Introduction
In its submission to the Higher Education Strategy Group, CIT put forward the case for the creation of a Technological University sector for Ireland. We welcomed the inclusion of this among the recommendations contained in the published National Strategy for Higher Education to 2030. We believe that the creation of such a sector will bring many benefits to the graduates, the institutions and the country in general. We also agree that any such move must have real substance and that any superficial re-designation exercise will only serve to weaken the institutions and the Irish HE sector. We supported the Strategy Group’s assertion that University designation should be on the basis of internationally valid criteria. We welcome the development and publication of proposed criteria by Dr Simon Marginson. Herein is the CIT submission in relation to these proposed criteria.

Higher Education and the Irish context
Ireland remains committed to developing a high skills, knowledge economy as part of its strategy to enhance its ability to compete in an increasingly challenging global economic environment.

More immediately, existing economic and human capital must be maximised as the country faces the challenges of the current financial crisis.

Higher Education (HE), as part of the economic capital, has a key role to play in the short and long term strategy of Ireland in meeting these challenges in terms of:

- knowledge development through research training,
- providing professionals and practitioners via education programmes and
- on-going professional development and up-skilling through lifelong learning processes for the ‘high tech’ knowledge society.

In playing this key role there are a number of factors preventing the sector maximising its impact. The current conventional research intensive universities collectively have a mission which reflects their role in the economic, social and cultural life of Ireland. This necessitates a broad focus across all academic disciplines. In addition it is beholden upon these universities to focus on pure as much as applied research. This is important for the country and for their own international standing. Their current mission is appropriate and must not be distorted by an undue emphasis on any one aspect of their role over others.

The Institutes of Technology (IoTs) also have an established and strong track record of which they can be proud including:

- Niche applied research, innovation and entrepreneurship activity;
- Contribution to the generation of economic capital and revenue;
- Widening access and participation;
- Their local, regional and community centredness.

The focus of their curriculum on:

- business, industrial and professional needs;
applied generic research capabilities; specifically focussed enterprise collaboration activity;

has combined to make the IoT sector a considerable factor in Ireland’s economic development. However, certain issues currently limit their capacity to respond to the short and long term needs of the country. The development of their mission has been inhibited by the lack of common understanding both nationally and internationally about the purpose and functions of the IoTs. Inappropriate assumptions are made about the binary nature of the Irish HE sector and the capacity of different types of HE institutions to operate at the higher levels of tertiary education. This has impacted upon:

- Ability to attract inward investment at local and regional level;
- The diminished portability of the graduate’s qualification;
- The attraction of high level staff from academia or from business and industry;
- The attraction of overseas students;
- The difficulty in establishing and retaining strong academic partnerships on an equal basis;
- National and international income generation.

Fortunately these difficulties are not insurmountable but they do need urgent attention. A more coherent HE sector involving all aspects of the system in a complementary and innovative way would more effectively enable strategic policy engagement in the continued development of the Irish economy in the face of global competition. The mission and current nature of activity and performance of the IoTs remains appropriate but it must be developed further and encapsulated into an enhanced role. The National Strategy for Higher Education to 2030 envisaged the establishment of a small number of Technological Universities through the consolidation and subsequent re-designation of the existing IoTs.

To gain the benefits envisaged, by CIT and the National Strategy Group it necessary to:

- Develop appropriate criteria for designation as Universities which ensure international credibility and understanding in order to guarantee recognition of worth;
- Draw upon existing examples of Technological Universities to ensure that re-designation does not inadvertently lead to mission drift and replication/duplication of the role played by the traditional research intensive Universities;
- Give attention to disparities in size and scope to create a common foundation for re-designation.

We welcome the work carried out by Dr Marginson and believe that it provides just such a set of clear internationally valid criteria for determining University designation.
General Comments

Mission and Maintaining System Diversity

What is a Technological University? It is important to recognise that a Technological University is not the same as a traditional research intensive institution, but it is of the same status and standing. A Technological University has a remit which emphasises:

- closeness to the world of work;
- the professional readiness of its graduates;
- coverage across all NFQ levels from 6-10;
- a research and innovation mission which stresses application and enterprise collaboration;
- a staff base which is as engaged with the business, industrial and professional community as it is with academia.

In many countries HE systems have developed to include Technological Universities as part of their strategy to meet the needs of their economies. Technological Universities are an international reality and there are numerous successful examples across Europe and in Australia.

One of the fears in creating a unitary, University-only higher education system is that of mission drift resulting in a loss of system diversity. International experience has shown that mission drift and loss of diversity are not an inevitable result of the move to unitary system. There are examples of national higher education systems which have managed the transition while maintaining substantial diversity in terms of institutional profile and activity. It should be noted that both in cases where mission drift has occurred e.g. United Kingdom and in systems where diversity has been maintained e.g. Australia, the key determining factor has been the funding model adopted rather than the designation criteria. We would suggest that the mission of a technological University is clearly articulated as part of the designation process and that the adherence to this mission is addressed by the performance-based funding model for such institutions. This approach provides the greatest flexibility and allows these institutions and their activities to adapt over time to best meet the needs of stakeholders in line with the broad mission. If characteristics such as extent of provision at NFQ level 6 and 7 are included as part of the designation criteria instead of the ongoing funding model there is nothing to prevent an institution having satisfied the initial criteria, abandoning this activity into the future.
Institutional Profile
Dr Marginson addresses the issue of size or scale in a balanced manner and identifies that there will be twin forces at play in the determination of the appropriate size or scale for a Technological University. Firstly, the national necessity to have a small number of Technological Universities with the scale and size to be nationally and internally significant will act to push up the scale/size threshold. In this context sizes of the order of 20,000 FTE are not unreasonable. On the other hand the geographical, demographic and even political factors may act in the other direction and tend towards smaller units comprising 10,000 FTE. Such decisions will form a large part of any re-designation process and, as is pointed out in the report, it is impossible to be definitive about size/scale in the designation criteria.

CIT would be firmly of the view that for these new Universities to have appropriate credibility and status they must have significant activity at NFQ levels 9 and 10. The importance of provision at NFQ levels 6 to 8 is fully recognised and must remain a vital part of the activities of the Technological Universities. However, in an international context, activity at NFQ levels 9 and 10 is one of the key factors which differentiate Universities from non-University higher education institutions. In order to be effective the new Technological Universities must be permitted to pursue a range of activities which identify them as peers of universities both at home and abroad. Therefore they must have significant activity at NFQ levels 9 and 10 and the activity at level 10 in particular must be equal in status to similar activity in existing Universities. Any proposals which would restrict level 10 activities to rigid models or enforced collaboration arrangements would only serve to undermine the status of Technological Universities both nationally and internationally.

Research
It is important that the distinct research profile of the Technological Universities is clearly articulated as part of the designation criteria. Dr Marginson’s report addresses this issue thoroughly and is particularly effective in dealing with the false dichotomy of applied versus basic/pure research.

The proposed criteria define a research profile which is in keeping with the vision set out in the national strategy and which would see the Technological Universities engage in research which is consistent with and complementary to their overall mission. Research would be an essential core activity and would inform all the other activities of the University including teaching and learning as well as innovation, entrepreneurship and other enterprise support activities. The research strategies of the Technological Universities would focus on depth rather than breadth, developing expertise, critical mass and research excellence in a small number of disciplines.

Staff Capacity and Profile
We fully support the profile of staff capabilities and activities as described by Dr Marginson’s report (particularly those pertaining to professional/enterprise engagement and innovative as well as flexible work practices) and we also support the view that some of these factors are not suitable for inclusion in a set of quantitative qualification criteria. The reasons for this are twofold. Firstly, many of the conditions necessary for these activities to develop are not under the remit of the individual
institutions and pertain instead to national labour agreements and contracts of employment. Secondly, it is generally accepted that these activities are difficult to quantify or even define and thus it is difficult to produce precise quantitative criteria. The criteria as presented represent a reasonable approach to this in defining what should be delivered without being overly prescriptive.

Process for University Designation
As important as the actual criteria is the process for University designation of which they will form a part.

Nature and use of the Criteria
It is important to note that these are gateway criteria in that they allow an assessment to be carried out to determine if an institution qualifies for University designation. Such criteria cannot and should not define how that institution is to operate into the future.

The Process
The National Strategy for Higher Education sketches an outline process but does not address in detail the logistical and legal issues involved. We believe that for practical reasons the process of merger and the process for re-designation should be carried out in tandem as part of a single initiative. To facilitate the merger and subsequent re-designation it is important that a single entity is formed. This entity is in effect a shadow or interim administration representing the proposed, merged institution. This body will be referred to as the Governing Board and will consist of the presidents of the Institutes merging and the Chairs of their respective Governing Bodies. The members of the Governing Board will appoint a chair of the Governing Board. The Governing Board may nominate one of the members of the Board to take up this role or they may appoint an independent third party to act as Chair. It is important that the position of Chair is filled by a single individual and joint or rotating Chairs not be permitted.

To deal with the day to day issues relating to all aspects of the merger a facilitator will be put in place. This will not be an appointment in the normal sense. Instead it is envisaged that the Governing Board will appoint the facilitator from within the existing resources of the Institutes concerned by means of a secondment arrangement. This individual will also act as secretary to the Governing Board.

The Governing Board will be empowered to act on behalf of the Governing Bodies and Executives of each of the merging Institutes on all matters relating to the merger. For the duration of the merger process the Department of Education and Science, the HEA and all other official bodies will interact with the Governing Board and not with the individual Institutes.

A two stage process is envisaged. The first stage should determine the suitability of the proposed University. This assessment will, in the first instance, be on the basis that the proposed University meets the designation criteria. It should be a necessary pre-condition to applying for Technological University designation that these criteria have been met. The second part of this assessment will be a review of the suitability of the proposal in a national context taking in to account the impact on the institutions involved, the HE sector, the region concerned and the country as a whole. The outcome of phase one will be verification that the proposal meets all the criteria for Technological University
designation and that it is consistent with the strategic objectives of the various stakeholders. If successful the proposal will be approved to proceed to stage two.

The second stage will involve the detailed working out of the merger process to deliver the University proposed in the first phase. An international expert panel will evaluate the stage two submissions and will determine if it delivers on the proposal approved in the first phase. Upon successful completion of stage two the designation as a Technological University will be approved under the appropriate act and the merger can be completed.

**Concluding Remarks**

At this juncture there is an opportunity to establish a stronger and more coherent higher education system in Ireland. If this opportunity is grasped it will have significant short and long term benefits for the international perception of Irish higher education and more importantly for the economic competitiveness of the country. The criteria, process and legislation required to make Technological Universities a reality should be developed as soon as possible and the Institutes should be actively encouraged to begin exploring suitable merger options. It is in the interest of all the stakeholders to set in motion the necessary initiatives to bring about the rapid development of Technological Universities in order to benefit fully from the latent potential in the existing Institutes of Technology.