Towards a Future

Higher Education Landscape

13th February 2012

1. Introduction

The publication of the National Strategy for Higher Education marked a further step in the development of the Irish higher education sector. The publication of the strategy presents an opportunity to bring a nationally coherent and co-ordinated approach to the development of the sector while respecting institutional autonomy. But while the strategy, *inter alia*, sets out the broad objectives and direction to 2030, it did not set out to provide in detail how these were to be achieved. This document proposes a route to bridging the gap between the necessarily high level strategy and what is needed in terms of the structure, or landscape, of the higher education system to meet the objectives of the strategy and address its recommendations. In particular this document aims to assist institutions to set out a medium term (approximately 5 years) strategy that builds on institutional strengths and contributes to national needs.

2. Our starting point

Ireland has achieved a remarkable expansion of higher education opportunities over recent decades which resulted in a steady improvement in the educational profile of our workforce relative to international benchmarks. Our younger workforce is among the most educated in the OECD but the educational attainment levels of older workers are poor by international standards. Our output of qualifications at NFQ Levels 6 & 7 is a strength, but we are average in terms of the overall attainment at Levels 8-10 and below average in terms of the output of PhDs.[1] The disciplinary profile of Irish higher education corresponds closely with international norms, while the Irish higher education system is ranked highly internationally.[2] However, since the collapse of Irish public finances, the perception of the quality of Irish higher education internationally has suffered.

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[1] In terms of the attainment of tertiary qualifications, our improvement is reflected in the fact that while we rank 18th-19th (out of approximately 35 countries) in the OECD in respect of adults aged 45 to 64, Ireland now ranks 4th in the OECD in terms of the tertiary qualifications of younger adults aged 25 to 34. Ireland's strong position in terms of overall tertiary attainment is boosted by a strong output of qualifications at sub-degree levels (NFQ levels 6 & 7) where we rank 6th overall in terms of workforce qualifications. Our performance is closer to OECD average levels in terms of the attainment of qualifications at degree level and above (NFQ levels 8-10).[1] At PhD (NFQ level 10), Ireland is below EU and OECD average graduation rates. See OECD (2011) Education at a Glance 2011 - Table A1.3a. Population with tertiary education (2009) & Table A3.3 Graduation rates at different tertiary levels (2009).

[2] Recent research carried out by ECOFIN, on behalf of Ministers for Finance in EU countries, found that Ireland came first out of 28 countries in terms of the number of graduates per 1,000 inhabitants. It scored second out of 27 countries in terms of graduates per academic staff member. It ranked first in terms of how employers rate our graduates, and found that Irish universities are one of three countries where the highest excellence rating is given by academics in other EU countries. See St. Aubyn, M., Pina, A., Garcia, F. & Pais, J. (2009) *Study on the efficiency and effectiveness of public spending on tertiary education*, European Economy, Economics Papers 390, November 2009, ECOFIN, European Commission, p.66. http://ec.europa.eu/economy_finance/publications/publication16267_en.pdf

Ireland has a sound legislative framework for higher education, which provides a good basis for the governance of higher education and which accommodates a diverse spectrum of education institutions providing choice of discipline and level. In the international literature, institutional autonomy is positively correlated with high quality and performance and, in this regard, a recent EUA study has found that Ireland operates one of the most autonomous systems of higher education in Europe in relation to academic decision making.

Ireland's commitment to investment in education has been critical in generating the supply of skilled graduates that underpinned the significant increases in productivity and export-oriented growth achieved from the mid-1990s to the early years of the current century. Notwithstanding the significant overall increases in investment in higher education, per capita expenditure remained modest by international standards throughout the period of growth and has significantly decreased since 2009. As a consequence, staff-student ratios which were close to international norms have worsened.[3]

The State's policies of responding to the growing demand for higher education opportunities was, and is, reflected in a funding model largely determined by student numbers which implicitly incentivises growth. The national policy of broadly distributing provision to facilitate regional access took precedence over the creation of focussed centres of excellence, as evidenced in the wide distribution of programmes such as nursing, apprenticeship and teacher education. Together, these policies have resulted in a crowded and unstructured landscape. At present, 44 institutions offer under-graduate programmes through the CAO and 27 institutions offer research programmes at level 9 and/or 10. A further consequence of the promotion of growth has been both a proliferation of under-graduate programmes within many institutions, resulting in fragmentation of offerings and a loss of focus on core missions and strengths.

In terms of research activity, the frameworks established by funding programmes, particularly PRTLI, together with the much more competitive international environment for research, has led to greater institutional research specialisation. This is critical; Ireland is a small player in the world of research in higher education institutions and we must be focussed and strategic to maximise our return from research investment and to fully engage in international research activity such as the EU framework programmes. While there is evident differentiation of research activity and intensity between universities and institutes, research missions need to be supported and differentiated through funding mechanisms. A greater emphasis on the prioritisation and the impact of our research investment is needed in future together with closer links between the research, knowledge transfer and innovation agendas.

[3] See HEA (2011) *Sustainability Report* p 10, available at www.hea.ie

3. Drivers of change

Irish higher education operates in a complex and changing environment, but there are two essential drivers of change - quality and participation. There is a significant tension between these two objectives which needs to be managed in a sustainable way.

The provision of education and research by Irish HEIs must meet or exceed international standards for quality of outcomes, and this must be done in a transparent manner. If we are to ensure that those who enter our higher education system have a rich and personally fulfilling experience, then the teaching and learning environment must be of the highest standards. Economic renewal depends on our ability to maintain and develop a workforce with a high level of skills and on an education and research system that is relevant and responsive to societal needs, capable of sustaining a base for high quality research and innovation. This necessitates a response based on a diversity of institutions, programmes and research provision, all underpinned by a commitment to excellence. The achievement of excellence requires a core of well qualified and motivated staff, capable of teaching to the highest standard, pursuing opportunities for scholarship and conducting research. However, there are concerns relating to quality which include the rapid expansion of undergraduate programmes with a narrow focus, the academic preparedness of students entering higher education with low levels of prior achievement and the small scale of some recent PhD provision. Underpinning all these challenges is the need to manage quality within an increasingly difficult financial environment.[4]

Higher education operates in the global arena and this is the context in which academic outputs, standards and quality are benchmarked and referenced. Ireland needs a system consisting of strong, internationally significant institutions working within a cohesive framework to create the knowledge, economic capital and innovation ecosystem required for our recovery and development. The HE system must not just follow but must play a lead role in the creation, fostering and growth of potential new spheres of economic activity and social innovation.

In terms of participation, the National Strategy states that the further expansion of higher education is inevitable and essential if we are to fulfil our aspirations as a knowledge-based economy. Policy and practice in respect of participation in higher education should support access by those who can and wish to benefit from higher education, as well as supporting the skills needed in the economy. In economic terms, higher education of high quality plays a major part in the creation of human capital and in equipping graduates with the knowledge, skills and competencies to participate in the economy. The national skills strategy demonstrated the need for ongoing upskilling of the existing work force, while recent demographic projections show that the numbers of school leavers will continue to grow into the coming decades. The prediction of national skills demands is a difficult and challenging activity and there

[4] See A Hyland for HEA and NCCA (2011) *Entry to Higher Education in Ireland in the 21st Century* Discussion Paper, available at www.hea.ie

are limits to our capacity to predict where skills needs will arise. However, it is clear our HE system must strengthen its alignment with the evolving economic needs, and its integration within the education and training system as a whole.

4. Our objectives

In shaping the landscape, a first priority is to take account of national objectives for higher education in the coming years. While these objectives can be grouped in different ways, three main objectives are identified here:

i. Improve student experience

Access should be provided for all those students who are capable of benefiting from higher education. Particular regard is needed for those without a family tradition of participation. Students must have access to different pathways into higher education, and pathways between higher education institutions. Students should have a dynamic and vibrant learning experience, drawing on best practice in pedagogy and learning technologies. Different modes of learning should be available to facilitate the work-life balance of students.

ii. Improve impact on society and economy

Through the education and training of graduates, and the creation and distribution of knowledge, higher education should contribute to the development of a dynamic, fair, productive and creative society. Higher education should provide graduates with a breadth of knowledge, skills and competencies to meet the needs spectrum of private enterprise, public purpose and social innovation. Higher education should meet the requirements of the national research, innovation and enterprise agenda with an appropriate prioritisation of investment to achieve optimal social and commercial impact. Higher education should be regionally and community-engaged, as one means of ensuring the currency of the teaching and research underway, and of enabling competitive regional development.

iii. Improve international recognition of the quality of Irish HE outcomes.

Higher education is an international activity. Our system and the individual institutions must compete for scarce financial resources, as well as staff and students. Our higher education system is also an important component of Ireland's overall international reputation. The quality of our graduates and research is an important consideration in decisions by international firms as to whether to invest in Ireland. For these reasons it is essential that our system is internationally recognised as one of high quality.

5. A system-level approach

The National Strategy identified the need to move beyond a simplistic binary notion of a higher education system, towards a system of coherent, diverse, and well co-ordinated HEIs, capable of meeting the social and economic needs of the country. Such a system requires *distinctiveness* of missions at the institutional level, and

diversity of missions at system level. This means having a range of institutional types with clearly differentiated missions and clear strategic orientations. These institutions should provide a complementary range of all the academic disciplines needed by individuals, by society and by the labour market. In turn, high levels of inter-institutional collaboration are required so that specialisation at institutional level does not lead to diminished opportunities and choices for students at regional and national levels. Achieving such a co-ordinated system will be dependent on successful engagement processes at both system level and institutional level.

In order for a system-level approach to work, each institution must understand where, by playing to its strengths, it can make the biggest impact and benefit both for itself and for Irish society. This in turn requires that broad outlines of the system should be clear so as to allow each institution to make strategic choices. It is the purpose of this document to set out the principles which will underpin reform of the structure of Irish higher education in the immediate future, and that will assist institutions in developing a set of inter-relationships that will best serve the achievement of national objectives. Informed by these principles, institutions will make strategic choices. These will be the subject of review by the HEA through a process of engagement at system level, leading to a blueprint for the whole of the HE landscape.

6. The future higher education landscape

In considering the growth and development of the higher education sector, it is clear that a variety of policy instruments, types of institutions and configurations of institutions will be needed to achieve the objective of a coherent system of higher education, which meets a diversity of needs. Ireland already has a variety of institutional types; this is a strength from which to build. But the evolution and development of missions, in particular over the past decade, has caused the distinctions between types of institutions to become blurred. We need to revisit and revise missions to match 21st century needs, and ensure clarity and diversity. This means conserving all of the best aspects of the binary system, that have served us well, such as the differentiated emphasis in different parts of the system on regional engagement, research intensity, part-time provision and labour market orientation. But we must also respond to the demands for new types of provision and performance enhancement through more sophisticated mission differentiation.

Ireland has a well-developed National Framework of Qualifications (NFQ) that, in conjunction with its outcomes oriented approach to learning, emphasising the development of knowledge, skills and competencies, allows us to build a range of opportunities for creating rich and diverse student pathways into and through our higher education system. No higher education institution can or should attempt to provide the full range of entrance and pathway opportunities for the full range of general, specialist, or labour market oriented programmes of study. This institutional range and diversity will help ensure that the whole of the system is greater than the sum of the individual institutions. The future system will be characterised by differentiation based on important features such as NFQ level, discipline

specialisation, programme orientation, regional engagement, student profile, mode of provision, research intensity and specialisation.

Diversity of mission

Ireland's complex, modern, open economy and society increasingly requires a range of educational opportunities for new and returning students. This will include full and short-cycle undergraduate and post-graduate programmes, including those which deepen and those which broaden the knowledge base of students at different levels. Currently, much of the provision of short and full cycle programmes at Levels 6 and 7, most of which is career and labour market oriented, is provided by the institutes of technology. It is intended that this pattern of provision will remain. However, close collaboration between institutions operating in the same region will be a feature of the future system. Levels 6 and 7 will be key entry points for people in the workforce seeking part-time and flexible opportunities for up-skilling or re-skilling. This will continue to be an important area of focus for institutes of technology.

There has been some concern about the blurring of missions at Levels 8 and 9. But it is not helpful to differentiate overly between the types of Level 8 and 9 taught programmes that should be offered by different types of institutions. Crude distinctions between 'market ready graduates' and graduates of 'academic' programmes, for example, mask the richness and diversity of provision and outcomes that exist and that the HEA wishes to encourage. The learning outcomes approach facilitated by the NFQ allows for differentiation of programmes, on the basis of the balance attained between outcomes in the areas of knowledge, skills and competencies of graduates.

In order to create and sustain a diverse yet coherent system, it will be essential that all institutions have a clear perspective on their particular mission and role within the overall system. In particular, it will be essential that institutions ensure that their programmes continue to be reflective of, and appropriate to, their mission.

In a more diverse HE landscape, this would lead to greater differentiation based on field specialisation, programme orientation and mode of delivery, again reflective of the mission and orientation of each institution. The suite of programmes offered by an institution is a key expression of the distinctiveness of its mission and of the differentiation of an institution within its "family" of like-minded institutions.

It is anticipated that while all institutions will develop more blended learning programmes to meet student demand for more flexibility, open and distance learning (ODL) is expected to become a much more significant element in the programme delivery of some institutions.

Considerable progress has been made in expanding the provision of research degrees at Levels 9 and 10. However, as in other countries where the enhancement of PhD provision and quality is a strategic priority, there is an on-going need for Irish HE to position and market itself as an provider of excellent PhD education. Accordingly, it

will be essential that any provider demonstrates both a capacity to deliver high quality PhD training, benchmarked against international standards, as well as a coherent demand for PhD output.

PhD provision is but one element of Level 10 education and training, and a growth in alternate means of Level 10 provision such as industrial/ professional doctorates is expected to be reflected in the missions of some institutions and appropriately supported through research funding instruments.

Collaboration & consolidation
From the viewpoint of the structures in HE, the National Strategy saw collaboration, locally, regionally, nationally and internationally as being key to system development. Inter-institutional collaborations will be required across a range of activities such as programme design and provision, access, transfer and progression, research, knowledge transfer and shared support services. An immediate priority is to enhance the quality and cost-effectiveness of provision through shared collaborative provision at under-graduate and post-graduate levels, particularly in high cost programmes, such as medicine, engineering and architecture, or programmes with limited student demand. Collaborations and alliances may also lead over time to consolidation, where this can bring academic and other benefits to the HEIs involved and the wider system.

In relation to regional clusters, there is already evidence of nascent clusters (i.e. the Dublin Regional Higher Education Alliance, the Líonra alliance of institutions within the BMW region, the Shannon Consortium in the South West, and in the South and South East different collaborations between UCC and CIT, and WIT and Carlow IT).

Building on this progress, regional clusters will be created in a formal and systemic way to address the full range of higher education needs of a region and to advance regional development. All higher education institutions will actively participate in regional clusters. Collaborative arrangements between institutes and universities that enhance the quality and effectiveness of their activities are expected, and indeed will in many instances form the nucleus of regional clusters. The clusters will also facilitate extensive engagement with other education providers at all levels, as well as with enterprise, business and community stakeholders.

While not specifically addressed in the National Strategy, further education is a key component of post-secondary education. In the interests of meeting the broader needs of learners and the economy, is it important that new and more effective links are created between further and higher education. Regional clusters will be an important mechanism to bridge the gap between further and higher education, through better student pathways, and recognition of learning outcomes.

In addition to regional clusters, collaborations that are not constrained by geography will be vital. These include mission-based clusters to guarantee the continuing provision of labour-market oriented and practice-led specialist provision in areas such as culinary arts, art and design, policing and army, tourism, agriculture, theatre/drama.

Collaboration that transcends national boundaries will become increasingly important to enhance the international connectedness and reputation of individual institutions and of the system as a whole.

At present Ireland has a significant number of small higher education institutions that are in receipt of public funding. The national strategy is clear in its recommendation that these should be consolidated, where appropriate, to promote coherence and sustainability. It is expected that such institutions will be consolidated through incorporation into or merger with existing universities, institutes of technology or into technological universities. Public funding of these small institutions will not be continued except in circumstances where there are significant reasons of a strategic kind for continuing funding as separate institutions. Where appropriate, there will also be consolidation of institutions in the institute of technology sector, dictated by the requirements of sustainability and quality, leading to a smaller number of multi-campus institutions.

High quality private sector institutions will continue to be a feature of the system, and could have an expanded role where they meet particular economic or other demands. The role that such institutions can play in augmenting publicly funded provision will be the subject of further consultation. In line with best international practice, the question of regulation of private (for-profit and not-for-profit) providers will be addressed as part of overall system development and regulation.

Elimination of unnecessary duplication

Competition between institutions, both public and private, is an essential feature of any higher education system. But care needs to be taken that competition does not create unnecessary and wasteful duplication. Elimination of unnecessary duplication of provision, while maintaining capacity to meet future student demand, will be an important part of the HEA's system co-ordination role. The HEA will facilitate and co-ordinate analysis by the relevant institutions of programme and disciplinary offerings to explore on a system basis where unnecessary duplication arises and how rationalisation can be achieved. Regional clusters provide an ideal platform to ensure coherence and comprehensiveness of provision locally and regionally.

Progress on this issue is critical. The preferred option is that higher education providers within a region (and where appropriate nationally) will proactively come together to examine the scope for rationalisation of programmes and the effectiveness of the regional use of current and capital resources and, where relevant, to demonstrate that they have formal regional collaborative arrangements in place. HEIs will be expected to show that they have reviewed programme provision in the light of demand, that they have taken account of relevant findings of quality processes, particularity in relation to critical mass, that they have reviewed the use of resources on a regional basis, and that they are acting on the findings. The HEA will provide details of its data analysis of student numbers to support institutions in addressing this issue. The HEA will work closely with the QQAI in this regard.

Technological university.
The National Strategy provides for the establishment of technological universities. Such an institution, must satisfy the requirements that there is a clear need for it and that it meets the criteria set out in the document "Process and criteria for designation as a technological university" attached.

7. Achieving these outcomes

The development of a co-ordinated system of higher education that incorporates the elements outlined above will not occur in an "organic" way. While change driven by the institutions themselves, jointly or alone, will continue to play an important part in achieving a system outcome (bottom-up approach), a top-down element (based on shared vision and direction) will also be necessary. The role of the HEA is to provide this top-down element, through the process of engagement. This process will be a dynamic one so as to ensure on-going focus on mission-relevant activity in the HEIs and performance to agreed outcomes. Regulatory systems, many already in place, will also support the process. Central to the set of inter-relationships that will characterise the Irish HE system will be a close and mutually supportive relationship between the QQAI and the HEA. This will be vital in ensuring that funding, quality and the attainment of excellence are mutually reinforcing. In carrying out its role, the HEA will be informed by research into the development of higher education, high quality data and expert advice and support as required. The funding allocation process now in place is under review and will be reformed as necessary to support our objectives.

The National Strategy acknowledges that one of the key strengths of our higher education system has been, and should remain, institutional autonomy. There is, in developing a system approach to higher education as now intended, a risk that such autonomy will be weakened to an extent that outweighs the benefits that can arise from a system approach. To manage that risk, the HEA will adopt an approach of progressive implementation of this process of engagement and the new funding relationship over a period of 3 years. In that period the HEA intends to keep under close review with the HEIs what will be a work in progress. By the end of 2014 a fully functioning system approach will be in place, including performance monitoring and performance related funding at institutional level.

An important first step towards developing a co-ordinated HE system is to agree on the architecture of that system. This document provides the basis for that work. The following outlines the process by which the HEA proposes to develop that architecture.

The appendices to this document contain -

- Process and criteria for designation as a technological university (Appendix 1).
- Guidelines on regional clusters (Appendix 2).

Additionally, recognising that consolidation will be a feature of the development of the higher education system, the HEA will provide guidance on best practice on this question where appropriate and when required.

Each HEI is now asked to respond, within a period of six months from the date of issue of this document, regarding where and how it proposes to position itself within the Irish higher education system as outlined in this document. Such proposals should provide high level strategic plans with regard to mission, institutional alliances and clusters.

Strategic plans could result in:

- Proposal to merge with another HEI(s)
- Proposal to apply for designation as a technological university
- Proposal to establish a specialist institution..

Proposals in relation to the establishment of regional clusters are also sought.

In parallel with the work undertaken by the institutions, the HEA will commission a study with the objective of providing an objective view of the future structure of our higher education system. This will address issues including the number of institutions, the range of missions and the alliances and relationships which have the potential to strengthen the system. The study will also have regard to issues such as social and economic needs, regionally and nationally, feedback from employer surveys, financial considerations and demographic trends.

Proposals received from the institutions will be discussed with them individually, or in groups where appropriate, during early autumn 2012. All proposals will be considered by the HEA in the round. The HEA will be informed by the proposals received and by discussions with the institutions, and by the study referred to above. The HEA will then advise the Minister on an outline blueprint for the higher education system, including numbers, types and locations of higher education institutions that will be required in the system over the next 10-20 years. At this stage, taking a system strategic view, the HEA will also advise on any proposal for a new type of institution. It is intended that this blueprint will be published by the end of 2012.

The Minister for Education and Skills will continue to determine policy for the sector, with advice from the HEA. The Minister and the Government will also continue to determine the overall funding provided to the sector. The Minister will set objectives for the HE sector, and the HEA will be held accountable by the Minister and the Department for the achievement of those objectives.

This document has not addressed the issue of sustainability, but it is acknowledged that it is a key underpinning element to success. Sustainability is not just an issue of resources but how resources are applied and the structures within and between institutions for delivery of their mission.

APPENDIX 1

Process and Criteria for Designation as a Technological University

Introduction
The National Strategy for Higher Education provides for the establishment of a new type of university – a technological university. A technological university will have a systematic focus on the preparation of graduates for complex professional roles in a changing technological world. It will advance knowledge through research and scholarship and disseminate this knowledge to meet the needs of society and enterprise. It shall have particular regard to the needs of the region in which the university is located.

For the purposes of determining whether an application for designation as a technological university should be approved, the HEA shall appoint international panels of experts (referred to as "Expert Panels") to advise the Authority in respect of Stages 3 and 4 of the designation process outlined in this memorandum. In conducting their evaluation, the Expert Panels will carry out such site visits and reviews and be given access to information from the applicant institution as they consider appropriate.

The designation process will consist of four stages as follows –

- an expression of interest,
- the preparation of a plan to meet the criteria,
- an evaluation of the plan, and
- an application for designation.

Stage 1 - Expression of Interest
Higher education institutions in Ireland wishing to apply for designation as a technological university must submit an expression of interest to the Higher Education Authority. The expression of interest must state, *inter alia*, how the transition from the institutions' current status to final designation will be financed. The expression of interest will be considered by the HEA in the context of a system wide analysis of Ireland's higher education needs and the strategic implications arising from the establishment of a new university. The HEA will, having considered the system level implications of the proposal, advise, within a reasonable period (no longer than six months), as to whether or not the proposal may proceed to the next stage.

Stage 2 - Preparation of Plan to Meet Criteria
At this stage a plan will be prepared by the applicant, addressing how it is proposed to meet the criteria for a technological university and the process requirements and related timelines.

The establishment of a technological university requires the consolidation of two or more institutions. Accordingly, the plan must be based on a legally binding memorandum of understanding between a consortium of existing institutions describing their consolidation into a new single institution, which has been approved by the Governing Body of each institution.

The plan must demonstrate that legally binding academic and administrative arrangements are in place to ensure that national and regional needs for graduates at higher education Levels 6 and 7 on the National Framework of Qualifications are met.

Stage 3 - Evaluation of Plan

The plan will be assessed by an Expert Panel which will have regard to -

- the capacity of the proposed consortium to achieve the objectives of consolidation in terms of academic rationale, scale, the degree of integration through alliances and membership of clusters and the extent to which workplace practices have been developed to bring them into line with those of a modern university, and
- the existing position of the proposed consortium in relation to each of the technological university designation criteria (Appendix 1) and its capacity, based on its developmental trajectory, to meet these criteria within a reasonable timeframe.

A decision will be provided by the HEA to the applicant within six months of receipt of the plan. If, in the opinion of this Expert Panel, the proposal is not likely to meet the criteria for designation as a technological university within the proposed timeframe the application will not proceed further. In that case, a further application will not be accepted for a period of five years. If the Panel is of the view that the plan presented represents a credible and realisable proposal, the Panel may provide advice to the applicant or the HEA on any matter relating to its implementation.

Stage 4 - Application for Designation as a Technological University

Where a legal consolidation has been achieved and the applicant considers that all other requirements for designation have been met, the applicant may apply for designation as a technological university. The application for designation will be evaluated by an Expert Panel. In carrying out that evaluation, this Panel will have regard to the criteria set out in Appendix A, the legal and administrative requirements applying to universities in Ireland, the configuration of institutions within the Irish higher education system, the characteristics of technological universities internationally, detailed statistical profile data on Irish higher education institutions and the overall merits of the application.

This Expert Panel will report its recommendation to the HEA which will consider the report and advise the Minister for Education and Skills.

Appendix A
Criteria for a Technological University

1 Mission

1.1 A technological university will have a systematic focus on the preparation of graduates for complex professional roles in a changing technological world. It will advance knowledge through research and scholarship and disseminate this knowledge to meet the needs of society and enterprise. It will have particular regard to the needs of the region in which the university is located.

1.2 Having regard to the mission of a technological university, these criteria set out the requirements that are to be met by an applicant before designation can be made.

2 Institutional Profile

2.1 The university will –

- be characterised by the breadth of its programme provision across higher education Levels 6 to 10 of the National Framework of Qualifications.
- have programmes of study that are vocationally/professionally oriented, with a strong focus on science and technology.
- have programmes of study that incorporate structured work placement.
- have programmes that address the social and economic needs of the region in which the university is located.
- have sufficient resources and critical mass to ensure appropriate pedagogical and research quality and depth of faculty expertise to meet the mission of the institution.
- have sufficient critical mass to support effective and efficient governance and administration and to provide an appropriate level of student services.
- maintain an active research policy primarily focused on applied, problem oriented research and discovery, with effective knowledge transfer alongside the provision of consulting/problem solving services that are particularly relevant to the region.
- support intensive and broad-based links with regional business, enterprise, professions and related stakeholders that inform curriculum, teaching and learning, assessment and research.

3 Student Profile

3.1 The student profile of the university will match its stated mission. Specifically, the university will provide programmes at higher education Levels 6 to 10 to meet local, regional and national demand and to meet the university's responsibilities in respect of educational opportunities at these levels.

3.2 At the time of application for designation as a technological university –

- enrolment in the applicant institution in research programmes at Levels 9-10 will not be less than 4% of FTE enrolments at levels 8 to 10. In addition, the application must evidence a developmental trajectory, showing that the institution will raise these enrolments to 7% within a period of ten years from the date of designation. Level 10 provision will be concentrated in a small number of fields/departments which have the capacity and credibility to offer this level of study and training to the level set by the national PhD standard;

- a combined minimum of 30% of all students in the applicant institution will be lifelong learning students enrolled on professional focused programmes and industry up-skilling, including part-time, work-related programmes and work-study programmes and/or mature learners.

3.3 Where the institutions that consolidate to comprise a technological university have been providing, prior to consolidation, non-higher education programmes (as defined by the National Framework of Qualifications) the university will, if necessary to meet local, regional and national demand, ensure this activity continues, either directly or indirectly, through appropriate administrative and academic arrangements that allow for the sharing of academic facilities and the progression of students.

4 Staff Profile

4.1 A technological university will in the appointment, management and progression/promotion of academic staff to and within the university have in place contractual and appointment procedures that, *inter alia*, -

- give weight to professional practice and institutional engagement activities and
- provide existing staff members with a balance between teaching, research, engagement activities and academic administration that is appropriate to their subject area and their academic experience.

4.2 At the time of application for designation –

- 90% of full time, academic staff engaged in delivering higher education programmes in the applicant institution will hold a Level 9 qualification or higher.

- at least 45% per cent of full time, higher education, academic staff, will hold a Level 10 qualification or the equivalence in professional experience, combined with a terminal degree appropriate to their profession. The proportion of such staff that hold an equivalence in professional experience shall not exceed 10% of full time, higher education, academic staff. There

will be demonstrable evidence of a developmental trajectory that shows the capacity, including staff with equivalence in professional experience as referred to, to increase and reach levels consistent with other Irish universities but not less than 65% within ten years of designation. These staff will not only hold Level 10 qualifications or equivalent in professional experience, but also be able to demonstrate sustained activity in relevant areas of research and development.

- in the fields of knowledge/study in which doctoral level training and research is on-going, the proportion of staff holding Level 10 qualifications will be in excess of 80%. As a general principle, only those with Level 10 qualifications will be engaged in the delivery and supervision of Level 9 programmes. Only those with Level 10 qualifications and with a sustained record of research publications and mission-appropriate research outputs will be engaged in the delivery and supervision of Level 10 programmes.

5 Teaching, Learning and Curriculum Development

5.1 A technological university will have the curriculum and the teaching, learning and assessment processes to support its core mission to develop graduates who have a focus on the world of work. The full opportunities provided by the National Framework of Qualifications for enhanced teaching, learning and curriculum development will be incorporated, with a particular focus on-

- Curriculum development focused on knowledge, skills and competencies developed in conjunction with business, professional organisations and, workforce, student and occupational organisations;
- Curricula that embed the full range of generic attributes linked to employability and citizenship;
- Curricula that embed engagement in the workplace as part of its programmes;
- Research-informed and practice-led teaching, learning and assessment that uses problem-oriented, practice-based and is community engaged.

6 Research

6.1 The research dimension of a technological university will-

- Focus on applied, problem-oriented research and social and technological development and innovation, with direct social and economic impacts and public and private benefits in the region in which the university is located;
- Support and sustain research activity among its staff that can be compared to appropriate international benchmarks. Such benchmarks will include *inter alia* evidence of cooperative research groups of a viable scale, success in winning competitive research funding nationally and internationally and inter-institutional research collaboration;

- In linking research to teaching, demonstrate methodological approaches to the formation of level 10 knowledge, skills and competencies that are appropriate to the institution's research mission and meet national PhD level standards. This will be through the integration of practice-led, professional, and industrial doctorate structures alongside more traditional PI-led approaches, all within the context of national policy for structured PhD provision.

6.2 An applicant institution will, at the time of application, –

- have existing research capacity to support on-going programmes, projects and doctoral training in at least three fields of knowledge/study as defined by ISCED fields of study at the 2-digit level (ISCED2 – "Narrow fields");[5] and
- demonstrate a developmental trajectory showing that the institution can extend research and doctoral activity to sufficient capacity to support two further fields, as defined by ISCED2 within five years of designation as a technological university.

7 International Profile

7.1 The international engagement of a technological university will specifically reflect its mission and orientation.

7.2 At the time of application, an applicant will demonstrate a developmental trajectory for the enhancement of internationalisation related to teaching and learning, research and staff development and a sustainable range of international collaborations such as joint projects, student and staff exchanges including the collaborative provision of academic and training programmes.

8 Leadership, Management and Governance

8.1 The leadership management and governance arrangements in place will be fully reflective of and in line with the stated mission of the institution. In practice this will mean -

- governance structures that reflect the external orientation of the institution and the engagement focus of its programmes of study;
- an integrated academic governance structure that gives coherence to multiple units, with consolidation of previously autonomous institutions where these existed, within the framework of the institution's mission.
- a leadership team that combines strong academic credentials and experience with experience in enterprise and professions relevant to the institution's mission.
- effective institutional-level academic governance with the authority, processes and competence to ensure the quality of programmes of study and the quality and integrity of other academic matters;

[5] ISCED codes are outlined on the HEA website at http://www.hea.ie/files/files/file/statistics/SRS%20User%20Files/EurostatISCED.pdf

- workplace practices and employment contracts are reflective of a modern university including, *inter alia*, such matters as the flexible delivery of programmes for diverse learner groups, the length and structure of the academic year, the efficient utilisation of the institution's physical resources and other infrastructure.

APPENDIX 2

Guidelines on Regional Clusters

The future landscape of Irish higher education will require a coherent framework comprised of a variety of institutions of different kinds, with distinct well-defined roles, responsibilities and inter-relationships. The building of regional collaborative clusters of such distinct institutions is key to the delivery of many of the most important objectives of the National Strategy and to the delivery of the overarching objective of achieving a more coherent, higher quality and more efficient higher education system. Clusters will allow programmes of teaching and learning to be better planned and co-ordinated, resources to be used more efficiently, more flexible student pathways and better progression opportunities to be put in place, and better and more coordinated services to enterprise and society to be provided at a regional level.

This Paper sets out guidelines for the development of clusters of higher education institutions that would operate as collaborative partners to deliver on jointly agreed strategic objectives within a region. Clusters will not change the basic legal status of existing institutions as mergers might. Instead clusters are agreements between groups of autonomous, independent institutions to co-ordinate activities and integrate planning to provide better, higher quality services to students and regions and to advance the capacity, performance and contribution of the higher education system as a whole

The National Strategy requires that the diversity of mission that has served Ireland well to date should be maintained and that the potential be realised for clusters of diverse higher education institutions to influence national and regional competitiveness, through interaction with local authorities, local enterprise, development agencies, further education providers; to play a key role in the development of industry clusters and networks, and to provide clearer and better regional education pathways. Performance targets for HEIs will be stretched to encompass the standards that could be achieved in collaborative cluster arrangements, rather than in isolation.

In addition to geographic regional clusters, collaborations that are not constrained by geography are also important. These include mission-based clusters to guarantee the continuing provision of labour-market oriented and practice-led specialist areas. Also collaborations that transcend national boundaries will become increasingly important to enhance the international connectedness and reputation of individual institutions and the system as a whole. While the Irish HE system has traditionally operated as a set of autonomous institutions, there has also been a tradition of collaboration between those institutions. The institute of technology sector has for example always had close links in areas such as recognition of awards and student progression. In recent years

collaboration has extended further across the whole system, particularly but not exclusively in the research sphere. Examples such as the Shannon Consortium and the Dublin Regional Higher Education Alliance are already beginning to develop new approaches to cross-institutional issues.

Objectives of Regional Clusters

While there is a very broad range of possible objectives for regional clusters the five core objectives are -

1. **Co-ordinated regional engagement.** Regional clusters will provide a means to co-ordinate engagement with business and community and to support small and medium sized enterprises, ensuring that enterprise and the wider community have access to the full range of supports which the education system can offer, including knowledge transfer, business incubation services throughout the region and facilitating the emergence of a genuine 'no wrong door' approach by the clusters to their interaction with the wider community.

2. **Student pathways.** Regional clusters will increase the range of access, transfer and progression pathways into and through the institutions in the cluster, and provide opportunities for pathways between further education and higher education.

3. **Improved quality through opportunities for centres of excellence.** There remains significant scope to improve quality by achieving the necessary critical academic mass in particular disciplines. This can be addressed by developing undergraduate and postgraduate centres of excellence. A feature of regional clusters could be the development of systems to allow for the transfer/sharing of staff and other resources between programmes to facilitate this. This could be especially valuable in advanced research programmes, where an institution may not be able to justify a full time staff member, but could valuably use a portion of the time of such a staff member from a larger or more specialised institution. Within the cluster students should have access to the highest standard of tuition and facilities within real and virtual centres of excellence, which would create the conditions for the development of new and innovative fields of study and research. The opportunities afforded by clusters go significantly beyond programme offerings and offer scope for the development of better student support units, improved staff development, teaching and learning units, and better access to IT infrastructure.

4. **Co-ordinated programme provision.** Regional clusters should ensure regional access to comprehensive provision, elimination of unnecessary duplication, allowing for a broad range of differentiated offerings. It is expected that higher

education providers within a region would come together and examine the scope for rationalisation of programmes and the effectiveness of the regional use of current and capital resources. Opportunities to streamline aspects of provision through appropriate specialisation in particular institutions should be progressed. The development of clusters is also relevant to the recommendation of the Strategy for an increased emphasis on enhancing the quality of Irish PhD education and training by rigorously examining the locations where PhD training takes place. In the event that some locations are inadequate in any significant respect, membership of a cluster, which includes other PhD awarding bodies, may offer an alternative to students seeking PhD qualification in that region.

5. **Shared services.** Regional clusters have demonstrated that they are an ideal vehicle to ensure that, to the greatest extent possible, a model of shared services is adopted so that learners have access to the highest quality support services possible within the cluster and unnecessary duplication of administrative support services is eliminated. In the future, the development of clusters may also offer a more sustainable basis for the targeting of new infrastructure investment into institutions. Rather than institution-specific plans, which may not exploit economies of scale, future acquisition of land, creation of new premises, purchase of equipment, development of ICT infrastructure and other plans can be more formally considered in the context of the needs of a cluster of institutions. This should not deter institutions from maximising the regional use of existing capital facilities through collaborative arrangements.

Principles and best practice to underpin regional clusters

1. Mutual Benefit
   All institutions should benefit from their inclusion in the cluster.

2. Stakeholder Benefit
   The creation of the clusters should improve the way in which institutions communicate with and provide services to the stakeholders of the institutions

3. Transparency
   The development and operation of the clusters should take place in a transparent manner.

4. Evolution and Organic
   The development of the clusters should be seen as both evolutionary and organic. Different clusters will develop at different paces and in different ways according to institutional and regional needs. The precise nature of the arrangements or the areas of co-operation is less important than the trajectory for improved collaboration over time. The oversight arrangements that are put in place need to be able to capture this.

5. Formal Agreements
   Regional Clusters should have transparent written agreements approved by the governing authorities of the participating institutions, setting out the objectives of the cluster, how the members will work together and take decisions, how effectiveness in meeting objectives will be monitored and mechanisms to review or terminate the agreements

6. Best Practice
   There is a now wealth of relevant international experience around successful existing clusters that demonstrate best practice to underpin clusters (See for example, the UK collaborative association, Universities for the North East, at http://www.unis4ne.ac.uk/, or the Scottish universities collaborative organisation, Interface, to provide access for industry and business http://www.interface-online.org.uk/3 .) The purpose of Clusters is not to suppress institutional identity and in the monitoring of progress the maintenance of institutional diversity should be supported.

Risks to be managed

1. Loss of Diversity
   A major risk that needs to be managed and mitigated will be that the different missions of the institutions within the cluster could, over time, lose their distinctiveness and particular types of provision would be lost from the region. It will be essential that this does not take place and that the systems for review and evaluation pay particular regard to this.

2. Creation of Excessive Bureaucracy
   A further risk could be the creation of new layers of bureaucracy – both within the clusters, and within the HEA in reviewing clusters development, without any particular benefits arising.

   It seems inevitable that some new forms of process, perhaps some elements of shared organisational or governance arrangement might have to arise within the participating institutions in order to make the clusters proposal work. Equally in order to ensure that the process is effective there will need to be some oversight from the HEA or other body. Every effort must be made to ensure that while any new processes are clear and accountable, they are at the same time minimised and streamlined with other existing processes.

Barriers to Achievement of Clusters

1. Upfront costs
   It should be recognised that given the limitations on Exchequer funding it is unlikely that any new funding will be provided to support the establishment of regional clusters. However, the HEA retains the option of top-slicing small amounts from the main grant for this purpose and of allocating this subject to institutional compliance with certain criteria (e.g. agreed outcomes, and processes, timeframes accountability and transparency of process etc).

2. Perceived Threats to Institutional Identity
   There is a now a wealth of international experience around successful existing clusters that demonstrates that such impacts need not arise. The purpose of Clusters is not to suppress institutional identity and in the monitoring of progress the maintenance of institutional diversity should be supported.

3. Regional Mismatches
   Institutions may find that they have no natural geographic match in terms of another higher education institution with which to collaborate, or that for reasons of history, competition, etc. they do not wish to become engaged with their natural geographic matches. Equally institutions with good existing relations may not welcome collaboration with institutions that would, on a geographic basis, be naturally associated with them.

   Should some institutions not be included in their obvious regional or any other cluster, the HEA will engage with the institutions concerned, and if necessary arbitrate over any difficult issues. The formation of regional clusters should not in any way hinder institutions from continuing to engage in other collaborative clusters such as national clusters based on academic disciplines, clusters based around the operation in a region of a significant private corporation etc. and of course international collaborations.

Alignment of Clusters with Agenda for Institutional Consolidation in Institute of Technology Sector

The development of clusters will happen simultaneously with the possible consolidation of higher education institutions. Institutions will be required to plan for their future development on an academically and financially sustainable basis and to consider whether they wish to proceed on a stand-alone basis.

The necessary development of regional clusters should not be impeded by any consolidation process. Ultimately, mergers may or may not take place but regional clusters must develop. Mergers should only happen after a careful case has been made, based on an academic plan, and after consideration of cost

benefit has taken place. Where such mergers can be justified, the creation of a new and stronger institution should enhance, rather than detract from, the regional cluster.

How will Clusters Emerge

As part of the reform of its funding models the HEA will set out how it will use funding allocations to support the development of the clusters, and in the longer term, to align funding with the success of the clusters in meeting national objectives.

Any funding that might be available should not be directed at the clusters *per se*, but should go to the separate institutions based on their achievement of the agreed objectives for the cluster. The use of clusters should be one of the means by which they achieve these goals; as such it is the outcomes achieved as a result of membership of a cluster that will attract public funding. However, in the early years progress by higher education institutions in the process of establishing and/or participating in clusters will be reviewed by the HEA in addition to outcomes.

The role of the HEIs themselves will be of particular importance. It will be their role to put in place the clusters and to manage and operate them. In line with the principle of organic and evolutionary development, different sets of institutions will have to put in place the arrangements that best meet their needs and the needs of their stakeholders while taking account of their capabilities and state of development.

Check List for Higher Education Institutions

In reviewing and assessing the stage of development of clusters, the higher education institutions themselves in the first instance should review the extent to which -

1. there is a range of bilateral and multilateral formal agreements providing for the establishment of centres of academic excellence at under and postgraduate levels,
2. there is a range of bilateral and multilateral and formalised arrangements for progression and transfer between institutions, bi and multilateral formal arrangements exist between higher education and second level and further education institutions in the region covering learner access arrangements including specified transition-to-higher education programmes,
3. a wide range of pedagogical policies and practises (covering APL) exist and are in use to recognise and credentialise learning that takes place outside traditional formal structures,
4. there is a wide range of pedagogical policies and practises that encourage and promote work based learning and cooperative education,

5. bilateral and multilateral and formalised arrangements exist between higher education and second level and further education institutions to promote access to laboratories and specialist teaching facilities and to support the use of VLE's and other specialist learner support services,
6. shared learner support services (careers, access supports, counselling, tutoring, discipline specific supports (e.g. mathematics) are formally in place between institutions,
7. shared administrative support services (Admissions, HR, IT, finance etc) are formally in place,
8. there is shared, critical infrastructure, e.g. research and business incubation space, specialist libraries and sports facilities,
9. shared and networked responsibility for the brokerage of high level skills provision and labour market support and development arrangements are in place,
10. support services for enterprise development are formally shared and networked between institutions covering access to RDI facilities, IP, business planning and support and laboratory test and development facilities

Indicative regions and clusters

The following is one possible configuration of the set of regional clusters that might emerge and which institutions are asked to consider in the first instance:

a. East/North East - UCD, DIT, TCD, DCU, St. Pat's Drumcondra, Mater Dei, IT Blanchardstown, IT Tallaght, IT Dundalk, NUI Maynooth, Dun Laoghaire Institute of Art & Design, National College of Art and Design

b. South East – Waterford IT, Carlow IT

c. South/Mid West - UCC, CIT, UL, IT Tralee, MIC, LIT (incl. Tipp Institute),

d. Border/Midlands/West – NUIG, GMIT, IT Sligo, St. Angela's, Athlone IT, Letterkenny IT

31 January 2012