INTRODUCTION
The Bologna Process was initiated in 1999. It now involves 46 countries. An important action line in the Process is the restructuring of higher education programmes and changes to the qualifications (diplomas) that are made as a result. In 2003, Ministers with responsibility for higher education gathered in Berlin to review progress in the Bologna Process. They called on each participating country to develop a national framework of qualifications. They also called for the elaboration of an overarching Framework for Qualifications of the European Higher Education Area. For the purposes of brevity, this Framework will be referred to as the Bologna Framework. Subsequently in Bergen in 2005 Ministers adopted the Bologna Framework. This framework had been developed by a working group set up by and reporting to the Bologna Follow-Up Group and chaired by Mogens Berg. This document aims to introduce readers to the principal elements of the Bologna Framework.

RATIONALE AND PURPOSE OF THE BOLOGNA FRAMEWORK
There are a number of countries with national frameworks of qualifications already in place or being put in place, each reflecting national structures and policy priorities. Some of these relate to all education and training while others just to higher education. The ministers of all countries in the Bologna process have committed to having national frameworks in place by 2010.

The rationale for the Bologna Framework is to provide a mechanism to relate national frameworks to each other so as to enable:

(a) International transparency – this is at the heart of the Bologna process and while devices, such as the Diploma Supplement, have a role to play in this objective, it is difficult to ensure that qualifications can be easily read and compared across borders without a simplifying architecture for mutual understanding.

(b) International recognition of qualifications – this will be assisted through a framework, which provides a common understanding of the outcomes represented by qualifications for the purposes of employment and access to continuing education.

(c) International mobility of learners and graduates – this depends on the recognition of their prior learning and qualifications gained. Learners can ultimately have greater confidence that the outcomes of study abroad will contribute to the qualification sought in their home country. A framework will also be of particular help in supporting the development and recognition of joint degrees from more than one country.

THE BOLOGNA FRAMEWORK IN DETAIL
The first, second and third cycles established in the Bologna Process are the key elements of the overarching framework. These cycles can be best understood by reference to internationally acceptable descriptors which have been developed jointly by stakeholders across Europe – the so-called “Dublin descriptors” (see Appendix 1). They are of necessity quite general in nature. Not only must they accommodate a wide range of disciplines and profiles but they must also accommodate, as far as possible, the national variations in how qualifications have been developed and specified. Qualification descriptors are usually designed to be read as general statements of the typical achievement of learners who have been awarded a qualification on successful completion of a cycle.

The working group that established the Bologna Framework also examined the nature, development and effectiveness of existing national frameworks of qualifications. This revealed a wide pattern of different experiences from which a number of good practice recommendations was developed by the group. This is attached in appendix 2.
BUILDING TRUST
The success and acceptance of the Bologna Framework depends on trust and confidence among all stakeholders. This is to be achieved through a process in each participating country seeking to verify the compatibility of its national framework with the Bologna Framework.

This verification process requires more than a mere expression of qualifications by the competent national body. National frameworks and their associated quality assurance arrangements must satisfy a series of criteria and procedures, including the designation of competent bodies responsible for the maintenance of the Framework by the national ministry with responsibility for higher education, a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the Bologna Framework, the existence of national quality assurance systems for higher education consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process. Furthermore, the national framework, and any alignment with the Bologna Framework, is to be referenced in all Diploma Supplements. The verification report must be made public so that partners in the Bologna Process are able to see the reasons that lead the competent national authorities to conclude that their framework is compatible with the Bologna framework. It is strongly recommended that the verification exercise include at least one foreign expert. The detailed outline of these criteria and procedures is included in Appendix 3.

Following the adoption of the Bologna Framework in 2005, a further working group was established. Various seminars and other activities were organised to help countries develop their national frameworks and two countries’ existing frameworks went through self-certification processes. The group concluded in 2007 that the Bologna Framework and the procedures and criteria for verification of compatibility of national qualifications framework with the Bologna framework are adequate and serve their purpose. The Group made a number of recommendations to be considered by countries in undertaking the verification process. These are included in appendix 4.

A Coordination Group was established in 2007, under the chair of the Council of Europe, to support the development of national frameworks and the implementation of the Bologna Framework.

EUROPEAN QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING
Parallel to these developments, there is a second European overarching Framework for Qualifications which has now been adopted – the European Qualifications Framework for Lifelong Learning (EQF). This has been adopted by the European Union and relates to all education and training awards in Europe, including those aligned with the Bologna Framework. While EQF directly incorporates the cycle descriptors of the Bologna Framework, it does have its own separate level descriptors.

Diagrammatically, the relationship between the Bologna Framework and the EQF may be illustrated as follows:

<table>
<thead>
<tr>
<th>EQF</th>
<th>Bologna Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>*</td>
</tr>
<tr>
<td>6</td>
<td>First Cycle</td>
</tr>
<tr>
<td>7</td>
<td>Second Cycle</td>
</tr>
<tr>
<td>8</td>
<td>Third Cycle</td>
</tr>
</tbody>
</table>
* EQF level 5 is linked with Dublin Descriptor Short Cycle Qualification (within or linked to the first cycle). This is not formally part of the Bologna Framework – In adopting the Bologna Framework, Ministers agreed that the Framework would include, within national contexts, the possibility of intermediate qualifications.

It is planned that the countries within the European Union and other states participating in the Lisbon Strategy will align their national frameworks of qualifications with the EQF by 2012.

**CONCLUSION**
The strength of European higher education is the cultural richness and diversity, as represented by the 46 participating countries in the Bologna Process. This is an advantage for European students and an attraction for students from outside Europe. The Bologna Framework and the development and implementation of national frameworks of qualifications are central to removing the barriers to mobility and the creation of a common language for qualifications.
### Dublin Descriptors
(Extract from Working Group on Qualifications Frameworks Report, 2005)

<table>
<thead>
<tr>
<th>Short Cycle Qualification (within or linked to the first cycle)*</th>
<th>First Cycle</th>
<th>Second Cycle</th>
<th>Third cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualifications that signify completion of the higher education short cycle (within or linked to the first cycle) are awarded to students who:</strong></td>
<td><strong>have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level supported by advanced textbooks; such knowledge provides an underpinning for a field of work or vocation, personal development, and further studies to complete the first cycle;</strong></td>
<td><strong>have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</strong></td>
<td><strong>have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</strong></td>
</tr>
<tr>
<td><strong>can apply their knowledge and understanding in occupational contexts;</strong></td>
<td><strong>can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</strong></td>
<td><strong>have the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgements;</strong></td>
<td><strong>are capable of critical analysis, evaluation and synthesis of new and complex ideas;</strong></td>
</tr>
<tr>
<td><strong>have the ability to identify and use data to formulate responses to well-defined concrete and abstract problems;</strong></td>
<td><strong>have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</strong></td>
<td><strong>can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</strong></td>
<td><strong>can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</strong></td>
</tr>
<tr>
<td><strong>can communicate about their understanding, skills and activities, with peers, supervisors and clients;</strong></td>
<td><strong>can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</strong></td>
<td><strong>can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</strong></td>
<td><strong>can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</strong></td>
</tr>
<tr>
<td><strong>have the learning skills to undertake further studies with some autonomy.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.

<table>
<thead>
<tr>
<th>Credits</th>
<th>Typically Include</th>
<th>Normally Carry</th>
<th>Credits Not Specified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approximately 120 ECTS</td>
<td>180-240 ECTS credits</td>
<td>90-120 ECTS credits – minimum of 60 ECTS credits at the second cycle level</td>
<td></td>
</tr>
</tbody>
</table>

*This is not formally part of the Bologna Framework – In adopting the Bologna Framework, Ministers agreed that the Framework would include, within national contexts, the possibility of intermediate qualifications.*
Appendix 2

Good practice for the development of national frameworks of qualifications
(Extract from Working Group on Qualifications Frameworks Report, 2005)

• The development and review process for producing good frameworks is most effective when it involves all relevant stakeholders both within and outside higher education. Higher educations frameworks naturally link to VET and post-secondary education and as such are best viewed and treated as a national initiative. This also makes possible the inclusion of, or links to, other areas of education and training outside higher education.

• The framework for higher education qualifications should identify a clear and nationally-agreed set of purposes.

• Frameworks for higher education qualifications benefit from the inclusion of cycles and/or levels, and articulation with outcome-focused indicators and/or descriptors of qualifications.

• The use of learning outcomes in describing units, modules, and whole qualifications aids their transparency, recognition and subsequent student and citizen mobility. The identification of formal links to learning outcomes should play an important role in the development of national frameworks of qualifications.

• More flexible higher education frameworks of qualifications have the benefit of promoting multiple pathways into and through higher education, and thus through encouraging lifelong learning and the efficient use of resources promote greater social cohesion.

• Higher education frameworks of qualifications benefit from being directly linked to credit accumulation and transfer systems. Credits are student-centred tools that can enhance the flexibility, clarity, progression and coherence of educational systems when they are expressed in terms of learning outcomes, levels/cycles and workload. Credit systems facilitate bridges and links between different forms, modes, levels and sectors of education and can be instrumental in facilitating access, inclusion and lifelong learning.

• Higher education frameworks of qualifications should explicitly link to academic standards, national and institutional quality assurance systems, and public understanding of the place and level of nationally recognised qualifications.

• Public confidence in academic standards requires public understanding of the achievements represented by different higher education qualifications and titles. This confidence and understanding is enhanced by the publication of appropriate institutional audits and/or subject review reports.

• The development and application of ‘new style’ national frameworks of qualifications facilitates the development of autonomous higher education institutions by creating clear external reference points that help to promote high quality, responsible and responsive institutions.

• National frameworks of qualifications need to articulate in a transparent way with the overarching European framework for qualifications. The process of articulation should involve the careful mapping of national qualifications (their levels, learning outcomes and descriptors) with the cycle descriptors identified for the European overarching framework.
Appendix 3

Criteria & Procedures for Verification of Framework Compatibility
(Extract from Working Group on Qualifications Frameworks Report, 2005)

Criteria for verifying that national frameworks are compatible with the Bologna framework are as follows:

1. The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.

2. There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework.

3. The national framework and its qualifications are demonstrably based on learning outcomes and the qualifications are linked to ECTS or ECTS compatible credits.

4. The procedures for inclusion of qualifications in the national framework are transparent.

5. The national quality assurance system for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process.

6. The national framework, and any alignment with the European framework, is referenced in all Diploma Supplements.

7. The responsibilities of the domestic parties to the national framework are clearly determined and published.

Procedures for verifying that national frameworks are compatible with the Bologna framework are as follows:

1. The competent national body/bodies shall certify the compatibility of the national framework with the European framework.

2. The self-certification process shall include the stated agreement of the quality assurance bodies in the country in question recognised through the Bologna Process.

3. The self-certification process shall involve international experts.

4. The self-certification and the evidence supporting it shall be published and shall address separately each of the criteria set out.

5. The ENIC and NARIC networks shall maintain a public listing of States that have confirmed that they have completed the self-certification process [www.enic-naric.net]

6. The completion of the self-certification process shall be noted on Diploma Supplements issued subsequently by showing the link between the national framework and the European framework.
Appendix 4

Recommendations to be considered by countries in undertaking the verification process
(Extract from Qualifications Frameworks Working Group Report, 2007)
The procedures and criteria are those referred to in Appendix 3 (above)

Procedures:

- In developing their National Frameworks, countries should have a view on the need to align the National Framework to the Bologna Framework while noting that the Framework development process and the subsequent alignment are separate processes.
- Countries should ensure that there is some element of testing or implementation of a national framework before the process of aligning it to the Bologna Framework is completed.
- It might be helpful for small groups of countries to co-operate in undertaking alignment processes.
- While some countries have qualifications recognition agreements with other countries, sometimes outside of Europe, and the Working Group suggests that consultation be undertaken by a country aligning a national framework to the Bologna Framework with any such country with which it has a qualifications recognition agreement. Furthermore, countries with a tradition of having award holders move to other (perhaps neighbouring) countries may also wish to discuss any alignment process with those countries or to discuss possible cooperation with peers from such countries in their alignment process.
- The small steering group model, together with consultation with stakeholders on a transparent basis is a good model for all countries. At the same time, the Working Group recognises that different models may work well for other countries.
- It is important that there is clarity on the arrangements for requiring the stated agreement of certain stakeholders of the verification when a verification process is initiated.
- The manner in which Scotland and Ireland have involved international experts in their work through membership of the steering group has been exemplary.
- There are issues that will need to be addressed in the future about the availability and financing of experts to assist countries in their verification processes. There will be linguistic challenges, particularly where a verification process is undertaken in a national language whose use is not widespread across Europe and, certainly at this stage in the development of national frameworks, there is not a significant number of potential experts available. One option which the Working Group suggests could be explored is that the Council of Europe might assist some countries in the identification of potential international experts for national verification processes.
- The format of the Scottish and Irish reports can act as examples for the formats of the reports of other countries.
- There is a need for two outcomes from each self-certification process:
  - The first is the detailed verification document analysing in detail all issues and addressing each of the criteria and procedures.
  - The second is a simple summary of the outcomes for communication to the general public.
- All future alignment processes should take note of any alignment that has been completed.

Criteria (Note the working group made no recommendations regarding criteria 3, 4, 6 or 7):

- **Criterion 1 – The national framework for higher education qualifications and the body or bodies responsible for its development are designated by the national ministry with responsibility for higher education.**
  - That while there were not any particular issues arising for Ireland and Scotland in relation to the designation of the body with responsibility for the Framework in each country, this could be an issue for other countries. For such countries, the national actors who initiate Framework development may not be the same as the body ultimately responsible for the Framework. This is a natural development and does not undermine the ultimate legitimacy of the Framework which will eventually need to be adopted in a formal way in each country.
• **Criterion 2 – There is a clear and demonstrable link between the qualifications in the national framework and the cycle qualification descriptors of the European framework**
  - that the work of the ENIC and NARIC networks in examining issues relating to the concept of substantial difference be informed of issues arising in the verification process and that consideration be given to the development of formal linkages to this work.
  - that in making reports all countries should seek to address progression issues.
  - that there will be issues for many countries in terms of having more than one level in a National Framework relating to a Bologna cycle and of having intermediate qualifications and levels and that the approaches undertaken in the Scottish and Irish Reports, in terms of identifying these, can act as examples for other countries which have intermediate qualifications/levels.
  - the Working Group recommends that countries should identify intermediate qualifications in their verification processes and examine the possibility of aligning any first cycle intermediate qualifications with the Joint Quality Initiative’s descriptor for the higher education short cycle.
  - the concept of ‘best fit’ is a crucial one. It is not expected, nor is it desirable, that there will be an exact match between descriptors of different frameworks, which will have different purposes and contexts. The pilots showed that many qualifications will have elements which fit to a higher or lower level of the framework than the level at which the qualification as a whole is placed. The purpose of frameworks is to help understand both similarities and differences between different qualifications which do not have exact matches or equivalences.
  - there is a need to ensure that national verification reports address the issue of labour market relevance of first cycle completion.
  - the working group notes that it has been very difficult for Scotland and Ireland to address such recognition issues [i.e., recognition by higher education institutions in other countries of Scottish and Irish qualifications and of other country qualifications by Irish and Scottish institutions] given the state-of-play in the implementation of the national frameworks incorporating the Bologna cycles. Nevertheless, the Group considers that given that this is one of the key aims of the Bologna Framework, it is important that all countries endeavour to seek appropriate information in this regard as part of their verification work. The Group considers that this is an area where the ENIC and NARIC networks can be of assistance.
  - that all countries should provide for the review of the verification of the alignment of their National Framework to the Bologna Framework where there have been any major amendments to their National Framework.
  - that it is important that legacy awards (awards that will no longer be made but which are important as there will continue to be many holders of such awards) are included in, or related to, National Frameworks as they are being developed and implemented and that these are taken into account in the verification of the alignment with the Bologna Framework.

• **Criterion 5 – The national quality assurance systems for higher education refer to the national framework of qualifications and are consistent with the Berlin Communiqué and any subsequent communiqué agreed by ministers in the Bologna Process**
  - that in the implementation of the verification process countries should demonstrate that their national systems – at institutional and agency level – are deliberately seeking to implement the Standards and Guidelines for Quality Assurance in the European Higher Education Area and that the state-of-play in relation to reviews in line with the Standards and Guidelines should be set out while at this time such review need not to been undertaken. The working group notes that it is the intention of many countries to implement the standards and guidelines within the next four years and considers that any verification report should be added to and the Council of Europe notified where a review in line with the Standards and Guidelines has been completed. Additionally, the Working Group recommends that for any self-certification process underway after 2010, it should be a requirement that agency reviews in line with the standards and guidelines are completed in a satisfactory way prior to the completion of any self-certification process.
Appendix 5

Bibliography
