral collaboration across Europe. These are valuable processes which support the drive towards a European Higher Education Area, the relevance of the European meta-frameworks, and the introduction and implementation of national qualifications frameworks.

Ireland has played a central role in the development of both the Bologna Framework and its cycle descriptors (the 'Dublin descriptors') and the level outcomes upon which the EQF is designed. As a result, there is a high degree of comparability between the concepts of knowledge, skill and competence that underpin the Irish and European frameworks, as evidenced in the verification and referencing reports that elaborate on these relationships. It is a European and national expectation however that national qualifications frameworks, which articulate in more depth the knowledge, skill and competence outcomes associated with a given qualification and with the framework level at which it is included, will act as the primary reference point for the design of programmes.

As the compatibility of the NFQ with the Bologna Framework has been verified and it has been referenced against the EQF, the use of the NFQ major award-type descriptors and/or level indicators when designing a programme ensures its compatibility with the European meta-frameworks; contributes to the establishment of a national education and training system that promotes lifelong learning; accommodates transparent access, transfer and progression arrangements for the learner; and supports learner mobility.

PROGRAMME DESIGN: THE RELATIONSHIP BETWEEN THE NATIONAL FRAMEWORK OF QUALIFICATIONS AND EUROPEAN META-FRAMEWORKS

Programme designer refers to …

↓

National Framework of Qualifications award-type descriptors and/or level indicators

↓

Award is included in the National Framework of Qualifications

↓

Awards included in the National Framework of Qualifications are **automatically** referenced to the Bologna Framework Cycle descriptors and to the European Qualifications Framework (EQF) levels

USEFUL LINKS ON EUROPEAN META-FRAMEWORKS

Bologna Cycle Descriptors: http://www.bologna-bergen2005.no/EN/BASIC/050520_Framework_qualifications.pdf

Bologna Process website: http://www.ond.vlaanderen.be/hogeronderwijs/bologna/

NFQ Bologna verification document: http://www.nqai.ie/publication_nov2006.html

European Qualifications Framework and descriptors: http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm#doc

NFQ EQF referencing report: http://www.nqai.ie/interdev_eqf.html

SECTION D: DESIGNING PROGRAMMES FOR INCLUSION IN THE FRAMEWORK - QUESTIONS ARISING

INTRODUCTION

The following section sets out some examples of the questions that have arisen for higher education practitioners when undertaking the process of designing programmes for inclusion in the Framework.

When constructing major awards, which should be designed first, the programme or the module learning outcomes?

In order to give coherence to a programme, a top down approach is probably the more logical sequencing, certainly for new programmes. The design of clear programme learning outcomes based on knowledge, skill and competence provides a basis for direct mapping to Framework award-type descriptors and Framework levels. Modules that collectively address these outcomes can then be designed and articulated as module outcomes.

In redesigning existing programmes, the sequence may be the other way around, where a collection of related modules are being brought together to construct a programme, and the programme learning outcomes are being derived from the combined module outcomes and then mapped to the appropriate Framework award-type/level.

Do all of the eight sub-strands of knowledge, skill and competence have to feature in the programme outcomes of a major award?

The majority of new or existing major awards are likely to accommodate all of the sub-strands, but the balance of emphasis in their representation will depend on the individual programme. Also, individual sub-strands of a major award may be at a different level to the overall level of the major award-type. However, the overall package of learning outcomes for a named award needs to correspond to those of the award-type to which it belongs.

Do all of the eight sub-strands of knowledge, skill and competence have to feature in every module of a major award?

It is extremely unlikely that all modules will reflect all of the sub-strands associated with the programme they combine to make. The function of the modules is to cumulatively address the programme learning outcomes of a major award.

Do all of the eight sub-strands of knowledge, skill and competence have to feature in the programme outcomes of a non-major award?

Non-major awards (minor, supplemental and special purpose awards) may often specify programme outcomes with fewer than the eight sub-strands. In some cases, their focus may be narrow and only a small number of sub-strands may be defined. If only one sub-strand is defined for the award then the level to which the award-type is allocated is decided on the basis of that strand. If more than one sub-strand is defined, a best-fit principle will apply. This will take into account the purpose and context for developing the award (and, where relevant, its link to other awards).

Is a programme designed using the Bologna Framework's cycle descriptors the same as using the National Framework of Qualifications level indicators and award-type descriptors for reference?

The relationship between national qualifications frameworks and European Frameworks is outlined above. This construct indicates that it makes sense for the Irish National Framework of Qualifications to take precedence when identifying a reference point for the design or redesign of programmes for inclusion in the Framework and for subsequent recognition in the context of the European frameworks. Apart from the information provided about their relative relationship, the greater level of detail provided in the Framework descriptors ultimately makes it an easier framework to use as a reference for programme design.

If a programme is designed for inclusion at Level x, do all of the outcomes associated with the programme have to be at that level?

There is no requirement that all of the outcomes of a programme at a given level (major or non-major) need to be written to that level. With regard to major awards, 60 credits of learning outcomes need to be at the level of the award; for non-major awards the balance of learning outcomes need to be at the level at which the award is included. The distribution of level outcomes across a series of modules that make up a programme is a matter for the programme designer, in response to the needs of the programme and the anticipated learner. There are often introductory and intermediate aspects of a programme that will be at a lower level than the overall programme level. Similarly, some programmes incorporate exit points, which are at lower levels of the Framework.

How are exit points built into a programme designed to be included at a given level of the Framework?

If a programme has exit points at which awards can be made, the sequence of designing outcomes from the top of the programme still provides a logical starting point. When the exit points are being built in, they should also be accompanied by programme learning outcomes. It is important when designing a major award with exit points to keep in mind the minimum of 60 credits being at the level at which the award is included in the Framework.

Are the Framework level indicators designed to be threshold level indicators?

The Framework level-indicators (and award-type descriptors) are considered to indicate the 'typical' learning outcomes associated with the successful attainment of an award at a given level on the Framework, rather than being indicators of 'threshold' or minimum learning outcome attainment. This distinction has important implications for assessment design and for the development of assessment criteria.

How is an Ordinary Bachelor Degree with 180 credits differentiated from an Honours Bachelor Degree with 180 credits?

The Framework includes an Ordinary Bachelor Degree award-type with 180 credits at level 7 on the Framework. At level 8, the Honours Bachelor Degree has been allocated a range of credit from 180-240 credits. If you are designing an Honours Bachelor Degree with 180 credits, the key element that distinguishes it from an Ordinary Bachelor Degree with the same credit amount is the learning outcomes. Those associated with the Honours Bachelor Degree should be evidently at the higher level. It is also likely that all of the outcomes in the final year of a 180 credit Honours Bachelor Degree will be of a level 8 standard.

GLOSSARY

Award-type Descriptors: The 16 major awards on the Framework are all award-types. Knowledge, skill and competence and associated sub-strand outcomes have been developed for each of these and are called award-type descriptors. Due to the level of variation within, and the range of non-major awards, less detailed award-type descriptors are available for the classes of non-major award (minor, supplemental and special purpose). Award-type descriptors are generic, in that they do not refer to a particular field of learning.

Bologna Framework: A European higher education meta-framework with three cycles; Bachelor, Masters and Doctoral, and associated learning outcome indicators.

Bologna Process: The process that commenced with the Bologna Declaration in 1999 to establish a European Higher Education Area (EHEA).

Credit: Credit, and in some cases credit ranges, are associated with award-types in the Framework and are largely compatible in Irish higher education with European Credit Transfer System (ECTS) credit. The general purpose of credit is to recognise learning achievements which have value in themselves and which may be used to gain an award.

European Qualifications Framework (EQF): A European lifelong learning meta-framework with 8 levels and associated learning outcome indicators.

Learning outcomes: Learning outcomes are represented in the Framework through statements of knowledge, skill and competence. These are associated with each level and with the awards included in each level of the Framework.

Levels: The National Framework of Qualifications (NFQ) has 10 levels that capture learning from the very initial stages (i.e., literacy and communication skills) to the most advanced (i.e. Doctoral level).

Level indicators: Each level on the Framework has a specified level indicator. Level indicators are broad descriptions of learning outcomes, which are articulated in terms of knowledge, skill and competence. The Framework level indicators are generic in that they do not relate to a particular field of learning.

Major awards: Major Awards are the collective term for the 16 awards with a large volume of outcomes that are featured in the Framework.

Meta-Frameworks: An overarching (European) qualifications framework that enables the comparison of national qualifications frameworks with each other.

Module: A module is a discrete piece of learning within a programme that has associated learning outcomes, assessment and credit. It is also known as a 'subject' or a 'unit'.

Module Outcomes: Each module has learning outcomes associated with it. These outcomes collectively contribute to the achievement of the associated programme learning outcomes.

Non-Major awards:	Non-major awards are the collective term for awards in the Framework with a smaller volume and more narrow outcomes than major awards. There are three classes of non-major award: minor, special purpose and supplemental.
Programme Outcomes:	A series of statements articulated in terms of the learning outcomes of knowledge, skill and competence that are associated with a programme as a whole.
Sub-strands:	The knowledge, skill and competence learning outcomes associated with each level of the Framework have associated sub-strands which elaborate types of knowledge, skill and competence learning outcomes. For example, at each level there are knowledge learning outcomes indicated; the type of knowledge outcome anticipated at each level is broken down into knowledge breadth, and knowledge kind. These are called sub-strands.
Volume:	Volume refers to the amount of knowledge, skill and competence at a particular level or levels: the more the amount of knowledge, skill and competence the greater the associated volume. The concept of volume is a key to the development of a system of credit accumulation and transfer. Not all award-types at a level on the Framework have the same volume.