

Review of the Allocation Model for Funding Higher Education Institutions

Interim Report
by the Independent Expert Panel for the



May 2017

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Executive Summary

This report sets out analysis and interim findings from the review...

Since the Review of the Allocation Model for Funding Higher Education Institutions commenced in late November 2016, we have been building up a base of analysis and consultation with a wide range of key stakeholders in order to understand the existing situation, the future challenges faced by the higher education system in Ireland and the potential options for ensuring a more effective funding allocation model. This interim report sets out the work undertaken, the findings to date and the areas on which the review will focus as it moves towards its conclusion.

The higher education system has been evolving rapidly in recent years...

While there are more than 40 higher education institutions in Ireland, the focus of the funding system is on the 24 that receive a core funding contribution from the HEA. In 2015/16, there were 222,618 student enrolments in these institutions, but they vary significantly in scale, from 1,300 enrolments in St Angela's College to almost 27,000 in University College Dublin. In response to the small scale of some HEIs and in line with the National Strategy for Higher Education to 2030, there has been a process of consolidation across the higher education system, with four specialist teacher training colleges merging with a University, and further such processes planned (including the potential creation of technological universities from merged IoTs).

Participation in higher education in Ireland is high by international standards and growing strongly. Demographic growth has and will continue to stimulate significant increases in domestic student demand, complemented by a growing international student cohort. Employment rates of graduates are strong and have risen significantly in recent years. However, part-time and remote learning in higher education has not grown at the same rate as full-time undergraduate provision and this is an area of relative weakness that needs to be addressed. The effects of the economic downturn on higher education are clear, with core staffing levels contracting by 12% and funding per student dropping by 20% between 2008 and 2016. Many institutions are now in deficit and struggling to put in place long-term plans to secure future financial sustainability.

A high level of ambition has been set for higher education in Ireland...

The *National Strategy for Higher Education to 2030* published in 2011 set out a long-term vision of higher education as a central driver of innovation, competitive enterprise and academic excellence. Since its publication, there has been significant emphasis on setting out clear strategies for the higher education sector to reinforce wider national policy objectives, drive performance improvement and impact, and ensure its future relevance and sustainability. This includes:

- *National Plan for Equity of Access to Higher Education 2015-19*, setting new and increased targets for participation in HE, committing to a more consistent approach to access support across HEIs and progressing initiatives to understand and measure access data better.
- *National Skills Strategy 2025*, including a strong focus on the up-skilling of the existing workforce via part-time and online provision and a more integrated post-secondary system.
- *Innovation 2020*, with major targets for Horizon 2020 research funding, increasing collaboration and impact with industry and further development in postgraduate provision, with all requiring a strong foundation investment in building research capability in institutions.
- *Investing in National Ambition: A Strategy for Funding Higher Education (the Cassells report)*, making clear the need for increased levels of investment in higher education, but also

pinpointing key areas where the funding approach would have to change, including around access, research and flexible provision.

The scale of the Government's ambition for the higher education system as articulated across these strategies was further confirmed with the publication of the *Action Plan for Education 2016-19*, with a stated objective to create the best education system in the world over a 10-year period

The HEA funding model has been important in driving higher education participation...

The current approach to block grant funding of higher education via the HEA was introduced for universities and colleges in 2006 and was phased in for institutes of technology (IoTs) from 2009. The combination of a differentiated free-fees system and a recurrent grant allocation model (RGAM) driven by student numbers to provide a block grant to each HEI ensures that Exchequer funding broadly reflects costs of provision and offers institutional autonomy to plan spending strategically. It also serves as a strong driver of efficiency, rewarding institutions that can find a means to reduce cost below a standard unit of resource, by effective deployment of staff, control of non-pay costs or expanding student numbers. In this latter regard, it has facilitated the continuing expansion of the higher education system, supporting one of the highest higher education participation rates in Europe. It is clear that the model has many strengths and that it has balanced a very wide range of demands and delivered generally successful outcomes. Nevertheless, the overall approach to block grant funding must now evolve to reflect the changing landscape, new policy imperatives, societal and economic needs, and the performance and impact focus required to ensure that higher education continues to play a pivotal role in driving Ireland's future prosperity.

The basic components of the funding approach are in line with international practice...

The current funding approach in Ireland is consistent with international practice, with a block grant which is allocated on a formula basis to reflect the number, type and focus of study of students and allowing institutional autonomy. Increasingly, the formula-based approach is being supplemented by formal performance contracts and/or performance-funding mechanisms. Other common components of international funding models include top slices for national and other strategic initiatives that are better addressed by a sector approach. Most countries' block grant funding includes separate teaching and research components, calculated on the basis of different criteria. Therefore, the basic components of the Irish funding approach would seem to remain valid, with the challenge lying in how best to balance the different components and deploy them in pursuit of specific higher education outcomes. There is however a need to address a number of systemic factors that affect the capacity of the system to work as efficiently and cost-effectively as it could. These include differences between universities and institutes with respect to their pension liabilities, costing systems, capacity to earn additional income and borrow for capital development and the increasing challenges faced by leaders and governors in an ever more complex higher education world.

There is a need for consistent and comparable cost data across the system...

The cornerstone of an effective funding model must be robust, timely, reliable and consistent information on the costs of delivering higher education. The Irish funding system has always placed a strong emphasis on understanding the costs of provision in individual institutions. However, while cost data is gathered from all publicly funded HEIs each year, different costing systems are in place in universities and IoTs. Therefore, the appropriateness of the balance of funding is difficult to evaluate. The significant pension costs, research overheads and capacity to generate non-Exchequer income puts the funding position of universities in a very different context to IoTs, which face the cost

implications of the higher support needs of students, a focus on smaller scale lab-based provision, and the need for some to sustain campuses in multiple locations. However, until we have a consistent and comparable costing approach across the entire system, it will be difficult to determine a precisely fair allocation of funding as we move forward. The panel has considered the continued appropriateness of the weightings and found a decline in the actual relative costs of STEM and similar provision, although these actual costs continue to be above the effective weightings applied across the entire block grant due to the dilution of their impact in recent years.

A range of priorities emerged from the review consultation process...

A comprehensive and inclusive consultation process was undertaken, with 52 submissions made in response to an open call for structured submissions, and a wide range of stakeholders met by panel members. On the overall funding approach, it was argued that the current system was overly rigid and needed to evolve to reflect the many ongoing changes impacting upon higher education. We also heard that the funding model needs to be more transparent in demonstrating how it channels investment into areas such as skills development and research and innovation, and that it is critical that it recognises the diversity of missions in a fair and flexible manner.

While the continuing validity of a primarily student driven funding model is broadly recognised, there was some concern about the sustainability of such an approach without significant additional investment. There was support from institutions for commitment to a standard unit of funding resource, ensuring that funding per student did not fall any further, and a willingness to examine the potential to incorporate part-time provision and apply weightings fully across basic regulated income, including potentially student contribution.

There was positive feedback on the strategic dialogue and performance compact process, with many feeling that this was the appropriate mechanism for addressing many of the priorities set out in Government strategies. Many now wish to see the introduction of a rewards based performance funding system, although it was acknowledged that this would be dependent on the additional funding and on development of a common base of accepted KPIs and the design of an appropriate and objective balanced scorecard approach. There is general acceptance of the need to consider more robust outcome metrics in recognising the research and innovation and access roles of institutions and that scope should exist for funding transformative and innovative ideas outside the block grant approach, particularly if additional funding becomes available.

The future funding approach should be underpinned by a set of core principles...

In undertaking the review, there has been broad consensus around the characteristics that a future funding model must demonstrate if it is to maintain an effective higher education system. The panel believes that for this to be achieved the funding approach must:

- Respect institutional autonomy;
- Recognise the role that higher education plays in transforming lives, driving economic development and promoting social cohesion;
- Support institutional sustainability;
- Reflect Government and higher-education objectives; and



- Maintain integrity as an independent and robust allocation system.

In addition, it has been agreed that there are a number of core principles that should underpin the future approach to funding HEIs as shown in the above diagram.

The case for changing the funding approach is clear...

From the work undertaken to date, the Expert Panel sees a clear case for change in how higher education institutions are funded in Ireland. The current model made an important contribution to facilitating a step change in levels of higher education participation in Ireland and in the overall expansion of the system, but the context in which this system sits has evolved significantly since it was launched over a decade ago. The current pressure on the higher education system is clear, and the absolute need, as set out in the Cassells report, for additional recurrent and capital funding seems to be generally accepted. At the same time, there was very little support for any kind of cap on student numbers, with recognition of the impact of the system in up-skilling the population and driving economic growth over the last four decades. Nonetheless, if there is to be no limit on student numbers, and while the nature and extent of additional funding remains unclear, there is a need for care in implementing major change in how the system is funded. It is therefore important that a transitional approach to implementation of recommendations is adopted, introducing change gradually over a period of time and making certain changes are only when additional funding becomes available for the system.

The transparency of the model must be improved...

There are certain misconceptions about the focus of the current funding model and the degree to which it reinforces the desired outcomes from the system. There is a perception that the model does not fully articulate (or indeed recognise) the significant investment via the block grant to support an institution's research mission, and that the model does not encourage sufficient responsiveness to regional and national skills needs. Our analysis indicates that the funding model does indeed have a strong role in supporting skills development, with around a third of core funding channelled towards identified private or public sector skills needs. However, there is a need for more effective communication on how the model supports these and other priority areas.

A range of future funding options will now be evaluated...

The review is now at a critical stage, where we are using the analysis outlined in this report and the findings from the consultation process to develop specific options for the future funding approach. The implications of these options will be carefully modelled to develop a full understanding of both intended and unintended consequences of their implementation at both system and institution level. This will allow us to fully evaluate them and propose a recommended future approach in the final report. Our work will focus on a number of areas over the coming weeks, including: rewarding mission diversity in a fair and transparent manner; more closely reflecting the costs of provision; recognising outcomes from research and innovation and access activities; allowing skills development needs to be effectively targeted; providing a platform for lifelong learning and workforce upskilling; and embedding the role of performance funding.

1 Introduction and Overview of the Approach

1.1 Introduction

This interim report marks an important landmark in the review of the HEA allocation model for funding higher education institutions. Since the review commenced in late November 2016, we have been building up a base of analysis and consultation with a wide range of key stakeholders in order to understand the existing situation, the future challenges faced by the higher education system in Ireland and the potential options for ensuring a more effective funding model. This report sets out the comprehensive review process being undertaken, the findings which have emerged to date, the core principles which we agree must underpin the future funding approach, and the areas on which the remainder of the review will be focused in order to recommend an appropriate way forward.

1.2 Terms of Reference

We, the independent expert panel (short biographies are provided as Appendix 1), have been appointed to deliver on the following terms of reference for the study.

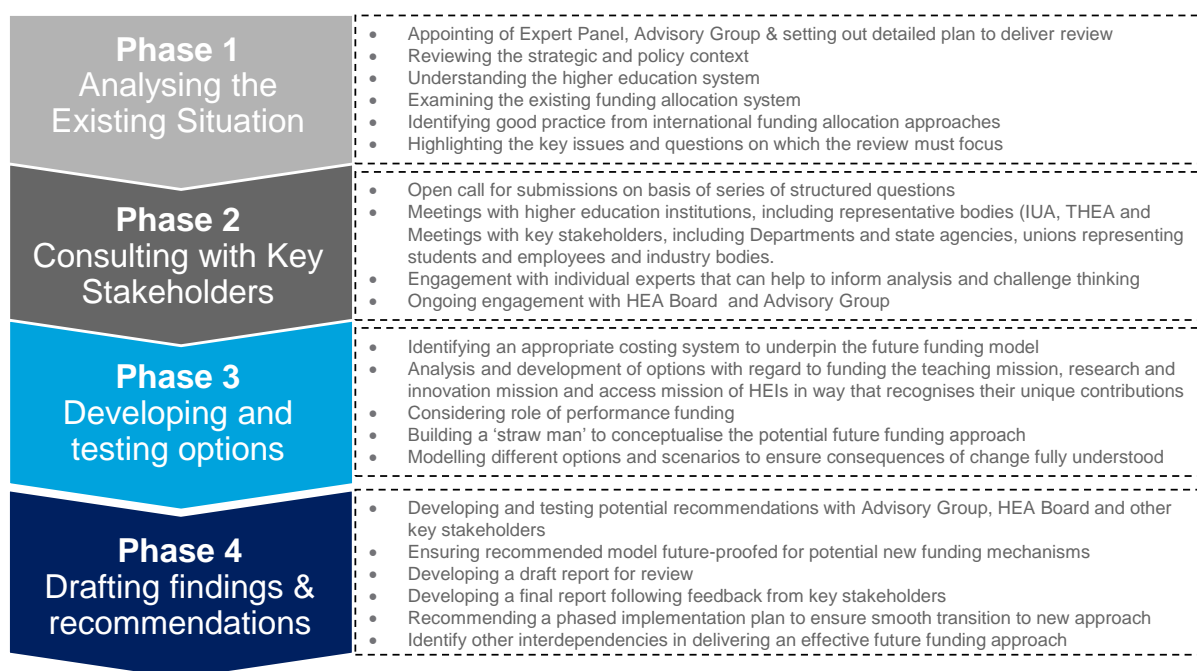
- review the existing approach to funding higher education institutions by the HEA in terms of its effectiveness in delivering on national objectives; reinforcing mission diversity; ensuring sustainability and quality; and driving performance
- identify and consider options with regard to how that approach is developed in order to reflect the principles which must underpin future funding of higher education, including the appropriate balance between the three different components of the current funding model (block grant; performance funding component; top-sliced targeted or competitive funding)
- make recommendations on an appropriate future approach and on an implementation timeframe to protect short-term financial stability

We have been assisted in our work by the HEA executive which served as Secretariat for the Review, and also by an Advisory Group representing a wide cross-section of relevant stakeholders which is providing critical feedback at key points during the review process.

1.3 Overall Approach

We have structured the review across four distinct phases as set out in Figure 1.1. With the logistical arrangements in place, we began by developing our understanding of the existing situation. To focus this analysis, working papers were produced that considered the higher education system, the current national policy context, the existing funding model and how this compared with international approaches. This allowed us to identify a range of key issues and questions which we recognised that the review must address, and we set these out in a fifth working paper. This helped us to develop a series of structured questions which we used as the basis of the second phase of the review which involved a comprehensive programme of consultation.

Figure 1.1: Overview of the Review Approach



This consultation programme comprises:

- An open call for structured submissions based across 11 themes, with 53 submissions received to date. Of these, 41 were submitted on behalf of organisations, and they are listed in Appendix 2.
- Bilateral meetings between the Expert Panel and higher education representative bodies (IUA, THEA and HECA) and relevant networks (Presidents, Chief Financial Officers and Access Officers)
- Bilateral meetings between the Expert Panel and key stakeholders, including government departments and state agencies, unions representing students and employees and industry bodies. A full list of stakeholders met during the consultation process is provided as Appendix 3.
- Feedback from the Advisory Group, which includes a range of key stakeholders. A list of the members of the Advisory Group is set out as Appendix 5.
- Engagement with individual experts who can help to inform analysis and challenge thinking as the review progresses.

We have also worked closely with the Higher Education Authority itself throughout the process. The Board of the HEA approved the initial scoping paper and terms of reference for this work and have provided input at key stages during the review. We have also been supported by the many of the teams across the organisation itself, tapping into the knowledge of the Irish system and its institutions in relevant areas including funding, performance, access, skills development and research.

1.4 Steps to Completion

While a few consultations remain outstanding, work has already commenced on the third phase of the review, using the detailed analysis and constructive input from stakeholders to develop options for the future development of the model. A further series of working papers will help to frame this work, considering potential approaches with regard to the costing system, the teaching mission, recognising research and innovation performance, supporting access and the performance funding

approach. In parallel, the potential scenarios in pursuing each of the options across the funding models are being extensively modelled in order to test the implications at both institution and system level. This will allow us to evaluate the options and propose a recommended future approach within the final report. It is our plan to prepare a draft report setting out the findings during the month of June, with the intention to produce the final report following feedback from the Advisory Group and the HEA by the end of that month.

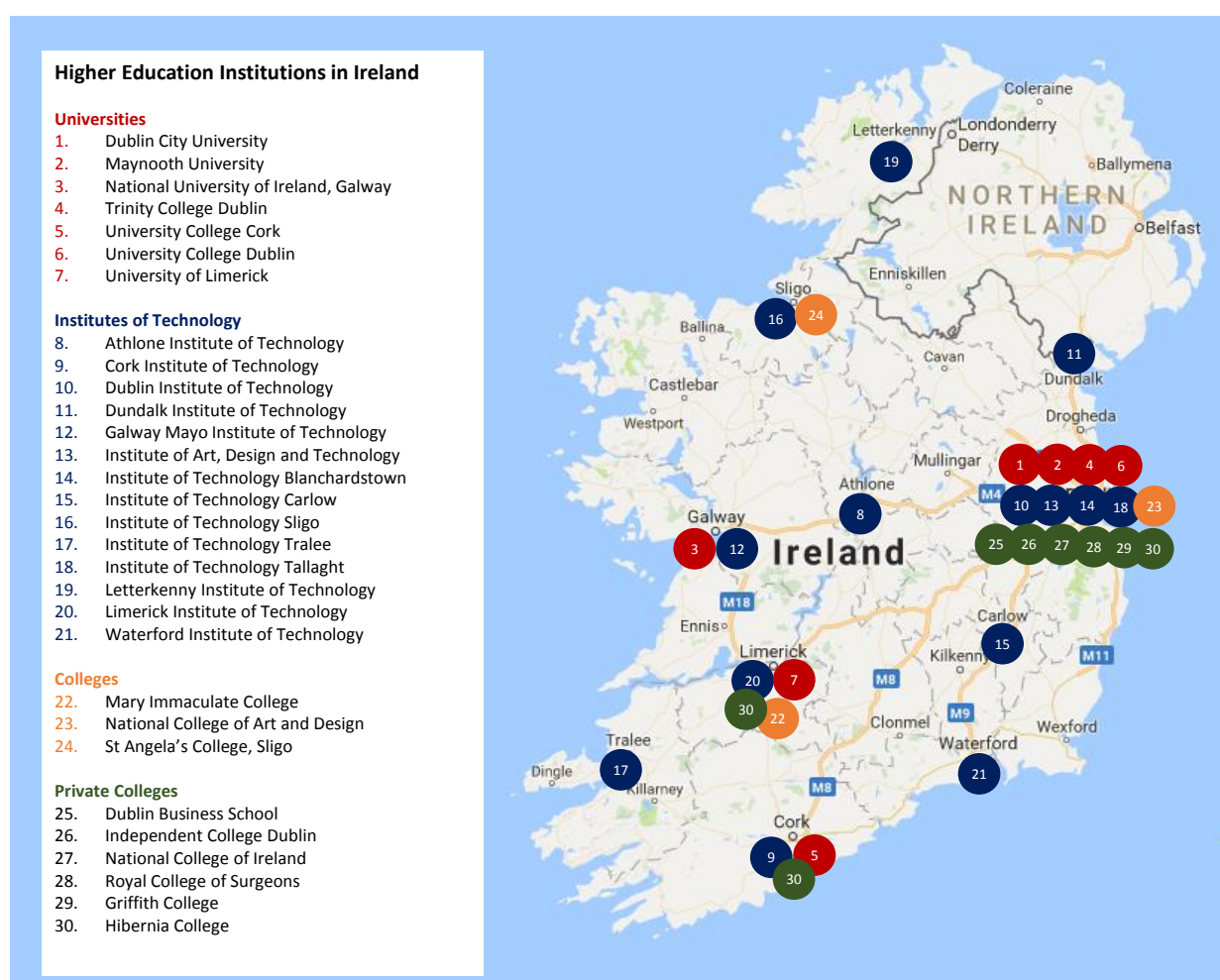
2. The Higher Education System in Ireland

2.1 Higher Education Institutions

While there are more than 40 higher education institutions in Ireland, the focus of the funding system is on the 24 that receive a core funding contribution from the HEA – of which 7 are universities, 14 are institutes of technology and 3 are specialist higher education colleges (two focused on teacher education and one on art and design). These 24 are typically referred to as the public higher education institutions. However, it is also important to note that other institutions, with both private and not for profit status, access some public funding from the HEA for specific courses (e.g. medicine, pharmacy) or by winning competitive calls (e.g. to run skills courses through the Springboard programme), or via the Department of Education and Skills in recognition of a particular remit.

The 24 core-funded institutions are set out in Figure 2.1 along with some of the main private colleges. Regional access and economic development have been major drivers of higher educational policy and hence provision has been established in all corners of the country. Indeed, a characteristic of Irish higher education institutions (HEIs) is the largely regional catchment area on which they draw their student base.

Figure 2.1: Higher Education Institutions in Ireland



The institutions vary significantly in scale, from 1,300 enrolments in St Angela's College to almost 27,000 in University College Dublin. In response to the small scale of some HEIs, there has been a process of consolidation across the higher education system, with four specialist teacher training colleges merging with a University (SPD, Mater Dei, CICE and Froebel College), and further such processes planned. There is also a process in place by which institutes of technology can merge and apply to become technological universities, with legislation to formalise the establishment of these new types of institution planned for 2017. This change will not impact upon the continuing Government commitment to maintaining a binary system of higher education, with distinct technological institutions functioning alongside more traditional university provision.

Prior to the 1970s, higher education was dominated by 5 universities, whose lineage stretched back to at least the 19th century. The government then established 2 national institutes of higher education, in Limerick (1972) and Dublin (1975), to provide technologically focused programmes. Following a review by an external panel, it was recommended that both institutions be granted university status, formalised within new university legislation in 1989. While these two institutions arguably maintain a more technologically focused and work-based learning approach to provision, there are no incentives or controls which focus their offerings in any different way from other 5 universities.

The origins of the institutes of technology were in the 1970s as a Government response to an identified need to produce technically qualified people to fuel industrial development and to support regional development. Regional Technical Colleges (RTC) were established to educate “for trade and industry over a broad spectrum of occupations ranging from craft to professional level, notably in engineering and science, but also in commercial, linguistic and other specialities”.¹ Under the RTC and Dublin Institute of Technology (DIT) Acts, 1992, their functions were further identified as providing vocational and technical education and training for the economic, technological, scientific, commercial, industrial, social and cultural development of the State with particular reference to the region served by the Colleges, as well as engaging and exploiting research, development and consultancy work. By 2000, all RTCs had been re-named Institutes of Technology (IoTs) in recognition of their wider remit and evolution as higher education institutions.

2.2 Oversight

The HEA leads the strategic development of the Irish higher education and research system with the objective of creating a coherent system of diverse institutions with distinct missions. This system seeks to be responsive to the social, cultural and economic development of Ireland and its people and supports the achievement of national objectives.

The HEA has a responsibility, at central government level, for the effective governance and regulation of third-level institutions and the higher education system. In exercising its mandate, the HEA works to ensure that:

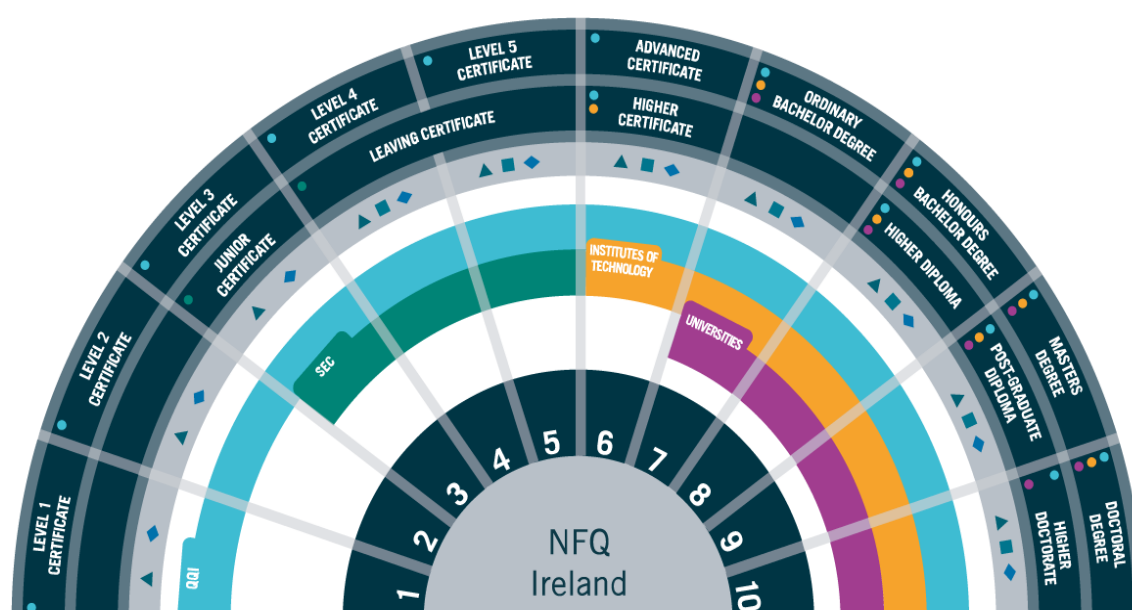
- It has due regard to institutional autonomy and academic freedom.
- Institutional strategies are aligned with national strategic objectives.
- Agreed objectives, based on those set out within a national framework defined by the Minister for Education and Skills, and detailed in compacts with institutions, are delivered through effective performance management at institutional and system-levels.

¹ Steering Committee on Technical Education: *Report to the Minister for Education on Regional Technical Colleges*, April 1967 (p. 11).

The HEA has been responsible for funding the universities since its inception and the IoTs since 2007. Previously IoTs were funded directly by the then Department of Education and Science. The now Department of Education and Skills still maintains direct funding links with a limited number of higher education institutions, although there is ongoing work to cease these legacy arrangements and allow the HEA to take full responsibility for funding the HE sector.

Quality and Qualifications Ireland (QQI) is the public-sector body responsible for maintaining quality and assurance and developing and promoting the Irish National Framework of Qualifications (NFQ). The Irish NFQ was established in 2003 and is set out in Figure 2.2. It validates awards at levels 1-10 based on level of knowledge, skill and competence. Higher-education awards are those that are considered Level 6 and above on the NFQ.

Figure 2.2: National Framework of Qualifications²



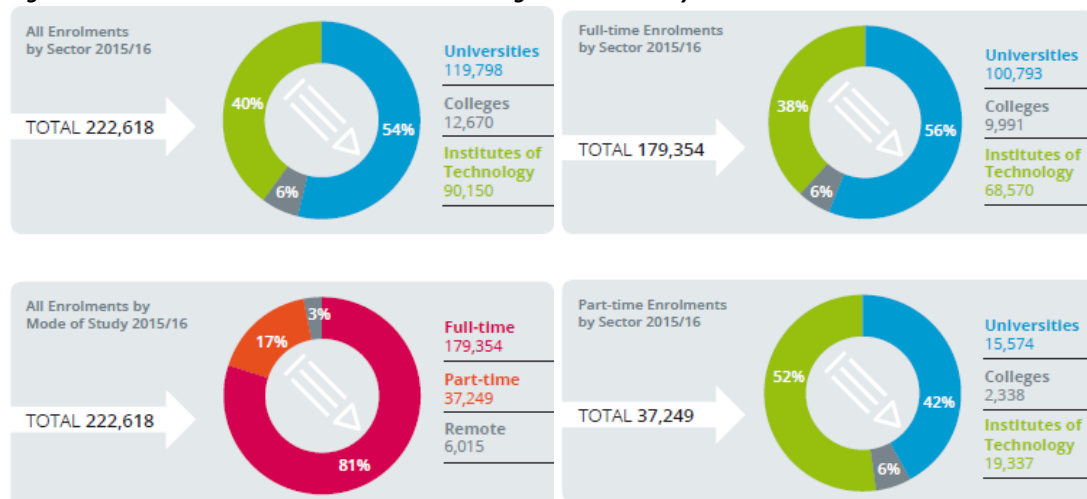
There are other organisations involved in monitoring the activities of the sector with regard to research, innovation and enterprise. Enterprise Ireland funds technology transfer, business incubation and entrepreneur development programmes within the HEIs and tracks performance accordingly. Science Foundation Ireland, funded by the Department of Jobs, Enterprise and Innovation, funds research centres and researchers in Science, Technology, Engineering and Mathematics (STEM) related fields. The research system in higher education is further discussed in Section 2.5.

2.3 Students

In 2015/16, there were 222,618 student enrolments in the public higher education institutions in Ireland. The split of the student base across universities and IoTs, and across full-time and part-time provision, is set out in Figure 2.3.

² See [http://www.qqi.ie/Articles/Pages/National-Framework-of-Qualifications-\(NFQ\).aspx](http://www.qqi.ie/Articles/Pages/National-Framework-of-Qualifications-(NFQ).aspx)

Figure 2.3: Student Enrolments across the Public Higher Education System



Participation in higher education in Ireland is high and growing strongly. Tertiary attainment for the population stands at 41% compared to the OECD average of 33%.³ With a target of 60% tertiary attainment among the 30–34 age group by 2020, Ireland has set itself the second highest EU2020 goal within the European Union, surpassing the headline target of 40%. Ireland has been moving steadily towards this target from an initial 27.5% in 2000 to 52.3% in 2015.⁴

Demographic growth has and will continue to stimulate significant increases in student demand.

The number of students in publicly funded higher education institutions has increased by approximately 2% per annum since 1960. In 1965, there were just 25,000 students in higher education. By 1976, there were 31,000. To maintain participation rates, the system must grow by around 25% to 2030. The Department of Education and Skills has considered three scenarios when projecting the estimated increase in demand for full-time third-level education which give a result of between 207,544 and 227,244 expected enrolments by 2029.⁵

Part-time and remote learning in higher education has not grown at the same rate as full-time undergraduate provision. Examining the composition of enrolments in more detail, 81% are full-time, 17% part-time and 3% remote. Of full-time enrolments, 87% are at undergraduate level and 13% are postgraduates. However, the part-time enrolment increases since 2000 remain lower than full-time, despite the prioritisation of flexible learning and workforce upskilling within the National Skills Strategy. Postgraduate research numbers have begun to increase again after a period of decline which coincided with the Irish economic recession, with 8,368 pursuing PhDs and 1,405 undertaking Level 9 Masters by Research programmes (a relatively unique aspect of Irish provision which involves two year focused periods of research study) in 2015/16.

An important consideration in relation to participation is access. National policy on higher education access is underpinned by the principle that everyone should have the opportunity to participate in post-secondary education and that the population of new entrants to higher education should be broadly representative of the general population (socio-economic mix, disability status, gender, etc.). All groups in Irish society have experienced increased levels both of participation in higher education

³ OECD: *Education at a glance 2015: OECD indicators*, 2015.

⁴ HEA: *Higher Education System Performance 2014–2016*, 2016.

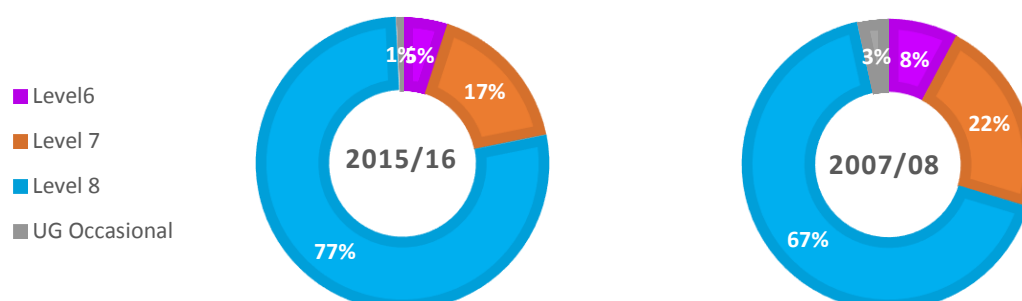
⁵ DES: *Projections of Demand for Full Time Third Level Education 2015–2029*, November 2015. Note that these are projections for full-time enrolments, which were at 179,354 in 2015/16 (cf. Figure 2.3).

and of educational attainment – including students with a disability, students experiencing social disadvantage (as measured by their socio-economic group classification) and mature students. Individual HEI access programmes and initiatives are in place, such as HEAR (targeting socio-economic disadvantage) and DARE (targeting school leavers with a disability), which offer places to students on reduced CAO points.

Table 2.1: Participation Rates of Key Target Groups (2014)⁶

Target Group	% Participation
Non-manual worker group (new entrants aged 18–20) as a percentage of the population	23%
Semi/unskilled manual and agricultural worker group (18-20 year old new entrants) as a percentage of the population	26%
Mature students (full time) as a percentage of new entrants	13%
Mature students (full and part-time) as a percentage of new entrants	19%
Students with a disability as a percentage of new entrants	6%
Flexible and part-time students as a percentage of all enrolments (undergraduate and postgraduate)	19%
Entrants admitted on the basis of a further education award as a percentage of new entrants	6.6%
Irish Travellers as a percentage of new entrants	0.1%
Estimated national participation rate (new entrants aged 18–20)	52%

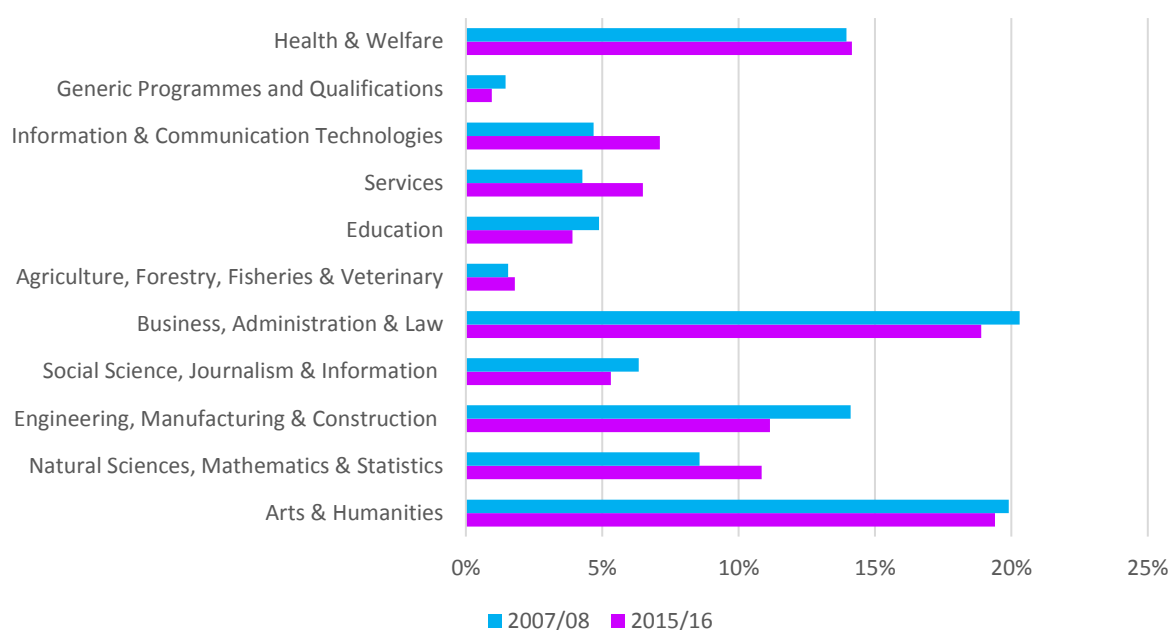
Figure 2.4: Full-Time Undergraduate New Entrants by Level



There has been an increase in the number of new entrants into full-time undergraduate courses taking level 8 qualifications, as opposed to Level 6 or 7 courses. Also, there has been some change in the fields of study chosen by full-time undergraduates between 2007/08 and 2015/16. Enrolments in areas such as information and communication technologies and natural sciences, mathematics and statistics are growing while engineering, manufacturing and construction are declining.

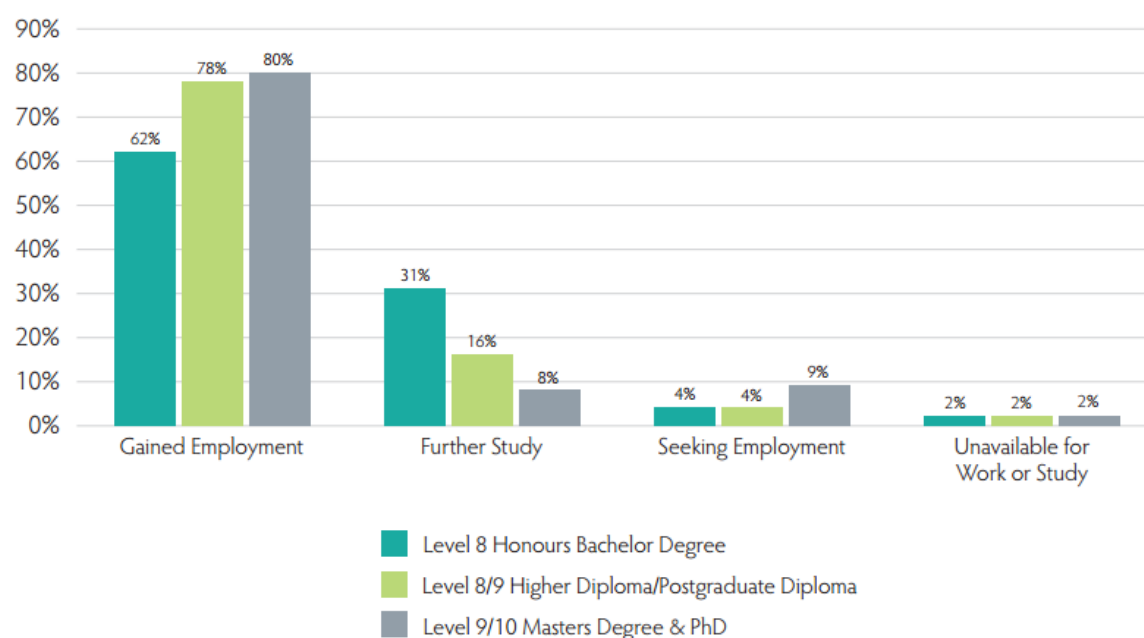
⁶ HEA: *National Plan for Equity of Access to Higher Education 2015-2019*, December 2015 (p. 42).

Figure 2.5: Full-time Undergraduate New Entrants by Field of Study⁷



Employment rates of graduates have risen significantly in recent years, with 62% of Honours Bachelor Degree graduates in 2015 gaining employment within 9 months of graduation, compared to 45% in 2009. The figure below illustrates the differences in employment prospects and further study rates for all levels of qualification.

Figure 2.6: Overview of First Destination of Graduates by Level of Qualification⁸



⁷ HEA: *Key Facts & Figures*, 2007/08 & 2015/16.

⁸ HEA: *What Do Graduates Do? The Class of 2015*, February 2017 (p. 30).

2.4 Staff

There were 17,699 core academic and non-academic staff in Irish public higher education institutions in 2015. This is supplemented by temporary research and specialist staff of 4,882, bringing overall staffing levels in the sector to 23,544. Since 2008, an Employment Control Framework (ECF) has been in place which has driven core staffing levels down by 12% by 2015. To meet ECF targets, we have seen a growing tendency in some institutions to deploy part-time and casual staff which are categorised as 'non-core' to meet increased demand. The academic/non-academic split between universities and IoTs is notably different: 47% of core staff in universities are academic, as opposed to 61% in IoTs, and 39% of staff in IoTs are non-academic as opposed to 53% of staff in universities.⁹

Pay costs account for most higher education expenditure, ranging from 60-70% in Universities and 72-80% in IoTs. The HR tools available to manage staffing and costs are limited given employment controls, statutory provisions, state oversight of pensions and national labour agreements.

The pressure placed on the sector from decreased staffing at a time of significantly increased provision demand is clear, and there are concerns about the adverse impact on quality of under-staffing and wider under-resourcing. As presented in Table 2.2, staff-student ratios in the HEA-funded institutions have deteriorated significantly in recent years, rising from 1:15.6 in 2008, which was in line with the current OECD average,¹⁰ to a ratio of 1:19.8 in 2013/14. While it is difficult to pinpoint declines in quality, there is anecdotal evidence from institutions of reduced laboratory exposure or levels of practice-based teaching due to staffing pressures which clearly impact upon the student experience. QQI also identified some of the increasing quality issues within the system in a recent report.¹¹

Table 2.2: Staff-student ratios, 2007/8 to 2013/14

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
WTE student numbers (full-time + part-time/2)	158,057	164,180	173,723	177,329	179,105	181,308	185,760
WTE core staff numbers	19,500	19,411	18,524	18,321	17,899	17,604	17,771
WTE academic staff numbers	10,100	10,041	9,772	9,697	9,418	9,297	9,364
Ratio of academic staff to students	1:15.6	1:16.4	1:17.8	1:18.3	1:19.0	1:19.5	1:19.8

Sector-wide initiatives to enhance quality in teaching and learning are led by the National Forum for the Enhancement of Teaching and Learning in Higher Education. The establishment, since 2013, of the Irish Survey of Student Engagement captures data on a range of indicators of the student experience and overall student satisfaction levels. The findings are largely positive despite the reducing staff-student ratios described above. For example, 56% of students report that they have developed effective writing skills from their experience at their higher education institution, and 75% indicate that they have developed critical and analytical thinking skills.¹²

⁹ HEA: *Key facts & figures 2015/16*.

¹⁰ OECD: *Education at a glance 2016: OECD indicators*, B3.3. Ratio of students to teaching staff in educational institutions (2013 data).

¹¹ QQI: *'Quality in an Era of Diminishing Resources'*, *Irish Higher Education 2008-15*, March 2016.

¹² ISSE: *The Irish Survey of Student Engagement, Results from 2016* (p. 47).

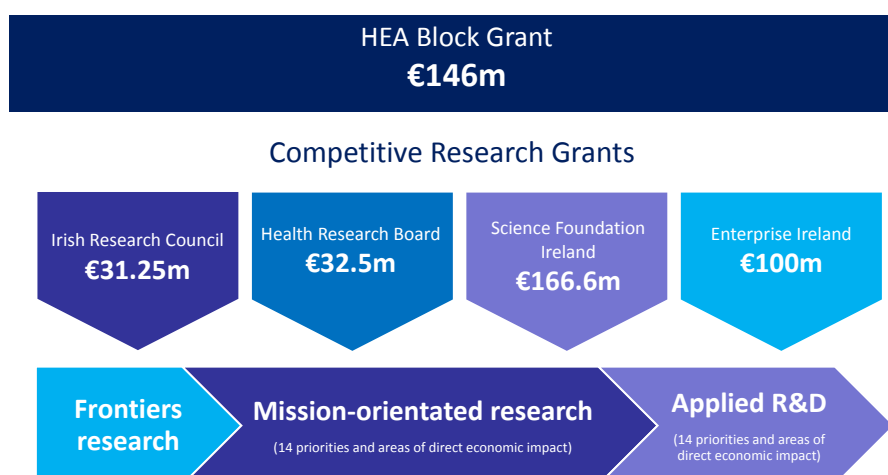
2.5 The Research System

Ireland's research system has been transformed over the last 20 years and it is now respected internationally in terms of talent and impact of innovation. For example, Ireland has risen to 16th place on the international Scientific Excellence Index, which measures citations of scientific papers.¹³ It has been stimulated by a significant government investment programme (aided by substantial philanthropic investment) via the Programme for Research in Third Level Institutions where €1.2bn was invested over 5 cycles in infrastructure and human capital to build specialist research capability across the sector from 1999. In parallel with the development of this programme, Science Foundation Ireland was established to target investment in science-based research activity, while research councils were set up for the first time to focus on humanities and social sciences (IRCHSS) and on science and on engineering and technology (IRCSET), respectively. Since that time several successful research centres of scale have been established, generating significant European and private funding and demonstrating impact on economy and society. Support infrastructure for knowledge transfer and enterprise development has also expanded significantly within the sector.

Following these developments, the current system of funding research and innovation across the higher education in Ireland can be summarised as follows, with an overview of the relative funding commitments set out in Figure 2.7:

- The HEA provides a foundation investment for research excellence within the block grant provided to institutions. Although universities have discretion to spend the grant as they wish, it is estimated that around €146m of HEA core funding supports research capability.
- The Irish Research Council (which is the product of a merger between the two previous Councils), funded by the Department of Education and Skills, supports postgraduate and postdoctoral awards and research teams on a competitive project basis.
- Science Foundation Ireland, funded by the Department of Jobs, Enterprise and Innovation, invests in research centres and researchers in STEM areas and has created a network of 12 collaborative research centres across the sector.
- Enterprise Ireland, funded by the Department of Jobs, Enterprise and Innovation, supports a range of interventions within the HE sector focused on knowledge transfer, commercialisation of research and enterprise development.

Figure 2.8: Overview of Irish Research and Innovation Funding Landscape

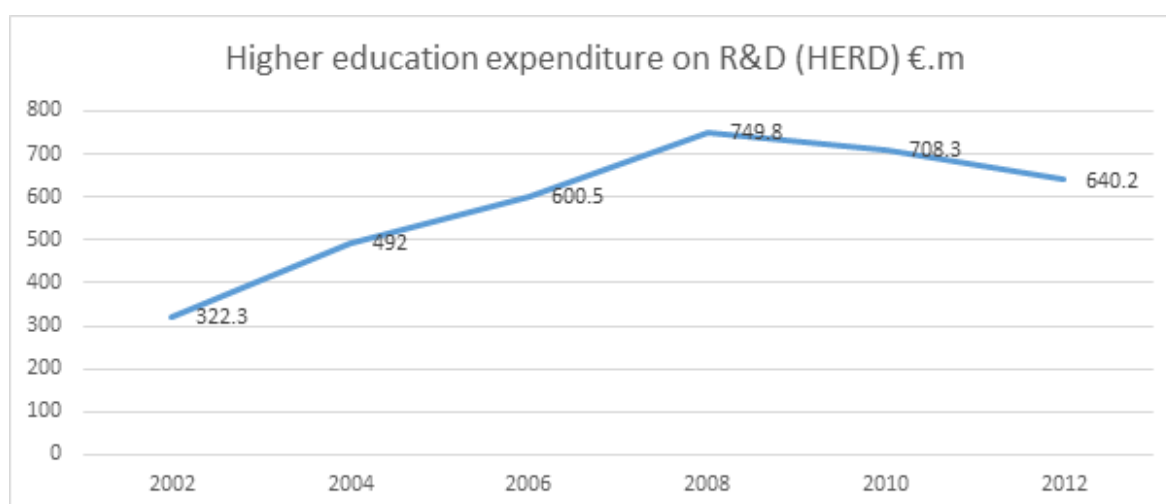


¹³ Irish Times: 'Climbing the International Innovation Rankings' (28 September 2016).

This system has been successful in significantly improving Ireland's global reputation for research and innovation. For example, Ireland ranked 1st in the EU Commission Knowledge Transfer Study in 2013. In 2016, it was considered a strong innovator (albeit not yet an innovation leader), being placed 6th in the EU Innovation Scoreboard. There has been strong engagement by Irish institutions in European research programmes through participation in International Research Organisations and Horizon 2020. Under Horizon 2020, the higher education sector has won 57% (€221m) of the €368m secured by Ireland to February 2017. The Irish target is to reach a GERD (Gross Expenditure on R&D) of 2.5% of GNP (or 2% of GDP) intensity of public and private investment in research by 2020. This would remain well below world leaders in innovation, who spend 4% and above of GDP of public and private investment in research. In 2017, Irish GERD was an estimated 1.6% of GNP.¹⁴

Beneath this relatively strong-performing research system, there are some concerning trends. The level of investment in higher education research and development (HERD) shows a decline since 2008, as highlighted in Figure 2.9, reflecting the wider financial pressure on the system. The need to reinvest and reinvigorate the research infrastructure in place in institutions is acknowledged, and a Cycle 6 of PRTL is planned, although its exact format is still being discussed by the relevant Departments. This is part of a wider issue with the quality and need for investment in HE capital stock, which will be further considered in Section 2.7.

Figure 2.9: Summary of higher education expenditure on R&D (HERD), 2002-2012, current prices



2.6 Internationalisation and Global Competitiveness

There are differing perspectives on the value and importance of university rankings, particularly in a relatively small higher education system like Ireland where there are other clearly defined policy goals that drive funding and performance and where regional access is a key aim. There is also concern that rankings overly focus on research criteria, with initiatives such as uMultirank attempting to take a more holistic view to comparing performance. Nevertheless, rankings are important for international reputation and an institution's ability to recruit international students, develop strategic research partnerships and diversify its funding base and Ireland's performance is worthy of reflection.

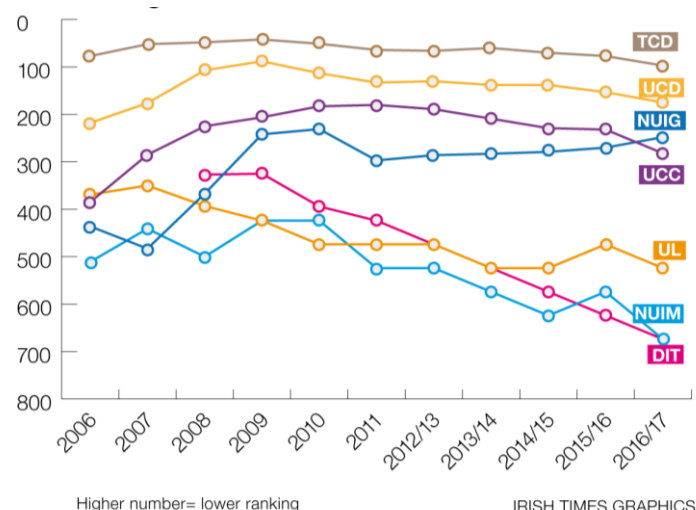
Between 2000-2010, helped by the progress in research and increasing levels of public investment in HE throughout much of that period, the rankings of the universities improved. By 2010, both TCD and UCD were ranked by Times Higher Education (THE) within the top 100 institutions in the world. However, since 2010, as the impact of the fiscal crisis and reduced state investment has become

¹⁴ Ireland's National Reform Programme 2017.

apparent, coupled with an increasingly competitive global landscape, rankings have gradually declined. Both institutions dropped out the top 100 THE list, while there is no other Irish university in the top 200.

All Irish universities, except for NUI Galway, were rated lower in the QS World University Rankings in 2016/17 than 2015/16. An overview of the change in the rankings of Irish institutions in the QS World University Rankings is set out in Figure 2.9 below.

Figure 2.10: Changes in Irish HEI Rankings 2006 to 2016¹⁵



TCD has been notable in its position as Ireland's leading-ranked university and recently announced that it had been accepted into the League of European Research Universities (LERU), an elite group of leading European research universities. On the other hand, 13 of the 14 IoTs are not ranked and have little prospect in the foreseeable future, although a number have embraced the opportunity for benchmarking areas of performance via the uMultirank mechanism.

The internationalisation of the Irish higher education system has been a key focus throughout the last 20 years. Institutions have developed stronger international linkages, while also attracting a greater number of students to study in Ireland. In 2014/15, over 15,000 whole-time equivalent, full-time students in Irish higher education were international: that is, approximately 9% of full-time numbers, an increase from 7% in 2012/13.¹⁶ This figure remains below the OECD average and considerably below high performers such as Australia, the USA, the UK and New Zealand. An international target of 15% of full-time students has been set in the new *International Education Strategy for Ireland, 2016-2020*. However, there is concern that institutions should not leave themselves overexposed to the risks inherent in internationalisation and avoid over-dependence on international students as a revenue-generation strategy.

The post-Brexit environment will present challenges and opportunities for Irish higher education and research in areas such as student mobility and residency rules, international educational programmes, academic/professional mobility/recruitment and research collaboration and funding.

A wider concern around the international outlook of the higher education system is the low number of Irish students who travel abroad as part of their higher education experience (2,501). The HEA notes that the EU has planned to increase the resources allocated to the Erasmus+ programme, and that

¹⁵ Irish Times: 'Irish universities continue to fall in global rankings' (6 September 2016).

¹⁶ HEA: *Higher Education System Performance 2014–2016*, 2016.

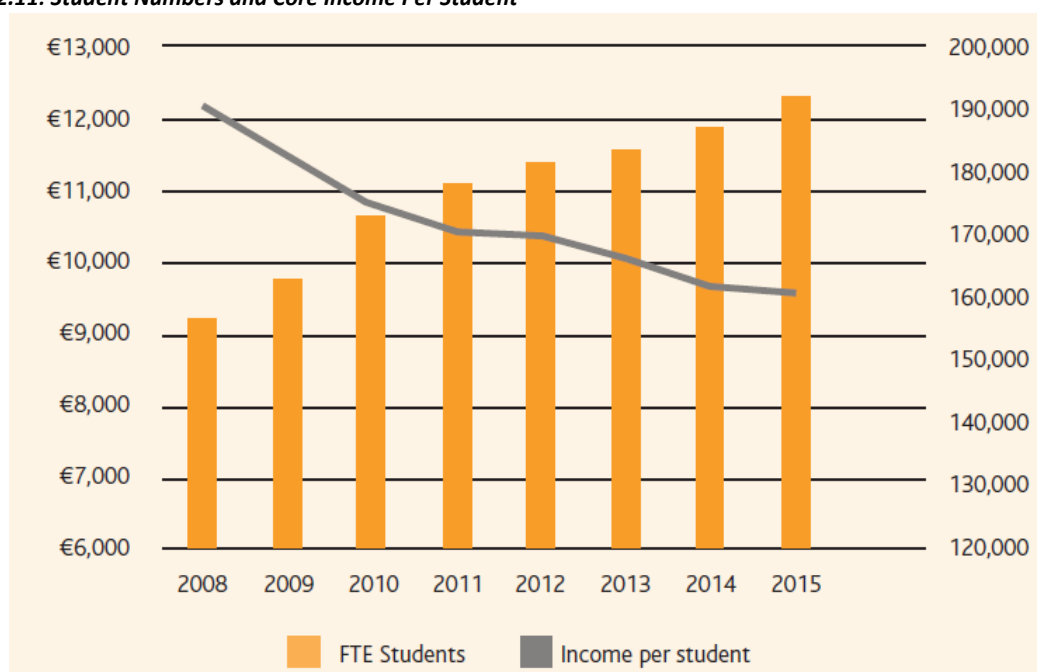
this may lead to an increase in Irish students travelling abroad as part of their studies, but there is a recognised need to stimulate greater levels of demand from Irish students for international experiences which will be key to meeting the challenges and opportunities of Ireland's innovative, open economy in the future.

2.7 Funding

The adequacy and mechanisms of funding for higher education have been the subject of much debate. A major review was undertaken by an Expert Group on Future Funding for Higher Education, chaired by Mr Peter Cassells, to advise on options regarding the future sustainable funding of the sector. The report, published in July 2016, concluded that the current approach to funding is unsustainable, and that substantial increases in investment in higher education must be made to ensure that the sector can remain viable and provide the capacity to meet the major increase in student demand projected through to 2030. The report is currently being considered by the Oireachtas Committee on Education and Skills.

The issues that the report identifies stem from the significant contraction of state investment in higher education, declining 38% from €2bn in 2009 to €1.3bn in 2016. At the same time, the number of students increased by approximately 34,000. The decrease in state funding was compensated somewhat by an increase in student contribution, which currently stands as €3,000 per annum. However, even when this is taken into account, overall funding per student has declined by c. 20% over eight years from 2008 to 2016, from over €12,000 to under €10,000 (see Figure 2.11). Indeed, the latest international comparator figures indicate that expenditure on tertiary education in Ireland (including both public and private spending) was 1.2% of GDP in 2013 (below the OECD average of 1.6%).

Figure 2.11: Student Numbers and Core Income Per Student



The decline in public funding is having a serious impact on the financial position of the institutions. 12 institutions were in deficit in 2016, and the problems are particularly apparent among the IoTs. Student numbers in the IoTs grew by 24% between 2008 and 2015, meaning total income per student

fell by 30%. A recent financial review of the IoTs revealed that 6 institutes face immediate sustainability challenges, with a further 4 potentially at risk due to limited reserves and current or projected deficit positions.¹⁷ Overall reserves fell from €132.5m to €78.7m over the period, wiping out 40% of the finance available to underpin ongoing sustainability and development. At an aggregate level, the IoT sub-sector is in deficit and this trend is projected to continue over the next 5 years. Decline in IoT cash balances is also apparent, from €218.1m in August 2013 to €147m in August 2016, and a further fall anticipated to €116m by August 2017. The HEA has agreed 3-year financial turnaround plans with the 6 institutions with ongoing deficits, but with limited funding available there are risks to whether these plans can be delivered.

In the university sub-sector, the latest audited accounts show an overall aggregate deficit. Given the OECD recommendation of a 3% annual surplus to maintain institutional sustainability, the deficit position across higher education is a major concern. One specialist college and 2 universities have submitted 3-year plans in line with the IoT approach. As regards the universities, the main concern is around capital stock and maintenance, and the implications for the financial position. There is also a reducing dependence on exchequer income, with the proportion of funding sourced from the state decreasing from 73% to 64% from 2008 to 2013.

While the recurrent funding situation is a major concern, the lack of capital investment in higher education in recent years is perhaps the biggest risk to sector sustainability. Pressure to accommodate additional demand in the schools sector led to a moratorium on new capital projects in the HE sector in November 2011.¹⁸ With a capital stock of €8 billion and a general acceptance that 2.5% to 3.5% of the value of stock needs to be invested each year in order to adequately maintain it, the recent overall investment levels, as set out in Table 2.3, are insufficient to meet these requirements, before considering the need for new buildings to accommodate increased student demand or deal with legacy issues around the quality of stock. These latter issues are important, with major repair or replacement required on 41% of the total space in the sector. Temporary buildings (including prefabs) and rented space account for 6% of stock. Irish students have 25% less physical space than is the norm internationally. Costs of maintaining and renewing the capital stock in higher education institutions are considered in detail in section 6.3.2.

Table 2.3: Capital Investment in Higher Education 2008-2015

	Paid 2008	Paid 2009	Paid 2010	Paid 2011	Paid 2012	Paid 2013	Paid 2014	Paid 2015
UNIVERSITY	€24.50	€76.54	€116.50	€48.00	€44.00	€41.00	€31.10	€29.58
IOTs	€51.00	€58.50	€51.00	€24.00	€8.00	€15.50	€8.00	€16.78
Grangegorman	€0.00	€0.00	€0.30	€5.00	€2.50	€12.30	€40.00	€5.91
DIAS	€0.00	€1.25	€0.30	€0.25	€0.02	€14.00	€0.10	€0.00
RIAM	€0.00	€0.50	€0.00	€0.20	€0.14	€0.04	€0.00	€0.00
CICE	€0.00	€0.23	€0.30	€0.38	€0.25	€0.20	€0.06	€1.70
Total	€75.50	137.02	€168.40	€77.83	€54.91	€83.04	€79.26	€53.97

¹⁷ HEA: *Financial Review of the IoT Sector*, 2016.

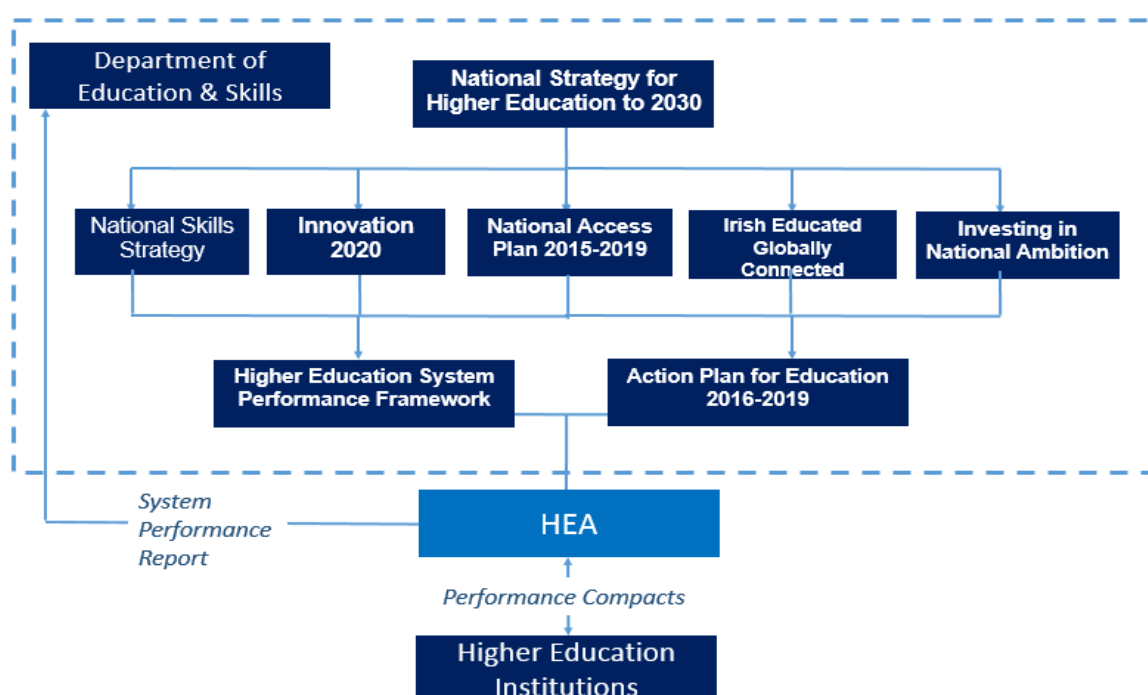
¹⁸ Letter from the Department of Education and Skills to the HEA, 10 November 2011.

3. Strategic Context Underpinning Irish Higher Education

3.1 Overall Context

In recent years, the Government has set out a clear direction in terms of the objectives it expects to be realised by higher education. An overview of this strategic context is set out in Figure 3.1.

Figure 3.1: Strategic Context Underpinning Higher Education



The *National Strategy for Higher Education to 2030* was the first step in this process, setting out a long-term agenda for change in the system. Despite being published in 2011, it has retained its relevance and provided the impetus for many important developments. It also heralded the establishment of a system performance process and a strategic compact and dialogue process whereby institutions set out a range of commitments within a framework of seven system objectives set by the Minister for Education and Skills.

There have also been a suite of national strategies focusing on different aspects of relevance to higher education. These have focused on research and innovation; skills development; access; and internationalisation. To ensure further focus on delivery, the Minister has also set out a three-year Action Plan for Education and Skills which reflects the objectives within these strategies. To deliver on its remit, the HEA has a strategic plan and annual workplan, together with a Service Level Agreement with the Department, to ensure focus on the key areas of development.

The funding of higher education has of course been an increasing concern. As previously mentioned, the establishment of an Expert Group to set out options for future funding strategy in this area put in train a process which intends to ensure a sustainable funding base for the sector in future.

3.2 Overall Higher Education Strategy

The **National Strategy for Higher Education to 2030 (Hunt Report)**, published in January 2011, sets out the long-term vision for higher education in Ireland. It establishes three core roles for Higher Education: Teaching and Learning; Research; and Engagement with Wider Society. The high-level objectives of the National Strategy established in the *Hunt Report* include the following points:



- The sector should keep pace with **demand** from students and employers and should meet Ireland's evolving human capital needs through an appropriate mix of provision.
- It should improve **equity of access** and regional pathways from second level and from further education and training.
- It should promote **excellence in teaching and learning** to underpin a high-quality student learning experience and should produce high-quality qualifications.
- It should maintain an **open, excellent, collaborative public research system**, founded on a strong, broad base across all disciplines. It should also focus significantly on the government's identified priority areas.
- It should be **globally competitive** and internationally oriented.
- The (then) existing landscape of fragmented individual institutions should be restructured to form a **single coherent system** of diverse but complementary institutions that engage in inter-institutional collaboration, including a new type of institution – the Technological University – as a development option for IoTs that have outgrown their existing mission.
- The **funding and accountability system should be restructured to focus on performance and outcomes** that are agreed in a mission-based dialogue. Relevant considerations include: factoring in supply, demand, available funding and quality; balancing institutional autonomy and public accountability; and maximising efficient use of resources and income generation.

Meeting this range of high-level National Strategy objectives for growth in access and participation, skills, quality, engagement and research involves striking a balance between responding to demand and maintaining quality within any given level of available funding. Over the past 15 years, HEA funding systems have been successful in growing Ireland's participation in higher education to meet expanding demographic demand. However, as public funding has contracted during recent years, there are concerns that further growth without proportionate funding will put the quality of the student experience and of Irish graduates' qualifications at risk.

In response to the National Strategy, the document ***Towards a System Performance Framework*** followed in 2012 and set out to translate the full suite of relevant national strategies into system-level objectives and target outcomes. A strategic dialogue process between the HEA in partnership with the HEIs is the key implementation process for the System Performance Framework (2014-2016). The process involves agreeing individual and, where appropriate, collective targets to meet key system objectives. These objectives, as per the Second Report of the Higher Education Authority to the Minister for Education and Skills, December 2016, are set out in Figure 3.2.



Figure 3.2: Current National Higher Education System Objectives



The overall objective is to form a stronger, more internationally competitive higher education system. The next period of agreed new performance targets for each HEI will be in 2017-2019. There is scope to withhold up to 10% of block grant funding on the basis of performance against the agreed targets. At present, the HEA approach allows 2% of funding to be withheld, and although 3 institutions were given this provisional penalty in 2016, subsequent programmes of action in each case allowed this penalty to be waived as the real intention is to use the funding as a lever to change behaviour.

3.3 Relevant National Strategies

There are four important national strategies, published within the last two years, that focus on key themes of relevance to higher education: skills, RDI, access and internationalisation. The strategies contain a range of objectives and actions which will have to be considered in context of how HEIs are funded and supported moving forward. Although none of them imply that the major driver of funding allocations should cease to be the volume of teaching and learning activity in a university or institute, they do seek development and change which could clearly be incentivised or supported by funding mechanisms.

The **National Skills Strategy** forms one element of the government's long-term economic plan and was published in January 2016. It is aligned with other policy statements including *Enterprise 2025*, *Pathways to work 2016-2020*, the *National Policy Statement on Entrepreneurship* and the *Action Plan for Jobs*. An overview of the objectives of the National Skills Strategy is set out in Figure 3.3.



Figure 3.3: Key Objectives of the National Skills Strategy



Implementing the National Skills Strategy requires a wide range of actions, including maintaining and increasing participation rates in higher education. Other targets of relevance to HE include: growth of apprenticeships; enhancement of STEM provision; the development of employability statements for programmes of study (attesting the transversal skills that will be gained); the expansion of work placements to cover all programmes; expansion of entrepreneurship education; greater engagement of employers in programme development and programme content review; development of programmes in response to identified skills needs; continued implementation of the ICT Action Plan, implementation of the Digital Roadmap; expansion of part-time/flexible provision; increased retention rates; development of further education and HE pathways; and promotion of regional clusters. Notably, some barriers to the further growth of STEM and ICT in higher education are demand related and will not be affected by putting in place further supply-side reforms.

The **National Plan for Equity of Access 2015-2019**, published in December 2015, is the third national plan to improve equity of access to higher education. The plan sets a target for each of the identified under-represented groups in higher education, and for the proportion of entrants progressing from further education and training. Its goals are set out below.



1.	To mainstream the delivery of equity of access in HEIs.
2.	To assess the impact of current initiatives to support equity of access to higher education.
3.	To gather accurate data and evidence on access and participation and to base policy on what that data tells us.
4.	To build coherent pathways from further education and to foster other entry routes to higher education.
5.	To develop regional and community partnership strategies for increasing access to higher education with a particular focus on mentoring.

The plan acknowledges that the strategic dialogue process is the primary mechanism for review of access performance. Moreover, it implies a need for continuation of the additional cost-based weighting for access students contained in the existing funding allocation model, but also for some earmarked or ring-fenced funding for pilot initiatives to target communities with very low

participation. Furthermore, it points towards an enhanced focus on access outcomes by examining problem areas of non-completion. This needs to be sensitively handled in funding allocations, taking into account the risk of reducing access. Additionally, it points to a need for improved data gathering which the funding model must somehow support.

Innovation 2020: Excellence, Talent, Impact is Ireland's strategy for research and development, science and technology and was published in December 2015. The strategy notes the significant progress made in developing research capability across Ireland. It flags a need to re-invest in the higher education infrastructure base via a sixth cycle of the Programme for Research in Third Level Institutions. Innovation 2020 sets a series of high-level objectives as follows:



- Continuing to support excellent research across the full continuum and across all disciplines.
- Becoming a global innovation leader.
- Increasing public and private investment in research and development by increasing annual enrolments in research programmes by 22%, by further developing research centres, and by introducing a research infrastructure programme. We are committed to maintaining a focus on the impact and relevance of research.
- Enhancing the impact of research and innovation for enterprise, continuing to focus most competitive funding on the 14 priority areas positioned within six broad enterprise themes (ICT, Manufacturing & Materials, Health & Medical, Food, Energy, Services & Business Processes).
- Ensure that education drives innovation, supporting the full continuum of talent development to ensure that the quantity and quality of trained people is sufficient and the full range of research.
- Focusing research and innovation activity on social and economic development – adopting a challenge-centric approach, ensuring that the public-sector research system is coherent and that the benefits of collaboration are fully realised.
- Supporting innovation through the protection and transfer of knowledge, maximising knowledge transfer.
- Engaging with the rest of the world in becoming a global innovation leader, aiming to secure €1.25bn from the competitive EU research funding programme Horizon 2020.

Implications of this strategy for the allocation of overall core funding are: the need to consider how growth in research enrolments can be given due priority alongside undergraduate enrolments and quality in teaching and learning in core grant funding; how research excellence and impact can be supported in the allocation of core research funding; how attracting Horizon 2020 funding can be facilitated; how research across the continuum and range can be supported; how knowledge transfer can be fostered; and how the coherent organisation of research can best be promoted by the funding model.

In the context of any new PRTL infrastructure programme, a set of principles for the development and maintenance of the higher education and research asset base need to be agreed, in particular identifying who bears responsibility for maintaining the value of the asset base

Irish Educated, Globally Connected is the new international education strategy for Ireland and was published in October 2016. It aims to set out a comprehensive approach to internationalisation and supportive national framework over the period 2016-2020, which develops Ireland's reputation in the development of global citizens. This strategy defines internationalisation of education as preparing

students, academics and staff to be active and engaged participants in an interconnected global world and attracts leading international student talent. Its strategic priorities are:

- Internationally oriented, globally competitive HEIs: these are the primary drivers of the internationalisation of higher education. The focus of our HEIs must remain on quality and building long-term engagement with students and partners. A target of a 33% increase in international students has been set for higher education.
- Sustainable growth in the English Language Training sector.
- Succeeding abroad by identifying and building presence in international education markets.

Most HEIs have pursued strategies to recruit international students as a means of revenue diversification during growing financial challenges. The funding model as it stands does not provide any funding in recognition of international student numbers, nor does it take into account income from this source in setting allocations.

3.4 Funding Strategy

The *Investing in National Ambition* report, setting out a strategy for funding higher education, was published in July 2016. It concludes that the scale of the resource deficit that has now emerged has passed the point where it can be addressed by further efficiencies (for example, through use of information technology or via a cap on numbers), and that only an increase in funding can allow higher education to continue to make a balanced contribution to Ireland's development. At present, block grant funding is allocated based on an institution's percentage share of student numbers. Thus, in a situation of static grant funding and growing demand, when some institutions grow their student numbers, others must either match that growth or lose percentage share of grant, leading to a downward spiral in the overall resource per student.

This report considers the need to reinvest in higher education to restore it as a key enabler of the nation's future development, examining current funding pressures faced by institutions, by taxpayers and by students. It concludes that a significant increase in investment is needed to create the kind of engaged, small-group, high-trust and high-expectation teaching and learning that will be necessary for the next phase of Ireland's development, observing that neither the status quo nor incremental increase in state funding would be sufficient. It proposes options regarding the proportion of funding that in future should be met by the state, by students and by employers, if future funding were to be increased and maintained at sustainable levels to meet demand. Furthermore, it suggested various means of allowing for some form of deferred payment for student fees based on income-contingent repayment schemes.

The report notes, in contrast with other countries, the lack of any formal relationship between student-number growth and system funding levels in Ireland. It also points to the need to grow income from non-state sources, such as from philanthropy and commercial services, under all future funding options. It recommends that resource optimisation needs to be enhanced and that the block grant allocation should be reviewed to ensure that it is structured to support overall priorities and objectives. In this regard, it proposes that the following elements be considered:

- The state grant in lieu of undergraduate tuition fees, which were abolished in 1996.
- Cost-weightings for disciplines, access and part-time/flexible modes of study.
- Consideration of weightings for strategically important but vulnerable provision, and for collaborative provision.



- Consideration of input, output and outcome metrics.
- Approach to research and innovation funding in the block grant and the appropriate balance between teaching and research metrics used in allocations. The report states that attention needs to be given to the appropriate methods for measuring research excellence and impact, drawing on international experience.

3.5 Delivering Strategy

Taking account of overall higher education strategy and the thematic strategies now in place, the Minister for Education and Skills has produced the **Action Plan for Education 2016-2019** which identifies commitments in relation to higher education (alongside others for school and further education), which must be delivered within the three-year timeframe. Reforming the funding model for higher education is a key action within the plan, the actions of which include:



- Increasing the percentage of people from target socio-economic groups in HE.
- Increasing by 25% the number of HE students undertaking a work placement.
- 13,000 places under the new apprenticeships programme.
- A new frontier research investment programme led by the Irish Research Council.
- Building in entrepreneurship programmes and modules across all HE provision.
- New grading system, common points scheme for HE access and reduction in the number of undergraduate entry routes as part of a cohesive approach to transitions.
- Addressing non-completion in HE.
- Implementation of a professional development framework for HE staff.
- Expansion of flexible provision by 25%.
- Requirement for employability statements to be provided against each HE course.
- Shared service programmes across HE, with the first focusing on payroll.

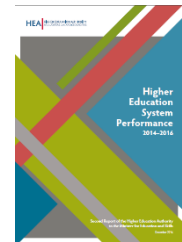
The HEA, of course, has a central role in ensuring the successful delivery of the above actions and the wider objectives set for higher education in the strategies summarised within this paper. As mentioned, the HEA has its own strategic plan to help focus activity in this regard. The plan defines six core strategic objectives for the organisation: system development; sustainability of HE; policy and planning; governance in HE; excellence in HE; and strategic programmes. This strategy is due for renewal in 2017, with a new Chair and new CEO in the HEA driving the process to ensure it reflects the evolving landscape. In delivering on its own strategy, the HEA sets out an annual workplan which is approved by its Board. This workplan also reflects an annual Service Level Agreement (SLA) with the Department of Education and Skills which further reaffirms the link between the Government's key policy objectives and the higher education sector. Actions are set out across 10 areas within the current SLA:



1. Implement the system performance framework.
2. Support the improvement of system-wide quality in teaching and learning.
3. Support the development of research and innovation capacity across the sector.
4. Improve the responsiveness of the HE sector to workforce skills needs and its engagement with enterprise.
5. Promote equity of access to, and the transformation of pathways to and within higher education.

6. Support the internationalisation of the higher education system and to ensure that the institutions adopt a holistic approach to internationalisation as a strategy for quality enhancement.
7. Implement the agreed system reconfiguration and review higher education provision.
8. Manage the allocation of public funding to higher education institutions and to support system financial sustainability and implementation of public sector reform.
9. Promote, monitor and ensure best practice with regards governance and accountability requirements for HEA and for the sector.
10. Support the Department in responding to the political system, departmental reporting and analysis requirements and policy development.

In addition, an annual system performance report is produced by the HEA for the Minister of Education and Skills. This reports on the performance of the higher education sector in delivering on the 7 objectives set down by the Minister for Education and Skills under the system performance framework. This draws on the annual strategic dialogue process and the submission of annual compact progress reports by HEIs which report on progress against targets within the compacts which reflect the wider system objectives.



4. The Existing Approach to Funding Higher Education Institutions

The Higher Education Authority is the statutory agency responsible for the allocation of exchequer funding to the universities, institutes of technology (IoTs) and other higher education institutions (HEIs). Most of the grants which the HEA allocates are 'recurrent' grants, allocated against the ongoing running costs of the institutions. The HEA also allocates capital funding for buildings and equipment with agreement from the Department of Education and Skills, although such funding has been very limited in recent years.

The operational costs of core teaching and research account for about 80% of the total expenditure of the HEIs; the costs of contract research account for the remaining 20%. Contract research is research that is typically organised around legally binding funding contracts from a range of funding agencies (as depicted previously in Figure 2.8), including those engaging with industry, for specified projects of fixed duration.

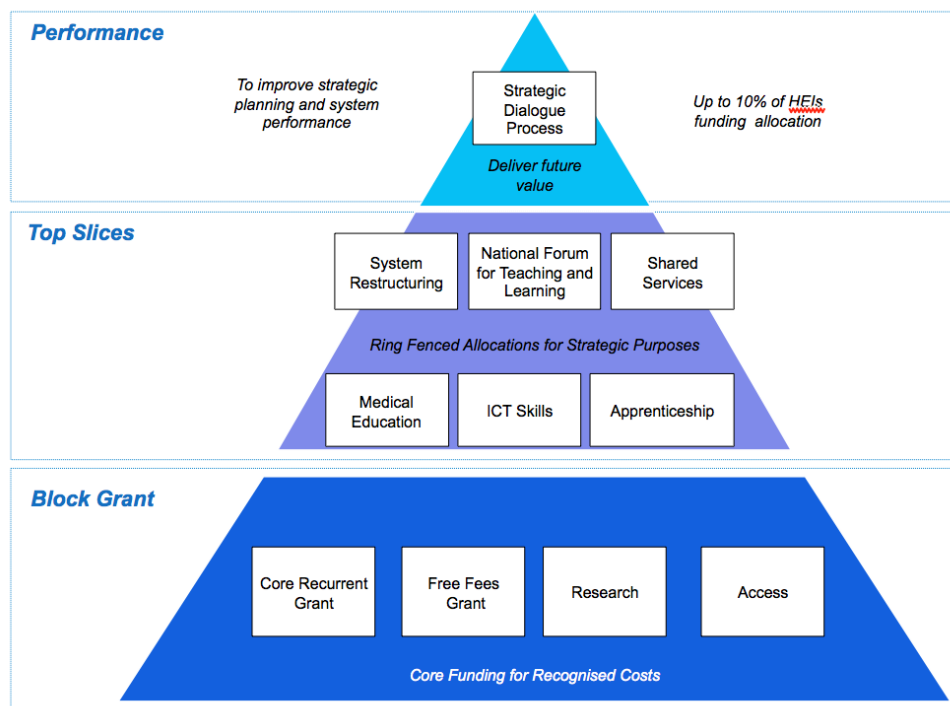
The HEA recurrent grant contributes about 50% of the core teaching and research budget of the institutions, with the balance derived from the student contribution,¹⁹ fees and income generated by the institutions. Income is generated from the sale of services, rental of facilities and profit on international education. At present, the funding allocation process takes no account of any of this other income.

4.1 Overview of the Funding Allocation Model

The current funding allocation was put in place for the universities from 2006, and on a phased basis for the IoTs from 2009. There are three separate, but related, elements to the funding allocation model. The most significant element is a **block grant** through a standardised treatment of recognised significant cost drivers for all institutions. Institutions themselves then control how they apply and use the resources provided. However, the outputs for which the resources are provided are agreed and monitored as part of a system performance framework. A second element is **directed funding** which is provided and ring-fenced for specified purposes, typically for limited periods. A third, newer element is **performance funding**, at present operating via a potential 'hold-back' of funding from the block grant, but which could provide for institutional reward as well as penalisation in future. This element of funding is intended to recognise the quality of an institution's overall performance in meeting targets for improvement, agreed in the context of the Minister's objectives for the system as whole, allocated in a way that does not have financially de-stabilising consequences. The performance framework is intended to allow for a nuanced approach to protecting diversity of institutional mission, whereas a more standardised approach is reflected in the core. The overall approach is summarised in Figure 4.1.

¹⁹ About 40% of the income derived from student contributions is indirectly state funded through grants to students from the SUSI scheme.

Figure 4.1: Overview of the Components of the HEA Recurrent Funding Model



4.2 The Block Grant

This is funding allocated as a single grant allocation to HEIs with the internal budgeting for this funding determined by the HEIs themselves, subject to review by HEA. The block grant allocation comprises:

- **core recurrent grant** allocated through a funding formula. The formula is significantly driven by audited prior-year student numbers, weighted for the relative costs of providing education in different disciplines (these weightings are set out in Table 4.1 and Table 4.2 below), with additional weightings for research and access, and with performance-based elements to reflect outcomes achieved in research, and skills-based provision. All changes in student numbers from one year to the next are taken into account in determining annual grant allocation. However, stability in funding is provided by limiting or moderating the pace at which resultant changes in funding are implemented to plus or minus 2% of the average sectoral change in any one year. The term RGAM (Recurrent Grant Allocation Model) is sometimes used to refer to this specific 'core grant' element of the allocation only.
- **'free fees grant'**, which is a legacy funding arrangement provided 'in lieu of tuition fees' since the abolition in 1995/96 of student-paid tuition fees. It is allocated based on certified student numbers (EU, first-time enrolments only) in each undergraduate programme, multiplied by the up-rated, but historically determined, fee for the programme. Before the financial downturn, a process was operated whereby the HEIs, the HEA and the Department of Education and Skills agreed the annual percentage by which these fees could be up-rated. This up-rate was based on allowed levels of prior year pay and non-pay inflation arising from government negotiated pay deals and took into account the pay/non-pay split in the HE sector accounts. When tuition fees were abolished in 1995/96, there was a nominal additional fee of £150 Irish pounds for registration and examinations that was paid over to the examining and

awarding bodies such as NUI and HETAC. It was this additional fee that, through successive increases, became the €3,000 student contribution of today. Thus, for students who are eligible under the free fees initiative, institutions receive both the free fees grant from the HEA and the €3,000 contribution from the student.

Table 4.1: University RGAM Weightings

	FTE	Taught Masters	Research	Non-Lab based	Fieldwork	Lab based	Clinical Medicine	Veterinary
Undergraduate& Postgraduate Diplomas	1.00			1.00	1.30	1.70	2.30	4.00
Masters Taught (60 credits)	1.00	1.50		1.00	1.30	1.60		
Masters Taught (90 credits)	1.50	1.50		1.00	1.30	1.60*		
Research EU (60 credits)	1.00		3.00	1.00	1.30	1.60*		
Research Non-EU (60 credits)	1.00		2.00	1.00	1.30	1.60*		
Research EU (90 credits)	1.50		2.00	1.00	1.30	1.60*		
Research Non-EU (90 credits)	1.50		1.33	1.00	1.30	1.60*		

Table 4.2: IoT RGAM Weightings

	FTE	Taught Masters	Research	Non-Lab	Fieldwork	Lab
Undergraduate and Postgraduate Diplomas	1.00			1.00	1.30	1.70
Masters Taught (60 credits)	1.00	1.20		1.00	1.30	1.70
Masters Taught (90 credits)	1.50	1.20		1.00	1.30	1.70
Research (60 credits)	1.00		1.80	1.00	1.30	1.70
Research (90 credits)	1.50		1.80	1.00	1.30	1.70

The term ‘block’ grant served to distinguish this approach from much earlier generations of ‘line-item’ budgeting/funding – where a Government department provided funding for many detailed lines of input costs.

Overall available funding is split into 2 funding pots: one for universities and colleges and one for institutes of technology, according to fixed or historically based proportions (60% for the former and 40% for the latter). The ‘free fees grant’ requirement for each of these sub-sectors is top-sliced from each pot and the remaining grant funding for each sector is allocated through the subject-price formula funding model.

It should be noted that over the past 20 years, the HEA has adopted and developed the funding allocation models to reflect the emerging needs of the sector and changing priorities. This approach has supported the ongoing development of HE in Ireland which in turn has served the economy and society well. The present review continues to support HEA’s continued effectiveness in allocating HE funding.

4.3 Core Grant Support for Research and Access

Core grant support for **research** is provided as part of the block grant. This is in recognition of the need to provide a ‘foundation investment’ to embed research excellence across the system, which should allow leading researchers to be given permanent tenure, adequate research support infrastructure to be put in place and should facilitate the undertaking of research by academics across all disciplines. Institutions themselves have the final say on the distribution of their budgets between teaching and

research, in accordance with their mission and objectives. A number of research-intensive institutions provide significantly greater funding to research through their own internal allocation mechanisms, and this reflection of institution strategy in internal allocations is to be welcomed.

The major portion of core grant support for research is provided through the research student numbers that are included in each institution's overall student numbers and in the allocation formula. Typically, research students attract a multiple of the funding provided for undergraduate students – roughly 3 times an undergraduate student in the universities and 2 times an undergraduate in the IoTs. About 20% of the universities weighted student numbers are research student numbers, against 3% in the IoTs. The lower weighting for research students in the IoTs as compared to the universities is intended to reflect the actual cost differentials in the two sectors and is based on the general approach that the core grant reflects costs rather than incentives. To provide a weighting of 3 (times the undergraduate cost) for research students to the IoTs, when the actual cost differential is less than 2, would incentivise research for the IoTs, raising policy questions about the respective missions of universities and IoTs. However, it should be noted that many of the IoTs with more intensive research activity challenge the existing arrangements and note the funding disadvantage in comparison to universities with whom they must compete for competitive external research funding.

In addition to the grant funding that is based on research student numbers, there is, within the universities' 'pot' only, a research top-slice of 5%, allocated based on research metrics, that is intended to recognise research success. 75% is allocated based on output of research degrees over the last three years. The other 25% of the top-slice is allocated based on competitively earned research income per academic staff member (to ensure that performance is not skewed by the scale of institution). Materiality can be an issue in the range of metrics used to allocate the research top-slice. By 2016, the research top-slice amounted to €9m compared to €24.5m in 2007, as cuts in total grants were replaced by student contributions that are outside the formula.

Core funding for **access performance** involves an additional weighting of 33% of the weighting for a non-laboratory student being added to the normal student weighting to take account of the additional costs of recruiting and retaining students from under-represented backgrounds. Thus a science student from a target socio economic group, or with a disability, attracts a weighting of 1.7 for discipline plus 0.33 for access.

4.4 Directed Top-Slice Allocations

Top-sliced, ring-fenced allocations for specific strategic or important purposes are earmarked from time to time by either the Department of Education and Skills or by the HEA. Top-sliced funding is generally used to steer rapidly required systemic change, to support issues that better addressed on a collective or sector level, or to handle urgent ad-hoc issues. Very often, top-sliced funding is allocated through competitive processes based on submission and panel evaluation. At present, top-sliced funding is provided to support some institutional restructuring arising from the national strategy (Technological Universities [TUs], mergers, etc.). Furthermore, it is currently used to grow new or expanded programmes, discipline restructuring arising from thematic reviews of provision (Medical Education, Nursing Education), strategic innovation funding (National Forum for Enhancement of Teaching and Learning), and new or expanded programmes to meet identified skills gaps. Other existing top-slices include funding for pension obligations, funding for shared service initiatives (e.g. HEAnet, IReL [e journals], Irish Survey of Student Engagement, Athena SWAN), and protected funding to reflect additional cost components related to important but vulnerable areas (e.g. practice-based music schools).

A general principle of funding that is top-sliced and earmarked for new developments is that funding should progress through stages of being ring-fenced, then reviewed, and finally being either mainstreamed or discontinued. An issue is the length of time for which the funding should remain protected. Over time, earmarked funding tends to build up and then be brought back into the central funding pot through review processes, and be replaced by targeted funding for new strategic reasons.

In the past, only funding provided additionally by the Department of Education and Skills was top-sliced for running competitive programmes or other strategic initiatives. However, in recent years, there has been some top-slicing from existing core grants. This has been contentious because of its effect on core budgets for teaching and learning and concerns at the transparency of the decision-making process. To address this, the HEA has established a formal annual consultation process with the representative bodies of the universities (Irish Universities Association) and the IoTs (Technological Higher Education Association) where proposed top-slices are set out and discussed and views formally recorded to inform the final decision by the HEA Finance Committee.

4.5 Performance Based Funding Component

A performance system complements the block grant whereby the outputs and outcomes for the sector and the individual institutions are agreed through a process of dialogue. The system aims to allow each institution to develop an agreed contribution in line with its own mission, its strengths, and its profile: it is deliberately not a one-size-fits-all set of targets. Since 2013, a performance funding component has been established, which allows for the withholding of up to 10% of the already allocated block grant (including free fees) for a particular year, on the basis of verified performance against agreed targets in the preceding year.

This approach centres around a system of agreed three-year mission-based compacts where HEIs propose their own targets relevant to their own agreed mission and profile in line with seven objectives set by the Minister for Education and Skills as part of an overall system performance framework. Proposed targets are subject to challenge by an external expert panel, and are formally agreed in a dialogue process. The HEA co-ordinates the approach at a system level to ensure pursuit and ultimate achievement of the Minister's system level goals.

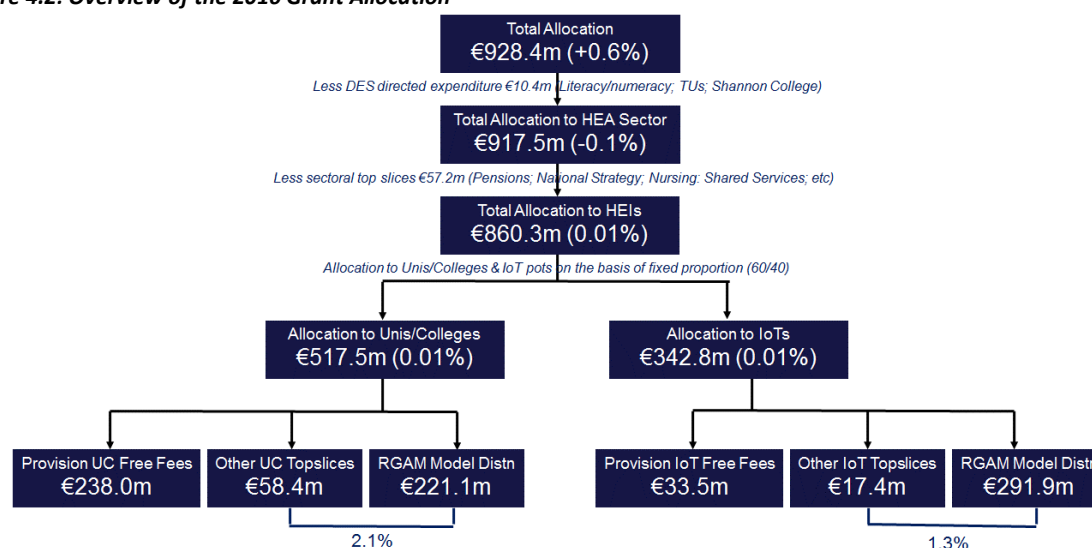
Some argue that, ideally, performance funding would be allocated at least in part from *additional* funding, which would then be allocated to institutions achieving high-quality performance, and not purely as a penalty. This would allow for the performance system to have a significant *incentive* focus and to direct investment towards proven high-performing institutions with confidence that these institutions have planned strategically, are doing the right things and doing them well. On the other hand, it is also argued that in a professionally managed, high-performing system, expectations should be high and good performance leads to release of grant; following this line of argument, a 'penalty approach' for poor performance is appropriate.

It has been noted by HEIs that the current penalty-based system can be demotivating, both for under-performing institutions that might need additional time-limited support and for very high performing institutions that can, at best, not suffer a funding penalty. In addition, with a number of institutions in less-than-robust financial positions, care has to be taken to ensure that the impact of any penalties does not undermine their ongoing viability. The introduction of performance funding in the Netherlands was accompanied by new funding of 2% of the total sectoral funding, and in Denmark by additional research funding equal to 0.5% of GDP as part of the country's globalisation strategy.

4.6 The Grant Allocation Process

When the HEA receives notification of the overall recurrent grant allocation, the Department of Education and Skills typically directs that certain portions of spend be used for a designated purpose (e.g. Technological Universities, Literacy and Numeracy Strategy). The HEA then makes these ‘first step’ allocations, which are effectively top-slices for strategic higher education purposes: c.€10m in 2016. The remaining grant is then typically split into two separate ‘pots’: one for Universities and specialist colleges, and one for Institutes of Technology. An overview of the grant allocation process is set out in Figure 4.2.

Figure 4.2: Overview of the 2016 Grant Allocation



Note: Percentages in brackets represent the % change from the 2015 grant

The HEA then makes ‘second step’ allocations for each pot, comprising top-slices for strategic purposes specific to each cohort (e.g. pensions for Universities/colleges; Educampus the shared IT service for IoTs) and then deducts the provision needed to meet the undergraduate ‘free fees’ obligations. The remaining grant for teaching and core research is then allocated to individual institutions via the RGAM. Ring-fenced or top-sliced funding tends to build up over time and, through processes such as this consultation process, may be reduced and brought back into the ‘pot’.

5. International Higher Education Funding Approaches

5.1 Common Components

As set out in Figure 5.1, the existing approach to funding higher education in Ireland shares many common components with other national systems. The principle of the block grant and institutional autonomy; emphasis on student-number, discipline-weighted and formula-based core funding systems; and the growing focus on a performance-based funding mechanism are shared across most of the models considered here.

Figure 5.1: Overview of Core Components of International Funding Systems

Country	Block Grant and HEI autonomy	Primarily Student Nos Driven	Weighted by Discipline	Performance-Funding Agreement ²⁰	Research & Access Funding within Core	Allocation model includes student fees
Ireland	Yes	Yes	Yes	Yes	Yes	No
Australia	Yes	Yes	Yes	Yes	Research only	Yes
Norway	Yes	Not directly	Not directly	Yes	No, research within performance component	N/a
Netherlands	Yes	Yes, but by graduates	Yes	Yes	Yes	Yes
Wales	Yes	Yes	Yes	Partial	Yes	No
England	Yes	Yes	Yes	Partial	Yes	Yes
Scotland	Yes	Yes	Yes	Yes	Yes	N/a
Denmark	Yes	Yes, but credit based	Yes	No	Yes, within weightings	N/a

For most countries, the funding allocation approach is driven by the annual budgeting cycle of government, distributing a predetermined ‘pot’ of money to reflect the relative role of institutions within their respective higher education systems. Only Australia has adopted a method of fixing a normative unit of funding (i.e. a fixed level of funding per student) and then setting allocations on the basis of student numbers. However, until 2012, Australia limited student numbers to provide some overall budgetary control, as is the case in most other systems, and there have been significant

²⁰ Wales has Tuition Fee Plans and England has Access Agreements, which are ‘partial’ Performance Funding Agreements albeit under different names.

financial implications since then. The Irish approach of allowing open-ended recruitment at the same time as operating a fixed budget is therefore fairly unique in an international context.

While the Irish approach has been different in this respect, it has evolved in recent decades in a similar way to other systems' institutional budget setting, moving away from 'negotiation', where budgets were agreed based on higher education institution submissions and dialogue. The latter approach left the process open to inconsistencies across HE sectors arising from legacy arrangements and special cases made by individual institutions. Increasingly, a formula-based approach has become the norm across Europe, reflecting the number, type and focus of study of students. The application of a single set of rules to all HEIs renders it a relatively straightforward, fair and transparent approach. At the heart of all funding formulae is the relationship between activity and price, with HEI allocations being:

- Based on some measure of **activity**, such as respective volume of student numbers, graduates or credits and differentiating between students with different (cost) characteristics. Systems also consider the level of study and other policy-based differentiators to encourage different types of activity.
- Multiplied by **price**, with different prices for different subjects, generally differentiated by cost (which does not vary greatly between countries), but which can also take into account policy considerations (e.g. priority subjects).

There have been isolated attempts to shift to a more demand-side approach, whereby the student is given the public subsidy to invest in whatever course he/she chooses, such as in the voucher type system in Colorado.

Increasingly, the formula-based approach is being supplemented by formal performance contracts and/or performance-funding mechanisms. Performance Agreements are contracts between the government and individual higher education institutions, which set out targets that institutions seek to reach within a specific period. Many funding systems now incorporate a performance element (even if there is no formal Performance Agreement process in place), with a separate performance 'pot' offered as an entitlement once set criteria are met, or as part of a competitive process that is designed to deliver on particular aims. Performance funding can be linked to individually negotiated performance indicators, or a common system of performance indicators. Where new and evolving objectives are set for the higher education sector via government policy, these tend to be embedded within the performance funding mechanism or through additional funding streams which sit alongside the core model.

Some systems that have introduced performance aspects to the formula-based block grant funding have tended to focus on one or two core areas: weighting allocations, for example, to penalise non-completion or to incentivise recruitment of access students. Such mechanisms can be directly related to the student base in order to remain consistent with the overall approach. Input-related factors such as student numbers and historical allocations are still very important in Europe. No country has moved to a completely performance-based system, and there is no uniformity in choice of indicators for assessing performance. Some examples of performance indicators currently in use are bibliometric research indicators, number of employed graduates, and student feedback.

Limiting such performance criteria to a small number of student-linked areas within the core funding block is also consistent with the strong focus in international approaches on avoiding funding methods which are too detailed and complex, focusing too heavily on input costs rather than the outputs produced, which can encourage inefficiency. Hence, all but one (Norway) of the major systems considered use a formula-based system to allocate a block grant to each institution, which then has

discretion, within certain parameters, to direct spend into areas which it feels will maximise its contribution, effectiveness and impact.

While there is a general acceptance across international funding models that they should focus on all publicly controlled funding, there are divergences in interpretation as to what constitutes public control. Student fees which are set by the state, for example, and where grants and loans are used to subsidise the student payment, could be seen as an intrinsic part of the funding allocation model and be taken into account when calculating the direct public investment.

Other common components of international funding models include top slices for specific national initiatives which a purely formula-based system will not advance, with the level of funding for this purpose typically under 10% of overall system investment. Most systems also have a 'safety net' to protect institutions from any sudden shocks in the level of funding received from year to year (as in the current moderating mechanisms used by the HEA). The approaches to the inclusion of research and capital in core funding varies, although there is a common recognition that foundation funding for both purposes is essential to ensure a supportive research environment and adequately maintained capital stock.

Most countries' block grant funding includes separate teaching and research components, calculated on the basis of different criteria. Generally, block grant funding for research is shifting towards more output-focused (quality-based) block funding. Also, countries typically use research councils to allocate project funds to institutions by means of competitive project grants, which are often attached to specific priorities as selected by government or by the funding authorities. Thus, a dual-mode model whereby project funding coexists with core funding for research is commonplace.

5.2 Individual Country Analysis

In order to understand the 'fit' of the current Irish approach with international practice, and to identify particular options with regard to its development, it is important to consider some of the key features of comparator models in greater depth. In the rest of this section the approach of each of seven relevant models is summarised.

5.2.1 Australia

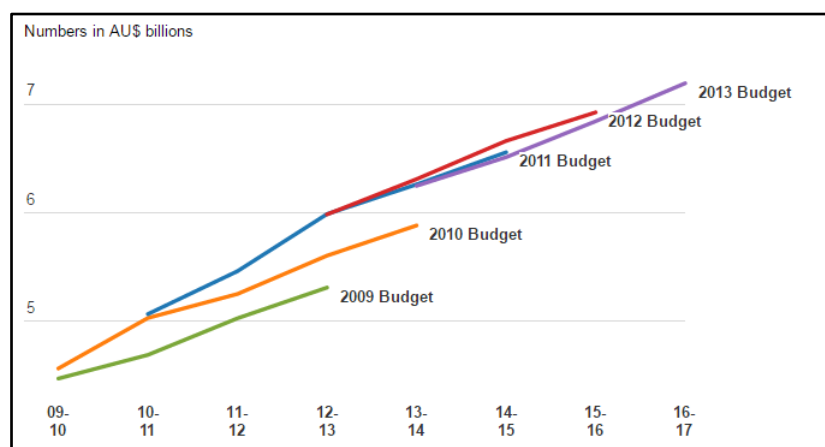
The Australian system operates a block grant approach, underpinned by the principle of institutional autonomy, allowing universities to direct expenditure as they see fit, including cross-subsidisation to reinforce diversity of mission or strategic priorities where appropriate. (In this regard, it is worth noting that international students account for 17% of the student population and can also cross-subsidise provision substantially.) Australian HEIs receive funding via the Commonwealth Grants Scheme. The core funding received by HEIs consists of a base funding allocation reflecting volume of students and tuition fees received directly from the students themselves (although underpinned by an income-contingent loan scheme).

The **base funding** allocation is based on the following core criteria:

- Full-time equivalent numbers (including conversion of part-time student effort into FT equivalents).
- Weightings for different academic subjects, with 8 differently weighted price categories.
- Weightings in respect of specific types of students.

Until 2012, the government set a limit on the number of students that each university could recruit in each subject. However, since that time student growth has been unrestricted. This move to demand-driven funding has put the system under pressure, as highlighted in Figure 5.2.

Figure 5.2: Estimated Cost of Demand Driven System in Australia 2009/10 to 2013/14



There are also adjustments to base funding to take account of: regional loading and national priorities (focusing on particular courses, types of students, and specific regions). The amounts provided are dictated by government policy, but new initiatives tend to be supported by additional funding streams, with the funding base then modified accordingly.

Base funding is also intended to provide a foundation investment for research, with 5-10% being used to support **research activity**. The majority of funds that universities receive for research comes from the Australian Research Council (ARC). Funding for research is almost fully performance-driven; it is based on the volume of competitive research income received, the number of students completing a research degree, and the volume of research publications. The ARC manages the National Competitive Grants Programme (NCGP) and Excellence in Research for Australia (ERA) assesses research quality. ERA outcomes directly inform government funding under the Sustainable Research Excellence in Universities (SRE) scheme.

Australia was the first country in the world to introduce an **income-contingent loan system** to support tuition fees in 1989. There is a proposal in Australia to remove any cap on fee levels (currently postponed, though still on the agenda), which would move away from the concept of a normative level of base funding per student. Fees have risen steadily over the past 20 years both in absolute terms and as a proportion of the base funding. Australia provides non-repayable, means-tested grants in respect of students from poor backgrounds, but does not have an in-built access adjustment within the base funding allocation.

Australia also allocates funding on the basis of **performance** criteria, which are based on indicators and on negotiated outcomes. Discussions are held between government and individual institutions that are eligible for funding as part of the funding and governance process.

5.2.2 Norway

There are three types of higher education institution in Norway: traditional universities; university colleges (little or no research); and specialised university institutions. Norway operates a block grant approach, with institutions having discretion to spend as they see fit, although this is a recent development from a previously tightly controlled system. Of the countries considered here, Norway

is the only country not to adopt a formula-based, student-driven approach to the setting of the block grant. Some 90% of HEI funding is from public sources (if income from research councils and other public bodies is included) and student fees have never been charged.

The majority of funding takes no **direct** account of objective measures such as volume of activity. Instead, it is based on historical allocations, with 60% being calculated on the basis of what was received the previous year. This basic funding component is intended to support stability and selected priorities (needs for a variety of disciplines, different regions, etc.).

Since 2002, Norway has also allocated funding on the basis of **performance** criteria, driven by common indicators and negotiated outcomes. Discussions are held annually between the government and individual institutions and the performance mechanism focuses on two components:

- The **education** component is based on the increase in student credits obtained and international students present. The performance element of this funding reflects policy concerns (to admit more students, shorten time taken to graduate, make it more internationally oriented). The varied cost of different subjects is recognised: students are weighted according to area of study.
- The **research** component is a fixed sum that is distributed competitively based on number of doctoral candidates, research grants (EU and Norwegian), and publications. State-funded universities receive 22% of their funding through the research channel, but only 6% of university colleges' funding is related to research. The main sources of external R&D funding are the Research Council of Norway and the private sector (especially oil companies).

5.2.3 Netherlands

Universities in the Netherlands are split into two categories, both of which are publicly funded: research universities and universities of applied sciences. One third of students attend research universities and two thirds attend universities of applied sciences. Public funds for both types of institution are distributed according to a funding formula, which includes a number of performance indicators.

The national budget for **research universities** is divided into a teaching component, a research component, performance funding and a component for medical education and research (linked to teaching hospitals). Of the teaching funding component:

- 65% is divided among the research universities in proportion to the number of students enrolled within the official length of a study programme and the number of degrees earned;
- 30% is divided on the basis of percentages per institution.
- 5% is allocated to the institutions for specific policy objectives, such as for quality, vulnerable programmes and special facilities.

Within the research funding component, 36% is allotted in proportion to the number of PhDs and degrees earned. The remainder is dispensed in the form of fixed amounts for each institution and an amount that is distributed based on percentages per university. The grants given by the national government to the institutions are paid as a lump sum, with full autonomy on spending in performing their statutory duties. In addition to the government grant, a research university also receives tuition fees and depends on significant additional competitive research funding. The Netherlands Organisation for Scientific Research (NWO) is the main national organisation that finances specific research projects.

The national funds earmarked for **universities of applied sciences** comprise an education component, a design and development component, and performance funding. Most the budget is divided among the institutions in proportion to the number of students enrolled within the official length of a programme and the number of degrees earned.

As with the research universities, the universities of applied sciences have discretion on the direction of public expenditure in delivery of their mission. In addition to the government grant, they also receive tuition fees and revenue from work performed for third parties, primarily contract teaching.

As a basis for **performance funding**, all (publicly financed) research universities and universities of applied sciences were asked prepare strategic plans for the years 2012-2016 to:

1. improve educational achievement.
2. strengthen their educational and research profile.
3. increase the impact and utilisation of research.

There was no obligatory format for the strategic plans, with one exception: on educational achievement, all HEIs had to formulate ambitions on seven indicators. The plans were evaluated by an independent committee which advised the Minister on approval of plans. Allocation of 5% of public funds for teaching in higher education has been made conditional on attainment of targets against the 7 compulsory indicators at institutional level and 2% is selective funding allocated to the most impressive and successful institutions. If a HEI fails to meet its targets on the 7 obligatory performance indicators, it risks losing a part of the conditional funding for the years 2017-2020.

Students pay **tuition fees**, *Collegegeldkrediet*, at all HEIs in the Netherlands. Tuition fees per year for EU students are €1,984 (full-time) and €1,706 (part-time). A new loan system was introduced in 2015/16 for students undertaking bachelor's and master's degree programmes.

5.2.4 UK

Before considering features of funding approaches in Northern Ireland, Wales, England and Scotland, it is worth considering their common methodology in relation to research. The universities in the UK receive a research budget that is based on quality evaluations established in periodic research assessment exercises. Institutions make submissions every 5-7 years, with the submission being made up of self-selected information from units of assessment within the institution (roughly equivalent to a department). Within each unit of assessment, individual researchers may only submit a fixed number of outputs for assessment, and assessment is by peer review. Initially, research grants were driven by scores in the periodic Research Assessment Exercise (RAE). In 2013, the RAE was replaced by the Research Excellence Framework (REF); in addition to assessing research quality, it also evaluates the societal impact of research. Under REF 2014, institutions were invited to make submissions in 36 units of assessment. The submissions were assessed by an expert sub-panel for each unit, working under the guidance of four main panels. It has been proposed that the next research excellence framework will require universities to submit all research-active academics for assessment, according to a joint consultation document from the UK's four funding bodies on arrangements for the next exercise in 2021, but no decision has been reached yet.

5.2.4.1 Northern Ireland

Higher education in Northern Ireland is delivered through a division in the Department of the Economy (DfE). Funding is directed to three universities (Queen's University Belfast, Ulster University and The Open University in Northern Ireland) and two university colleges (St Mary's University College Belfast

and Stranmillis University College). Higher education courses are also delivered in the six further education colleges. New full-time students studying in Northern Ireland paid £3,925 in tuition fees in the academic year 2016/17. Fees are expected to rise to £4,000 in 2018/19. Eligible students can get Financial Assistance for tuition fees and maintenance costs. Higher Education Institutions in Northern Ireland are considered underfunded and in 2015-2016 suffered funding cuts of £16m.

5.2.4.2 Wales

The funding approach in Wales has been subject to significant evolution in recent years. It responded to major tuition fee changes in England and increased investment to support tuition fees for all Welsh-resident students, regardless of place of study. This significantly reduced the levels of state investment in Welsh institutions and it was recognised that a full review of higher education funding and student finance was required. This review was completed in September 2016, and a recently published official letter confirms the government's intention to implement the Diamond review. The approach proposes a funding model for students based on fees at the level of England together with means tested maintenance grants. The approach is consistent for undergraduate and postgraduate taught programmes and incentivises part time study. Additional funding streams to the universities include a quality related research block grant; additional funding for expensive subjects and for knowledge transfer; and a national research student competition.

The body responsible for allocating funding in Wales is the Higher Education Funding Council for Wales (HEFCW). Most of the funding is distributed as block grants to institutions, allocated by formula. These take account of various factors, including recruitment in academic subject categories, mode and level, and the amount of high-quality research undertaken in the institution. HEFCW operate four funding methods:

- Part time and postgraduate taught teaching funding method.
- Full time undergraduate and Postgraduate Certificate of Education (PGCE) Funding 2016/17.
- Quality Research (QR) funding method.
- Postgraduate Research (PGR) Funding Method.

New fee arrangements for full-time undergraduate and PGCE students were introduced in 2012/13 and, since then, an increasing proportion of the HEFCW budget has been allocated to cover the fee grant cost for Welsh and EU domiciled students studying in Wales and Welsh students studying in the rest of the UK. A core funding base is then allocated to all Welsh universities.

5.2.4.3 England

Historically, HEIs in England have received a teaching grant and a research grant; the teaching grant has been based on student numbers, while the research grant is based on research performance (Research Excellence Framework, as well as project-based grants from the government research councils). Changes have occurred in both England and Wales, however, such that block grant has been cut to meet the costs of income contingent loans (England) and tuition fee grants (Wales). Thus, the balance of funding as between state and individual has shifted towards the individual in both cases.

England has seen radical change in the funding of higher education in recent years with significant tuition fee rises and reductions in the level of state grant. Despite this, the system remains committed to a block grant system that maintains full institutional autonomy. The Higher Education Funding Council for England (HEFCE) allocates a grant to each English HEI, with the combined total of this grant and the tuition fees generated referred to as the teaching resource. To calculate the HEFCE grant for mainstream teaching for each institution, there are 4 stages:

- Stage 1: For each institution, HEFCE's model calculates a level of standard resource. This is based on each institution's profile of students and considers:
 - the number of students
 - subject-related factors
 - a geographic factor (London weighting) intended to recognise the higher cost of operating in London

Standard resource is not, however, what HEFCE actually pays institutions, but rather a notional benchmark of what HEFCE thinks institutions' share of overall resource should be to reflect their teaching activities.

- Stage 2: HEFCE calculates the actual resource for the institution (called 'assumed' resource). This is based on the teaching grant that HEFCE actually paid to the institution for the previous year, adjusted for various factors such as inflation, plus an assumption of student tuition fee income.
- Stage 3: HEFCE compares the standard resource with the actual resource and work out the percentage difference between them.
- Stage 4: If the difference between the standard resource and the actual resource is no more than 5 percent (whether that is plus 5 percent or minus 5 percent), then the HEFCE grant will be carried forward from one year to the next. This plus or minus 5 percent margin is called the tolerance band and is the means by which HEFCE ensures institutions receive similar resources for similar activities without seeking to constrain them unduly. For institutions outside the tolerance band, their grant and/or student numbers need to be adjusted so that they move to within the tolerance band.

5.2.4.4 Scotland

The higher education sector is funded via the Scottish Funding Council (SFC), which is responsible for distributing funding to individual institutions for teaching, research and associated activities. Universities Scotland has indicated that public funding is reducing rapidly – by 12% since 2010/11.²¹

Unlike England and Wales, Scotland has maintained a commitment to free undergraduate tuition for all undergraduate students. It operates a system whereby a core teaching grant is allocated to institutions, with additional funding (equating to about a further 10%) made available for certain skills development objectives. The core teaching grant is based driven by weighted FTE student numbers, across 6 price groups, ranging from £5,190 to £16,454. This reflects the additional compensation required for expensive controlled clinical subjects (medicine and dentistry) and higher-cost strategically important subjects including science, engineering, veterinary science and design and creative arts. The teaching grant is closely linked to an Outcome Agreement; given this connection, institutions are prompted to align their education provision with national priorities and regional labour market needs.

Additional funding has been provided for widening participation, aiming to increase places by a further 680 per annum and an additional 1,118 places via access schemes. Additional funding for 815 places at taught postgraduate level to target skills development was provided in 2013/14 and these places are now paid for via the gross unit of resource.

²¹ Simon Johnson: 'Scottish Universities Warn that they are at "Tipping Point" Following SNP Funding Cuts', *The Telegraph*, 1 December 2016.

Block grant funding for research is delivered via a Research Excellence Grant of £231.8m, with £34.5m provided via the Research Postgraduate Grant and £12.2m via a University Innovation Fund. The research block grant supports quality under the Research Excellence Framework (REF) and is allocated on volume, quality and subject cost on a weighted basis.

5.2.5 Denmark

Teaching and research are funded separately in Denmark. Their levels are set through a mixture of contracts and negotiations, incremental historical allocations, formulae and performance indicators. Tertiary education is free for students and there is a generous student loan system for living expenses. Higher education institutions are 95% publicly funded, with the majority provided by the Ministry of Higher Education and Science. Universities are funded through two main sources: basic block funding and external income. Block funding is allocated on the basis of a 'taximeter system', based on per-student grants to institutions. The grants are calculated primarily on the recorded number of students passing examinations (i.e. obtaining credits). The taximeter rate (specified by law) varies according to subject field and level of education. Assumed tuition fees range from €6,000 to €16,000.

A core research funding allocation is provided to HEIs on a formula basis, driven by level of externally generated research funds, number of PhD graduates and bibliometrics. Institutions receive a share of the funding pool in accordance with their share of across these indicators.

There is no dedicated performance-funding mechanism as has been established in other systems, although the core funding model does take account of completion rates and research success as noted above. Since 1999, university development contracts have been established, but there is no automatic link between these performance targets and grants awarded by the government. Rather, these contracts are treated as 'letters of intent'.

For students, there are two main forms of support for living expenses: state grants and state loans (about 50% of students make use of state loans). Also, state education grants can be awarded for a study period abroad.

6. Understanding the Costs of Higher Education

6.1 Current Systems of Measuring Provision Costs across the HE Sector

The cornerstone of an effective funding allocation model is robust, timely, reliable and consistent information on the costs of delivering higher education. The Irish funding system has always placed a strong emphasis on understanding the costs of provision in individual institutions. Cost data is gathered from all publicly funded HEIs each year, supplemented by an annual budgeting process that ensures institutional income and expenditure plans are fully understood and challenged where appropriate, and by a student records system which validates undergraduate and postgraduate numbers across the sector. In 2016, the annual budgeting process for Institutes of Technology was enhanced, partly as a response to serious sustainability concerns, and a much wider management information template was required to be completed. This new framework focused on gathering data on historic costs and income over the past 5 years and projecting financial forecasts for the next 5 years based on agreed common assumptions. In 2017, the HEA has also introduced a new template for budget submissions from universities and specialist colleges to ensure greater consistency in approach.

Despite a strong focus on understanding costs of provision and these recent enhancements to institutional information gathering, cost comparison between universities and IoTs is not a simple task. Legacy issues include pension costs which are paid directly by traditional universities (and partly funded via grant allocations) but which are outside the funding system for IoTs.²² There are also two different methodologies for calculating unit cost data supplied to the HEA, with the universities using a Full Economic Costing system and the IoTs a unit cost system driven by levels of funding.²³ This makes the assessment of an overall, cross-sectoral cost of provision more complex and hampers analysis. It would seem clear, therefore, that there needs to be a move to a common higher education costing system and a clear, shared understanding of the cost of provision. The starting point for this process is to understand the distinctions between the two existing costing systems currently in place, and to consider how the respective datasets can be reconciled to improve understanding of system costs.

6.1.1 University Full Economic Cost (FEC) Approach

FEC data is produced by the university sector annually and is returned to the HEA by the Irish Universities Association (IUA). The FEC approach was developed to facilitate awareness and understanding of the true cost of activities for sustainable management in universities. It is an activity-based costing model that aims to capture the full economic costs of teaching, research and other activities. The full economic cost of an activity includes direct costs, indirect costs and allocated costs. FEC costs are sourced from the universities' harmonised financial statements, with a series of cost adjustments being made to ensure comparability (e.g. to take account of different pension arrangements). The two principal differences between the FEC system and the costs reported in an institution's annual accounts involve additions to expenditure in annual financial statements to reflect additional costs related to infrastructure and the cost of finance. These two adjustments made within

²² IoT pensions are paid directly to the recipient from a public-sector pension fund and kept off balance sheet and outside the grant allocation process.

²³ Given the relatively small scale of the specialist colleges and the ongoing process of consolidation across the sector, analysis is not provided separately for these institutions in this paper.

FEC mirror the approach used in the UK Transparent Approach to Costing (TRAC) system which is required by HM Treasury, HEFCE and Research Funding Councils.

- **Infrastructure:** The first adjustment simply adds on c.€110m for reinvestment in infrastructure calculated at c.2.1% of the insured value of buildings, and a further €36m for equipment and fittings. This effectively equates to the amount of surplus which an institution would need to have generated to allow the annual level of re-investment necessary to maintain the value of its infrastructure.
- **Cost of investment and finance:** This adjustment is applied in two ways – firstly, by taking the non-state funded assets – €1.3bn of a total assets of €3.3bn in the university sector – and allowing a cost of borrowing of 5.02% to finance this figure (c.€65m). Then a deposit interest rate (1.2%) is applied to income/operational expenditure, to reflect the fact that if the HEI did nothing with its funds (i.e. did not pay salaries, did not provide any teaching or any research) but simply placed it on deposit, it would have earned an amount which has to be reflected in its pricing strategy (c.€19m).

The FEC model adopted by universities has largely followed the approach established in England, although the introduction of significant student fees there and a resultant funding model where income per student can more closely reflect the full economic cost of provision is a notable distinction.

6.1.2 IoT Unit Cost Approach

IoTs supply annual unit cost data to the HEA for each of the individual higher education programmes that they deliver. The aim of the unit cost model is to establish a cost per student per course. The model categorises expenditure into:

- total direct costs (including pay for lecturers, specialist staff and tutors);
- total overheads (including premises costs, library costs, computer services and development office costs); and
- apportioned overheads (including registrar's office, central service and student facilities).

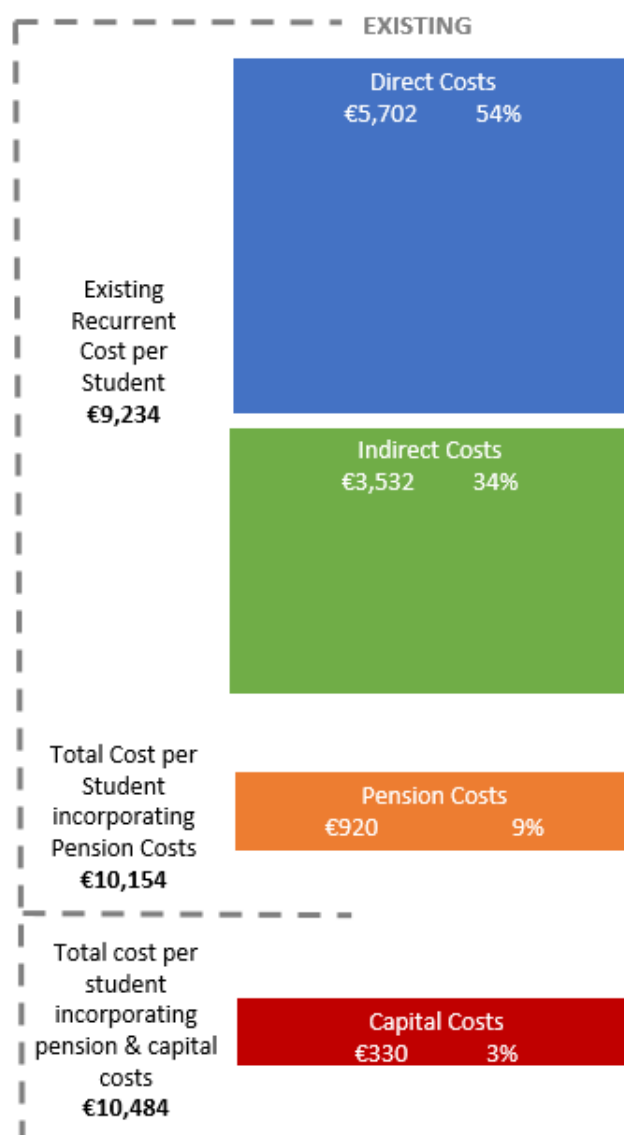
The non-recurrent elements of these costs are removed (e.g. major capital works, and sectorally funded projects). The total is then divided by the number of students to estimate the average cost per student. In line with the overall funding approach noted above, the IoT cost data does not provide for any contribution to pensions, nor does it account for any depreciation of institute's assets (or cost of maintaining same).

The unit cost data is calculated on the basis of funding available, meaning that, in the recent period of declining or static state funding, unit cost estimates have been similarly declining. As a result, the unit costs have been less reflective of the requirements of maintaining high-quality provision. IoTs are also required to return a detailed reconciliation of the total expenditure in the unit cost returns to the total reported expenditure in the draft statutory accounts for that year, ensuring that unit cost data can be fully validated retrospectively. There is, nonetheless, some concern about the consistency in approach in placing costs within different categories and in their allocation to different programmes.

6.2 Assessment of higher education provision costs

Despite the difference in the costing approach, it is important to use the data that is available to develop an overall understanding of the cost of providing a higher education place. Universities, IoTs and specialist colleges all provide funding statements to the HEA on a harmonised basis and this allows some reconciliation between the costing methodologies. Using these funding statements, the diagram in Figure 6.1 sets out an assessment of the cost per student across the higher education system, broken down by the different cost components, which are further explained below.

Figure 6.1: Average Cost Components across Higher Education Institutions



6.2.1 Recurrent Costs

Recurrent costs can be split into two categories: direct costs and indirect costs. For the IoTs, direct costs are clearly identified within pay and non-pay categories, by using unit cost data in tandem with the funding statements. For the universities, it is assumed that direct costs relate to the academic department costs, which refer to both the pay and non-pay costs associated with delivering academic programmes. The direct costs of research grants and projects in the universities have been eliminated

from the analysis as these should be supported by competitive grant sources. The Full Economic Costing model estimates that the indirect costs of these competitive research activities across a 3-year average amount to an overhead rate of 65.4%. The IUA further estimates that the overhead recovery rate (i.e. actual funding received for indirect costs) from competitive funding sources amounts to 18-20% of the indirect costs. Assuming the rate of 20% applies, based on the 2013/14 competitive research funding figure of €304mn, this means that approximately €138mn of indirect competitive research costs are supported by the core grant. This is an important factor in the sustainability of future higher education funding that merits further consideration. It is also critical that core funding to support research is maintained as part of the model.

The **indirect costs of universities** are assumed to include costs of other academic services, which relate to the operation of functions such as the libraries, IT systems and innovation support which support academic activity. It is also assumed that indirect costs include other education expenditure which comprises elements such as examination expenses and scholarships, prizes and fellowships and other overheads (i.e. central administration costs and the costs of maintaining premises, facilities and amenities).

Within **IoT indirect costs**, allocated overheads are central costs that are allocated based on usage mechanisms (e.g. premises on the basis of space utilised). Apportioned overheads are other central costs that are apportioned on the basis of whole time equivalent (WTE) student numbers (e.g. library costs). It has been assumed that the efficiency gains across these two indirect overhead categories in recent years (e.g. from improvements in central services, outsourcing, shared approaches, organizational restructuring) can be 'banked'. This implies that maintaining the funding contribution per student at these levels across these cost categories would present a sustainable approach.

Using the assumptions above, it appears that a greater proportion of IoT costs (66.5% against 58.5% in the universities) is focused on the direct delivery of provision via academic departments. This reinforces recent analysis²⁴ that there is relatively less emphasis on central management and administrative services within IoTs and that this capability must be built up to improve planning and performance.

6.2.2 Capital Costs

Maintaining and renewing the capital stock of a higher education institution must be a critical consideration in servicing its annual cost base. Exchequer capital funding has been very limited in recent years, with the analysis in Section 4 showing an average €69.8m of per annum over the last 5 years, which includes funding for many new bespoke capital development projects. This produces an annual capital funding cost per student of €330. Due to the universities' capacity to borrow, and the ability of some institutions to utilise reserves or source philanthropic funding, this Exchequer contribution has been supplemented to produce annual capital investment of €290mn, but most of this funding is channelled towards new bespoke capital development projects.

6.2.3 Pension Costs

Pension costs in Universities are highly complex, and this coupled with the fact that IoT pension costs are recorded outside of the HEA funding system, is a key reason why it is difficult to compare the cost base with IoTs. A component of the core grant to universities is top sliced to support pension payments, based on audited pension costs (this stood at €36mn in 2015). There is also a separate

²⁴ The recent *Financial Review of the Institutes of Technology* (October 2016) conducted by the HEA indicated a need to build management and strategic capacity

Exchequer contribution to the Pension Control Account (estimated at €18mn, given the 2015 allocation). Universities are also required to supplement these contributions from other income, across a variety of different schemes. By taking all pension contributions into account, it is estimated that total annual pension costs for the university sector amount to €99mn. Pension costs in IoTs are outside of HEA funding arrangements, managed and financed directly by the Paymaster General, which adds further complexity to comparing IoT and university costs. Nonetheless, IoT pension costs remain an Exchequer liability and are estimated at around €50mn per annum. The overall higher education pension cost per student is therefore estimated at €149m, which equates to €920 per student.

6.3 Channelling future investment effectively

As we noted in Section 2.7, the Cassells Report addressed the issue of the quantum of additional funding required to restore and quality and to meet demographic growth. It identified the main beneficiaries of higher education as government, students/graduates and employers and it set out a number of options for the proportions of total system funding that might in future be derived from each beneficiary. It stated that once having decided on the proportions of overall system funding that should be met by government, students/graduates or employers, the focus then needed to be on how most effectively these funds should be provided and allocated and how each set of stakeholders could contribute their share. The options included a new employer contribution sourced from an increased National Training Fund levy, and different options for student contributions including some supported by income contingent loans. It emphasised that under all scenarios increased state investment would be required.

It is not the role of this review to consider the level of additional investment required in Irish higher education or to make assumptions as to the source of additional funding. However it is important that our analysis and findings take account of the Cassells recommendations on the need for increased investment and the potential options for sourcing this. This will allow us to identify a reformed funding model that is capable of distributing current funds in an effective, equitable and transparent manner and that also has the capacity to efficiently distribute additional funding from new sources as they become available. Such a funding model will need to be capable of incentivising and promoting innovation and high performance and potentially penalising inefficiency and ensuring that increased investment from whatever source is complemented by ongoing reforms, resulting in a more flexible and responsive higher education system.

In section 6.2, we set out the estimated split between direct academic costs, indirect costs, pension costs and capital costs of higher education provision. The Cassells report acknowledged the significant efficiencies that have been generated across higher education during a period of constrained funding, and the ability to the system to continue to accommodate increased student demand at a time of decreased resources provides further such evidence. However there is concern about the continuing ability of HEIs to maintain quality, particularly with an academic staff-student ratio of 1:19.2, well outside the OECD norm which has varied between 1:14 and 1:15.8 between 2008 and 2014. This suggests that if additional investment becomes available it should be channelled into the area of **direct** expenditure where it is most urgently required to maintain the quality and international competitiveness of academic programmes. In effect, such a focus ‘banks’ the efficiencies generated across the other cost categories in the years of austerity. The other area of immediate priority is capital

investment, given the need to maintain adequate infrastructure to service the burgeoning student base and address the substantial infrastructure ‘deficit’ identified across the HE sector.

In HEIs we have seen a focus on raising non-Exchequer income to effectively cross-subsidise undergraduate provision to EU students, from increasing the international student base, generating other fee income and targeting philanthropic investment and borrowing to meet the costs of capital. Higher education has long been characterised by cross-subsidisation, both across disciplines and across different levels and types of provision, but care must be taken to ensure that the dependency on such cross-subsidisation does not become so great as to create unintended risks and consequences (for example, in pursuing unsustainable numbers of international students or setting uncompetitive or unfair postgraduate fee levels).

In any new funding allocation model, a closer relationship needs to exist between the total funding provided, the average cost of provision, and the three major funding components of student contribution, free fee, and RGAM block grant. This will allow quality provision to be maintained, and remove unintended incentives and disincentives that can arise due to mismatches between the structure of costing and funding. We also need to consider whether and how a new funding model should take account of the different levels of institutional dependency on state grants, or support the further diversification of the HEI income base.

6.4 Appropriateness of cost weightings

Clearly, the foregoing analysis treats all undergraduate students equally. However, both costs and funding vary in accordance with the subject area in which a student’s course is centred. The three main subject price groups by which undergraduate students are weighted are: Non-lab (weighting of 1), Fieldwork (1.3) and Lab (1.7), which relate to the areas of study. In the universities, there are further price groups for Clinical Medicine (2.3), Dentistry and Veterinary Medicine (4). Postgraduate students receive further weightings.

FEC and Unit Cost data allow for the incorporation of weightings into cost calculation and facilitates a comparison between laboratory and non-lab provision. Based on the assumption of a Level 8 undergraduate student in each category, Table 6.1 sets out current estimated costs, compared with the funding which is provided. It demonstrates that the impact of the weightings has been diluted as a result of reduction of state funding and its partial replacement by a fixed student contribution. This has resulted in a greater level of subsidisation for laboratory provision (and indeed for other provision in higher price groups). The cost data indicates that the 1.7 weighting is above the actual estimated additional cost of lab-based provision (a multiplier of 1.51 and 1.64 for universities and IoTs, respectively), but that its lack of application across the full funding base means that the effective weighting is only 1.3, which is below this estimated cost threshold. It is this type of unintended consequence which prompted a recent HEA decision to address the disincentive for STEM provision by applying an adjustment equivalent to the diluted impact from the increase in student contribution in recent years.

Table 6.1: Comparing the Costs and Funding of Laboratory and Non-Laboratory Provision²⁵

	Universities	IoTs
Non-laboratory Provision		
RGAM Weighting	1	1
Total Funding (Contribution/Free Fees/RGAM)	€7,018	€6,334
Total Cost Per Student (Based on FEC/Unit Costing)	€7,315	€6,527
Laboratory Provision		
RGAM Weighting	1.7	1.7
Total Funding (Contribution/Free Fees/RGAM)	€9,319	€8,410
Total Cost Per Student (Based on FEC/Unit Costing)	€11,082	€10,003
Effective Current Lab Funding Weighting	1.33	1.33
Weighting to Reflect Actual Lab Cost Premium	1.51	1.63

When looking at trends in this actual lab cost ‘premium’ over recent years, it has actually declined in tandem with the wider contraction of Exchequer funding. For universities, the actual weighting for lab-based provision fell year-on-year, from 1.8 in 2008/09 to the 1.51 level in 2013/14. The fall for the IoTs was less pronounced, from 1.71 to 1.64. The analysis suggests that this type of provision has borne the brunt of cuts within institutions, perhaps by reducing lab exposure, technician time, or replacement of equipment in order to minimise costs. It provides further rationale for the appropriate application of the weightings to be examined during the remainder of the review to ensure that the future funding model is reflective of cost.

²⁵ Costs are not adjusted for pensions.

7. Findings from the Consultation Process

As noted in Section 1, this review is underpinned by a comprehensive and inclusive consultation process. The panel would like to thank all those who have contributed to date via submissions, stakeholder meetings and the Advisory Group. Throughout the process, we have retained focus on what we see as the key themes and questions that need to be considered to identify an appropriate future funding approach. At an early stage of the review, we also compiled a list of all the expectations set out in national strategies and by different stakeholders to use as a long list of areas where a funding model could potentially influence behaviour. This list was used as an ongoing reference point throughout the consultations, to identify where the most immediate priorities lie in evolving the funding model, as embedding too many levers within it will be counterproductive to ensuring system performance, progress and impact. It is provided as Appendix 6.

This section provides a high-level reflection on what we have heard and the issues and options that will be further evaluated during the rest of the review. The material set out does not offer an exhaustive list of every point made during the process, but it does illustrate where particular views were reinforced across a number of stakeholders.

7.1 The overall funding approach

7.1.1 Ensuring funding stability over time

In common with most state funding recipients, HEIs balance the uncertainty of an annual budgeting process with the need to plan strategically over the longer-term. Naturally there was a desire from most institutions for a multi-annual funding approach if a feasible mechanism could be developed within the existing fiscal framework. In this regard, it was noted that the Minister's announcement of an increased Exchequer commitment of €160m across a three-year timeframe offered a potential platform for embedding longer-term certainty into the funding model. There was also acknowledgement of the challenge for Government in managing a small open economy and the need for short-term resource flexibility to respond to the rapidly evolving global environment.

The strategic dialogue and performance compact process is perceived by many to have improved longer-term planning capability across the sector, with the value of further encouraging strategic planning within a multi-annual funding framework recognised. A potential route proposed was the fixing of a three year tranche of funding for distribution on the basis of delivery of agreed compacts or other performance mechanisms built into the model in future. It was also suggested that institutions could be given certainty regarding their share of the overall grant allocation for a three year period to facilitate longer-term planning, although care would have to be taken to avoid any sudden large changes in levels of grant at the end of this three year period.

The case for a moderator within the funding model attracted a range of views. While many recognised the need for some mechanism to mitigate the risk of a major year-on-year decline in funding, those institutions which have grown their student base strongly in recent years felt that moderating their funding growth effectively penalised them for success. It was stressed that the rationale for a tight moderator is strongest in a declining funding environment. Its importance was also recognised in transitioning IoTs from direct Department funding to the HEA student driven funding allocation system. However there is a view that if funding begins to increase, and if the significant projected growth in student demand emerges, there needs to be more scope to incentivise HEIs to meet this

demand. One suggested approach involved restricting the negative side of the moderator to the current 2% less than the average sectoral growth, while allowing a more significant increase for those institutions growing beyond the existing capped growth level (for example, up to 5% more than the average sectoral growth). Obviously, this particular moderation approach could only function if a wider top-slice was applied.

A further proposal to provide greater stability in system funding was the guarantee of a minimum unit of resource or funding per student. There is widespread recognition that current funding levels are inadequate and that any further dilution of funding per student is likely to compromise quality. While it is acknowledged that an indefinite Government commitment to a fixed level of funding per student without any constraints on demand is extremely difficult, it was suggested that a fixed standard unit of resource could be agreed as part of the system performance framework (i.e. effective for the three year timeframe of this framework).

The challenge in balancing a system based on academic years with a funding approach aligned with calendar years was also noted, undermining institutional ability to adequately plan and budget.

It was also suggested that a multi-annual approach may be appropriate in meeting the capital needs of the sector. It was stressed that existing infrastructural deficits following years of underinvestment mean an urgent need for funds to repair buildings, estate and equipment. We heard that an ongoing commitment to addressing the capital deficit could be achieved via either direct annual contributions or an implicit assumption that the grant should allow institutions to target a sufficient annual operating surplus for infrastructure investment (although given the current levels of underinvestment it would be difficult to see how this could be achieved within the foreseeable future). It was also suggested that the allocation mechanism consider factors such as the age of the institute and its building stock, total square metres occupied, the number and type of students supported and the nature of activity.

7.1.2 A more transparent funding model

It became apparent during the consultations that some lack of transparency in the existing funding model in demonstrating the outcomes it delivers weakens perceptions of its overall effectiveness. For example, contrary to what some understood, the model does take account of retention and encourages local responses to skills needs, but this was not widely recognised by stakeholders.

The number of 'top slices' was also cited as a factor undermining the acceptability of the approach. One submission commented that top slices for specific purposes favour short-run policy changes over long term principles, particularly in a resource constrained environment. Many commented that these should be substantially reduced as part of a simpler funding model with the outcomes supported by HEA investment more clearly communicated. However, there was acknowledgement by others that the term 'top slices' had been used as a catch all term for any funding not specifically driven through the RGAM, and that funding in areas such as health, skills and apprenticeship would be more appropriately presented as part of the system's core funding package (although this funding would probably still be earmarked and directed).

Other factors causing confusion or complexity included:

- The ‘free fees’ component of the HEA allocation, based on legacy fee levels that are markedly different between universities and IoTs, which compromises the value of a weightings based RGAM allocation.
- The role of HEA funding in supporting research activity in universities with the premium received for postgraduate research students blurring the multi-faceted investment by institutions in providing a foundation for excellent research across all disciplines.
- The different treatment of pension costs between universities and IoTs and the varying funding streams supporting these costs in the former.

The Cassells report on future funding raised the prospect of new and additional funding streams via income contingent loan supported student fees and an employer contribution via the National Training Fund. There was clear feedback that if such investment was introduced in the future, there must be a clear mechanism within the funding model to ensure and demonstrate that it is efficiently directed towards areas which will reinforce the benefits received by the contributor. Given the ongoing consultation on the potential introduction of an employer investment mechanism, we heard about the need for much clearer articulation of how the funding model supported the skills needs of industry.

7.1.3 Recognising the diversity of missions in a fair and flexible manner

Many submissions emphasised the importance of recognising the distinct missions of universities and institutes of technology. The merit of retaining a binary funding system in line with a binary higher education system attracted a mixed range of views, with some perceiving the maintenance of two fixed types of institutions an overly rigid approach given the erosion of some differences between them in recent years and the need for an evolving and responsive higher education system in future. Both university and IoT ‘sub- sectors’ presented strong cases for protection of a strong base of funding, to maintain excellence in research and international competitiveness in the former, and to recognise the regional mission and more intensive student support requirements in the latter.

While it was widely recognised that the model needed to recognise the distinct attributes of the institutions, there was concern about the fairness of aspects of the current approach. The fixed 60/40 split into university and IoT funding streams was criticised as not reflecting relative flows in student numbers over time. We also heard concern at the difference in weightings for postgraduate provision between the universities and IoTs.

7.2 The core drivers of HEI funding

7.2.1 The validity of a student driven funding model

The validity of a student-based funding model was confirmed by most submissions and consultations. While not disputing the role of students as the central cost driver, some HEIs noted that there were core costs that must be met by all institutions regardless of scale, with payroll a significant and effectively fixed cost due to national IR restrictions. We received mixed feedback on moving towards a graduate-based allocation, with some believing this is a more appropriate means of recognising the core value from HEA investment and others concerned at how it might influence institutional behaviour, and the potential implications for access students (i.e. HEIs might be less willing to take on access students that are at greater risk of not progressing to graduation). There was also a mix of views on the potential value of a year-end credits-based system, with some perceiving this as a means of achieving a more flexible system that could reward full, part-time and online/flexible and work-based

delivery models, while others believe that sufficient reward already exists for part-time provision within the current model. Some stakeholders would welcome a wider outcomes based approach incorporating completion rates, employment rates and student satisfaction and consideration of the economic multiplier effect of higher education provision by HEIs in setting funding levels.

Despite recognition of the validity of a student-driven funding model, we heard serious concern about the feasibility of sustaining this approach if funding constraints are not alleviated. Funding per student has declined rapidly in recent years and the viability of maintaining quality provision with the existing level of state investment was questioned by many institutions. Despite this, there was little enthusiasm for a cap on student numbers, with all stakeholders acknowledging the pivotal role that higher education has played, and must continue to play, in driving economic growth, and the demographic challenge that has to be met by the system over the next 15-20 years. Some stakeholders cited the growth of 'low cost delivery' programmes as a consequence of uncapped student growth with a capped (and contracting) base of funding. There was support among HEIs for establishing a standard per student funding unit of resource as noted earlier in this section.

We also heard that the demographic growth projected will not be apparent in all parts of the country, with stable or declining populations forecast in most western counties. This provoked concern from institutions in these areas that a purely student number driven system would undermine their sustainability and questioned whether this was consistent with Government policy of balanced regional development. Indeed the role of higher education in a regional development context was a recurring theme, with the importance of alignment of future HE strategy with the new National Planning Framework noted.

7.2.2 Reflecting costs of provision

There was general acceptance that funding should be reflective of the costs of provision and that using broad discipline-based weightings within the model was an appropriate mechanism to support the alignment of costs. Nonetheless there was concern at the degree to which the impact of the weightings had been diluted over time, both as a result of the replacement of state funding with an unweighted student contribution and the wider decline in Exchequer support, meaning that the unweighted free fees allocation took a greater share of the state contribution. There was support for considering whether weightings should now be applied to the free fees component of the HEA allocation, and additionally whether an adjustment should be made to effectively weight the student contribution within the model.

The way in which provision is currently costed was raised as an issue. It was noted, for example, that economies of scale were not considered in costing and that system efficiencies have not been fully demonstrated. The benefits of the introduction of a full economic costing system by the universities was acknowledged but it was emphasised that a more robust, comparable and consistent costing approach across the entire system was essential if the future funding approach was to prove fully effective. It was noted that the payment of pension costs by universities, in contrast to the IoTs where pensions are managed and funded directly by the Paymaster General at central government level, further limits comparison of costs. It was suggested that a more timely flow of financial, management and performance data from HEIs would facilitate a more transparent system and better support the wider case for increased investment in higher education.

The consultation process attracted commentary from some interest groups on the appropriateness of particular discipline-based weightings. In this regard attention was drawn to areas including:

- Initial teacher education
- Art and design
- Optometry
- Dentistry
- Veterinary science
- Computer science

7.2.3 Recognising external influences on demand and funding levels

Other issues were raised which are impacting upon student demand and the levels of funding received by institutions, even if they are not directly a product of the funding model itself. These include:

- Despite an apparent institutional desire to offer Level 6 and Level 7 provision within IoTs, and an industry demand for this level of skills, student demand at these levels has been in decline, and the introduction of demand-side supports (e.g. no student contribution) was proposed.
- It was suggested that demand for lifelong learning is also constrained by a requirement to pay fees and further demand-side support in this regard would be welcomed.
- The impact of new professional requirements (e.g. initial teacher education, engineering, pharmacy) with postgraduate study now an integrated part of requirements. Free fee allocations are no longer available for the postgraduate year, placing a new financial impact on the student. For initial teacher education, it was noted that postgraduate numbers have fallen due to high fees and that this is already impacting on the diversity of the student teacher cohort.

More generally, the diversification of income in the university sector in particular was flagged along with the need for the funding approach to recognise that the state is becoming a minority investor in education in some institutions. The potential for a hybrid funding model was put forward by some stakeholders, with the HEA funding up to a certain number of students and institutions then taking on additional students on the basis of student contribution or a differentiated funding level.

7.2.4 Incentivising and reflecting performance

One encouraging aspect of the consultation process was the acknowledgement by most stakeholders that the higher education system is performing well and that there had been improvements in efficiency and performance in recent years. The advent of the system performance framework and the strategic dialogue and compact process was acknowledged in this regard, and there does now appear to be a culture of accountability and challenge on institutional performance. However, there is concern that the HEA/HEI dialogue process is not fully integrated with the HEA/HEI funding and budgeting process and that the focus only on penalties rather than incentives for good performance limits the effectiveness of the process. We also heard that this risks disconnect between financial and wider academic and organisational strategies of institutions.

There was strong support for the introduction of a reward based approach to performance funding as new funding for higher education becomes available (acknowledging that without this new funding this approach would only dilute further a limited pot of current funding). It was stressed that the lack of reward in the current model effectively penalises the stronger performers. One suggestion to

address this issue was the creation of a small "performance pool" for each HEI that could be released if the institution meets certain performance criteria. There was also a suggestion that a common set of key performance indicators be developed and agreed with the sector and then used as a basis for reward via a balanced scorecard approach.

It was noted that the strategic dialogue process itself would benefit from a more substantial, rigorous and critical evaluation of performance, rather than relying on institutional self-evaluation. Many institutions felt that assessment of HEI compacts needs to be based on more transparent criteria, particularly if institutions are to be penalised with reduced funding. The current system was acknowledged as impacting directly upon wider institutional reputations and this made a robust evaluation process critical. While it was recognised that wider stakeholders (e.g. QQI, SFI, Enterprise Ireland, IBEC) are consulted in establishing the system performance framework, it was noted that the dialogue process could be strengthened by their direct involvement in the assessment of particular institutions to provide further challenge on performance.

A key theme raised in the submissions around performance was the inflexibility to fully maximise performance due to HR constraints. We heard that when considering the deployment of performance funding mechanisms, account needs to be taken of the limited scope institutions have to change and respond to certain challenges, with 70% to 80% of costs essentially fixed pay costs. A key theme raised in the submissions around performance was the inflexibility to fully maximise performance due to HR constraints. We heard that when considering the deployment of performance funding mechanisms, account needs to be taken of the limited scope institutions have to change and respond to certain challenges, with 70% to 80% of costs essentially fixed pay costs. The staff contract for IOTs is quite dated and could potentially be reformed to address a number of themes such as recognising and enhancing the role of IOT staff in community and enterprise engagement and R&D, enhancing the educational experiences of students by revisiting the contract's exclusive focus on contact hours and enhance productivity within the sector. One area where potential improvement was flagged was in relation to strategic, management and leadership capability. It was proposed that the funding model should recognise that not all institutions have the same capacity and play a proactive role in institutional development.

There was recognition of the value of competitive funding to target particular skills needs or to facilitate innovative or transformative thinking. Most stakeholders are open to the idea of a strategic innovation or transformation fund as additional funding becomes available. There was however a counter-argument that competitive funding tends to contrive performance outcomes to the detriment of partnership working and collaboration. We also heard that competitive funding should be focused on only one or two areas, with the administrative burden of running a multitude of small competitive funding streams undermining any value that they might bring.

7.3 Recognising Different Aspects of HEI Performance

7.3.1 Recognising research and innovation performance

Many stakeholders acknowledged that the current approach to recognising research and innovation performance in universities could be broadened to place a greater focus on outcomes. Over-concentration on postgraduate research activity as the means of rewarding institutional performance was criticised by some with a more robust link to competitive research funding success (given the clear link to overhead costs which must be met via the block grant) encouraged. It was noted that the development of robust commercialisation metrics by Knowledge Transfer Ireland could facilitate a

widening of the criteria on which the current university research 'top-slice' is allocated, with the incorporation of bibliometric analysis also worthy of consideration. It was suggested that the approach to rewarding research performance via REF in the UK would be overly bureaucratic in the much smaller Irish system. There was nonetheless a concern that performance funding in this area should be balanced with recognition that not all HEIs are equal and should not be penalised for their particular mission or stage of development, with the importance of setting individual targets relative to where each Institution sits emphasised.

There was strong feedback from universities on insufficient funding of research overheads as a result of competitive funding sources. This issue goes wider than the money provided by the HEA as a foundation investment for research and must be considered in the context of the wider research funding environment. University FEC suggests a research overhead rate of 67%, yet it was stressed that funding agencies provide only a proportion of this requirement, leaving a significant gap which must be met from core resources. There was support for a multi-agency solution to be sought on the research overheads issue, which would provide clarity on where such funding should be derived. The urgency of finding such a solution was stressed given the financial strain placed on institutions delivering important national and international research projects and the impact on teaching activity that the inevitable cross-subsidisation brings.

We listened to strong views on the perceived inadequacy of the current approach to supporting research and innovation activities in the IoTs. The difference between IoT postgraduate research weightings and those applying to universities and the lack of a performance-based research and innovation top-slice for the technological sector were highlighted. There was support for introduction of an IoT research and innovation performance driven allocation as additional funding became available, although it was stressed that this should recognise their distinct characteristics and contribution in this space and not merely replicate the existing approach for universities. In particular, it was emphasised that the practice-led and research-informed approach of the IoTs should be reflected and valued.

7.3.2 Recognising access performance

There was no doubt as to the commitment to the access agenda across the higher education and other stakeholders that we met, but there were differing ideas as to how HEIs should be appropriately supported. There is some concern at the targeting and transparency of funding for access and the degree to which the 0.33 premium given to an access student is an adequate reflection of the additional costs of supporting such a student. We heard that there was insufficient focus on the costs of pre-entry access support with schools and in communities. Access to part-time higher education opportunities was also flagged as a critical component of widening participation and the application of access weightings to part-time students was suggested.

We heard concerns regarding the way in which institutions direct and report on access investment, and there was a desire from some for greater clarity around this. Many institutions however emphasised that access support to students goes far beyond the dedicated units and is embedded across their academic operations and that an overly prescriptive approach on accounting for access funding could undermine this approach. The current reliance on a voluntary access survey, with substantially different HEI response rates, to underpin access funding allocations was also questioned. It was noted that the establishment of the SUSI system provided a further data source by which required access investment could be gauged, and that the implementation of a new access data

strategy as part of the National Access Plan should offer potential to build additional and more effective funding metrics into the funding model over time.

Some felt that the funding model needed to better reflect retention and progression. At the same time there was caution that the funding approach must not discourage institutions from taking on particular access students because of a perceived higher risk that they might not complete their course.

It was strongly emphasised by most IoTs that their role in providing regional access to higher education and in supporting those with greater support needs through college is critical yet is not acknowledged within the access funding system. It was further noted that a key aspect of this regional access role for some IoTs is the running of campuses in multiple locations and that the additional cost attached in such provision needs to be recognised.

7.3.3 Gender Equality

As outlined in the recent HEA National Review of Gender Equality in Irish Higher Education Institutions (2016) gender inequality exists in Irish society and in our HE sector. For instance, only 19% of academic professors are female and only 28% of the highest paid professional support staff positions are held by females. The funding model could be used as a tool, either through top-slicing or other initiatives, to facilitate gender equality.

It was mentioned during stakeholder discussions that additional RGAM weightings could be utilised for the STEM subjects to incentivise the take up of these subjects by female students. HEIs would gain additional funding via the extra weighting when they increase female participation in discipline areas where females are underrepresented. Inversely the same principle could be applied to Initial Teacher Education/nursing for the recruitment of males.

Some stakeholders suggested there might be merit in the model taking some consideration of gender for the RGAM research component. The main research funding agencies in Ireland have already announced that they will require HEIs to have attained the Athena SWAN award by 2019 to be eligible for research grants. The Irish Research Council launched its Gender Strategy and Action Plan 2013-2020 in 2013. The strategy and action plan aims to provide equal outcomes to both men and women so that Ireland can attract and retain the most talented, creative and innovative researchers thereby maximising its collective research intelligence.

In 2015 HEIs signed up to Athena SWAN (Scientific Women's Academic Network), a national initiative supported by the HEA. By signing up to the charter, each HEI is committing to advancing women's careers in science, technology, engineering, mathematics and medicine (STEMM). In 2015 the charter was extended to the arts, humanities, social sciences business and law as well as professional and support staff.

The Strategic Dialogue process could be used to further enhance gender equality. The new Strategic Dialogue Performance Framework is expected to highlight the achievement of gender equality as a key system goal.

7.3.4 Skills development, collaboration and industry engagement

The need for funding to address identified skills shortages is understood and targeted allocations are generally considered to represent an appropriate response. There was also some support for extension to skills-based funding initiatives to include part-time, blended and online provision,

facilitating up-skilling and re-skilling of the existing workforce. The provision of some developmental funding to support the enhancement of online provision in particular was suggested. There was also interest in looking at how skills development outcomes might be more embedded into the funding model, by using tools such as employer surveys and graduate destination statistics.

It was argued that the current funding model does not provide sufficient incentives in support of institutional collaboration or the development of regional clusters. Collaboration to date amongst institutions has met with mixed success and the commitment of the HEA to further progressing this priority was questioned. The incentivised collaboration approach in the past via competitive funding programmes such as the Strategic Innovation Fund, was proposed as the most appropriate means of ensuring further progress, rather than a rigid prescriptive approach requiring action across the current fixed regional clusters.

It was broadly accepted that the development of HEI/industry partnerships should be supported. Some noted that, as with research, the current core funding model does not recognise the additional overhead associated with components of provision such as work placements, internships and other essential interactions with the community. This was linked to a view that there should be more recognition of the value of industry engagement and in particular Small Medium Enterprise (SME) engagement within the funding approach, either within the core funding model or via greater emphasis in HEI performance compacts. Others felt that pursuit of these important industry-linked components and targets to expand such activity should be embedded within the strategic dialogue and compact process to reflect the different attributes and approaches of different HEIs.

The importance of the delivery of future skills needs for the public sector, and particularly in the area of healthcare, attracted comment from a number of stakeholders. It was clear that significant work is ongoing by the Department of Health to establish a new comprehensive workforce planning system that will facilitate a more effective role for higher education in responding to these skills needs. It was noted that this will allow the system to adjust to clearly identified future demand across all healthcare related occupations and that the funding model must be sufficiently flexible to accommodate the rolling input from continually updated workforce plans.

7.3.5 Support for flexible learning

It was emphasised that a modern, vibrant society and economy requires a higher education system fully committed to driving a culture of lifelong learning and that this must be strongly supported within the funding model. Part-time students currently pay full fees and a state subsidy was suggested for this type of provision, perhaps via its inclusion within the free fee scheme. Another proposal was a standard allocation for tuition or a flat subsidy of €1,500 per student pursuing 60 credits. Other respondents suggested higher weightings for part-time programmes in recognition of the importance of encouraging more provision and the complex costs involved in delivering such learning (e.g. teaching contract constraints and the additional expense of out of hours' delivery). The technology and expertise costs associated with on-line learning were also raised, and it was stressed that this type of provision does not necessarily offer a cheaper way of delivering education.

There was also a suggestion that the costs of flexible learning provision should be met by those who directly benefit such as industry, and that the proposed additional contribution from the National Training Fund offered a potential avenue for such a contribution. Some submissions also advanced the case for greater recognition of work based learning within the funding model to ensure that there is

effective knowledge transfer between industry and HEIs and we heard that the issue needs to be given greater focus within strategic dialogue between the HEA and HEIs. There was also support for the use of a Springboard type competitive funding model for the development and delivery of flexible and online provision, with ring fenced resources for this purpose.

7.3.6 Linking funding to governance performance

There was a general recognition of the importance of good governance and full accountability for the significant Exchequer investment in higher education. However, there were mixed views on how best to embed governance requirements within the approach to funding, including that:

- Meeting governance requirements should be a condition of grant funding and non-compliance should not be tolerated.
- The most appropriate place to monitor governance is via the system performance framework and associated HEI performance compacts, which would allow good or poor performance to be linked to funding.
- The introduction of a penalty based system within the funding model which would reduce funding awarded by agreed levels in line with specific breaches of governance compliance

It was noted that no institution intentionally sought not to comply with governance requirements and that rather than financially penalise non-compliant institutions, a more constructive approach would involve supporting those institutions experiencing difficulties in managing their governance responsibilities (for example by investing in governance and leadership capacity). Nevertheless, there was recognition by many institutions that something needed to be done to provide further assurance on governance, particularly as they sought greater freedom around human resource issues and pursuit of revenue generation opportunities, and that having clearly defined penalties for a small number of critical and specific issues of non-compliance could be worthy of further examination.

7.4 Other interdependencies

A range of other points were raised during the consultation process which, although not directly related to the funding model itself, will impact on the effectiveness of any future funding approach. We state these as presented below as important contextual considerations in evaluating options for development:

- Payroll costs are between 70% to 80% of core costs and are largely inflexible due to national IR/HR restrictions limiting the capacity of institutional leaders to reshape in an agile fashion. Institutions stressed that unless the State moves to give institutions greater flexibility here, the funds that are free for driving change will be very limited.
- The absence of a borrowing framework for IoTs is a significant limitation and places them at a disadvantage in comparison to universities and exacerbates the legacy issues arising from underinvestment in capital stock.
- The need for better signposting of pathways throughout the education system (including from further education).
- Account needs to be taken of the evolving structure of the system, with further consolidation of institutions planned, and the prospect of the creation of Technological Universities.

Most importantly, it was emphasised by the majority of stakeholders that overall funding increases (both capital and current) are urgently needed to meet a growing demographic growth, to reduce student/staff ratios towards OECD norms and to reduce infrastructural deficits. However there remains some scepticism that additional investment will be forthcoming, and if no additional funding is available, the extent to which the funding model should be changed in the near-term was strongly challenged.

8. Core Principles Underpinning the Future Funding Approach

8.1 Key Characteristics of the Future Funding Model

In undertaking the review, there has been broad consensus around the characteristics that a future funding model must demonstrate if it is to maintain an effective higher education system. The panel believes that for this to be achieved the funding approach must:

- Respect institutional autonomy;
- Recognise the role that higher education plays in transforming lives, driving economic development and promoting social cohesion.
- Support institutional sustainability;
- Reflect Government and higher-education objectives; and
- Maintain integrity as an independent and robust allocation system.

8.2 Core Principles Underpinning the Future Funding Approach

In addition, it has been agreed that there are a number of core principles that should underpin the future approach to funding HEIs. These were validated during the consultation process. The proposed principles are summarised in Figure 8.1 and described in further detail below:

Figure 8.1: Core Principles Underpinning the Future HEA Funding Approach



Maintaining core operations – The funding model should recognise the significant resources required to maintain operations and the inflexibility around which these can be deployed. It must remain focused on maintaining the core teaching mission of the HEI and provides resources in a way that ensures that it can deliver on this mission. Every institution will require a core base of funding which reflects its relative scale and underpins its ongoing sustainability.

Policy and strategy driven – The overarching approach to funding should be able to recognise, influence and reward institutional behaviour in response to national policy priorities by using an appropriate balance of block grant, performance component and top-sliced competitive funding mechanisms. Aligned with this, the funding approach should require, reflect and reward institutional strategic planning which reflects its particular priorities, delivers on national objectives and sets a clear course of performance improvement over the medium and long-term.

Metric based – The metrics used to determine funding allocations in relation to a specific theme should be measurable, objective, robust and available in a timely manner. The metrics should reflect, as far as possible, all relevant aspects of performance, including outcome and impact indicators.

Transparent and understandable – All stakeholders should have complete clarity regarding the basis on which the levels of funding are allocated. The variables that are used to calculate these allocations must be measurable on a consistent basis across the system.

Demand and cost reflective – Funding should be able to adapt to changing patterns of student demand across the system and should be aligned with relevant ongoing institutional costs where there is a clear rationale for full or partial State subvention. It should reflect the discipline and structural mix of provision and the operational commitments to maintain a nationally and internationally competitive institution.

Differentiating missions – The goals for the higher education system are diverse and significant. For the system to have the desired impact at regional, national and international level, it is critical that the approach to funding supports and encourages differentiation of mission between individual institutions. This differentiation encompasses but is not limited to: blend of programme-level offering; balance across teaching, research and external engagement; student-cohort diversity and access performance; mix of undergraduate and postgraduate intake; regional/international focus; and variation in pedagogical methods.

Recognising excellence and supporting transformation – There is a need to avoid a system based solely on sustainability. The approach to funding should recognise and reward excellence at institutional level and facilitate innovative and transformative propositions to maintain or to build international competitiveness.

Supporting governance and autonomy – While respecting institutional autonomy and allowing flexibility in the deployment of resources by HEIs, the funding approach should also ensure that good governance by HEIs is recognised and rewarded. The level and timeliness of compliance with HEA and other mandatory requirements should be linked to an appropriate funding mechanism.

9. Interim Conclusions and Next Steps

9.1 The Need for Change

From the work undertaken to date, the Expert Panel sees a clear case for change in how higher education institutions are funded in Ireland. The current model made an important contribution to facilitating a step change in levels of higher education in Ireland and in the overall expansion of the system, but the context in which this system sits has evolved significantly since it was launched over a decade ago. The Government has set a high level of ambition for the future development of higher education and the wider education sector. To deliver on this, a funding approach will be required that is simpler and more transparent in terms of inputs and outcomes, but which is also able to support the flexibility and responsiveness now essential to meet rapidly changing economic and societal needs.

This is a pivotal point of the review, at which we reflect on the analysis undertaken of the existing situation, the future challenges to be met and what we have heard from a wide range of stakeholders. During our discussions many potential options have been identified and discussed, and the focus of our work now switches to further in-depth evaluation of these options. This will ultimately allow us to recommend the changes that will support system diversity and sustainability and further improve higher education performance.

9.2 Transitional Approach

The current pressure on the higher education system is clear, and the absolute need, as set out in the Cassells report, for additional recurrent and capital funding seems to be generally accepted. It was encouraging that the relevant state agencies and employer representative bodies reinforced our own analysis that the system was performing well under strain, but that without additional investment it would struggle to maintain quality of provision and fulfil the external engagement role so critical in aligning HE with wider skills and innovation needs. At the same time, there was very little support for any kind of cap on student numbers, with recognition of the contribution and positive impact of the system in up-skilling the population and driving economic growth over the last four decades. The transformative impact of the expanding higher education system over this period in bringing a generation into third level provision for the first time is clearly acknowledged and it must maintain this pivotal role in the economy and society to underpin future prosperity.

Nonetheless, if there is to be no limit on student numbers, and while the nature and extent of additional funding remains unclear, there is a need for care in implementing major change in how the system is funded. Therefore, as we firm up on our recommendations for change over the next two months, it will be important to ensure that the phasing of each is carefully planned in order to ensure that there are no sudden shocks (i.e. unanticipated declines in funding) for individual institutions or imbalances caused within the system (e.g. by allocating too great a proportion of limited funding into a particular allocation).

9.3 Improving the Transparency of the Model

Throughout the consultation process, we have been struck by the perceptions that the model does not sufficiently support particular outcomes, such as the retention of students, the targeting of particular skills needs, the success of research activity or up-skilling from flexible learning. Although

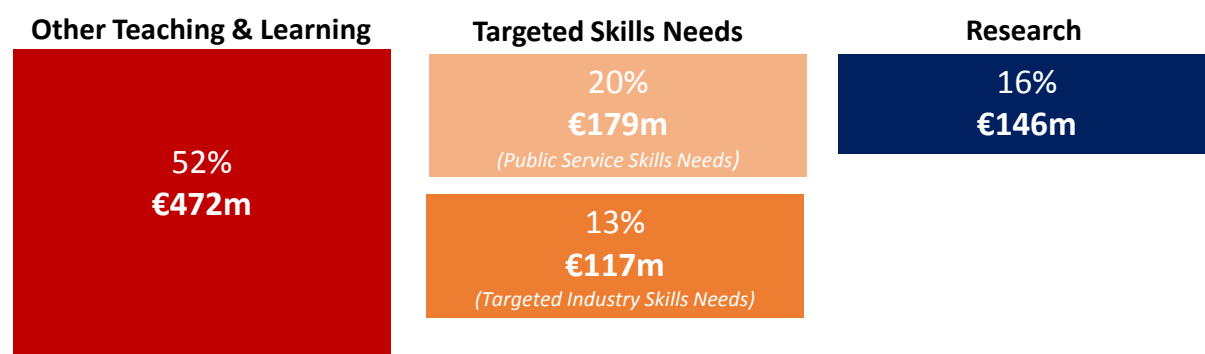
there are undoubtedly other ways in which such outcomes could be targeted via a higher education funding model, there is also a lack of recognition that the current model does, in a number of ways, incentivise and recognise outcomes in these areas, as set out in Table 9.1. This raises a question about the transparency, and ease of comprehension of the model.

Table 9.1: Perceived Weaknesses of the Funding Model and Actual Approach to Each Issue

Perceived Weakness	Actual Approach in Funding Model
It reflects numbers of students & so does not reward retention.	Funding is based on a student audit at March 31 st each year, ensuring HEIs are funded for only those students remaining for the majority of the academic year and therefore likely to complete the year, while removing any incentive to ‘pass’ borderline students at year end (a potential risk of a credits based funding system).
There is insufficient focus on meeting national and regional skills needs.	The model contains a range of incentives to meet ICT skills needs and supports provision in a range of other key national skills areas (including ring-fenced funding for health occupations).
Up-skilling via lifelong learning is not supported.	Part-time and online learning is supported on a credits basis in the IoT sector. Part-time learning is supported, based on credits, with 50% of the funding for an equivalent FTE student in the universities, and 20% of the funding for online provision.
Research activity is not rewarded.	A research top-slice is allocated away from the universities on the basis of postgraduate research graduates (75%) and competitive research funding (25%). It is also intended that the premium given via the RGAM for postgraduate research students will support the development of wider research capability and delivery of associated outcomes (in both the universities and IoTs).

Further on this theme, there is criticism that the model does not fully articulate (or indeed recognise) the significant investment via the block grant to support an institution’s research mission, and that the model does not encourage sufficient responsiveness to regional and national skills needs. To test this, we undertook a bottom-up analysis of how the actual block grant is distributed, with a high-level overview of the findings in Figure 9.1.

Figure 9.1: Overview of how HEI Funding is Channelled via the Model



This analysis shows that the funding model does indeed have a strong role in supporting targeted skills development, with 13% channelled towards addressing nationally identified key skills needs. The role in servicing public sector skills requirements, particularly in relation to health, is also very clear, with one-fifth of funding allocated on the basis of education for health, social care and other public service occupations. (Of course, skills are developed across the board in higher education; here, funding that is directly linked to specific skills requirements or governmentally signalled needs is identified.)

Clearly, there is a need for more effective communication on how the model supports these areas. This is particularly pertinent as we potentially move into a new era of a direct funding tranche sourced from employers, where there will be an expectation that such investment is channelled transparently to meet skills needs. It might also help to focus efforts in relation to future public service workforce planning, and facilitate planning and investment for research and innovation activities across the system, including a coordinated multi-agency approach for addressing the overhead costs of delivering competitively funded projects.

9.4 The Importance of Maintaining a Mix of Funding Tools

The current funding model consists of three core components: block grant; performance funding; and top-sliced targeted funding (either directed for specific purposes or distributed via competitive programmes). This three-pronged approach is common with most international higher education funding systems.

There is a clear case for the continuation of a block grant as a fundamental feature of a future funding model. Block grants do not mean that money is granted for an HEI to use regardless of any governmental expectations and do not imply an escape from accountability. The grant is composed of elements that reflect public policy expectations (e.g. teaching a certain number of students, addressing the particular needs of students from disadvantaged backgrounds, or with disabilities, supporting priority subjects). Having built the grant up from those elements, it is then passed over as a whole for the institution broadly to use as it judges best, alongside other funds that it might have from fees, EU schemes, industry contracts and commercial revenue in order to deliver the agreed objectives. The capacity to manage funding streams, and to cross-subsidise, within limits, across the varied activities of the institution, is one of the key ways that institutions can maximise efficiency and drive change.

Top-slicing for strategic purposes can incentivise and support more efficient and effective systems. It can help to drive particular objectives such as promoting shared service initiatives, supporting system restructuring and can address legacy system costs (e.g. pension liabilities) or facilitate new types of funding for provision (e.g. in the transfer of funding for medicine and nursing from the Department of Health). When compared with international funding models, the level of top-slicing in Ireland appears more significant. This is partly because some core system funding is currently included within this 'earmarked' category rather than as part of the core funding package. There would seem to be some scope to reduce overall level of top-sliced spend over time. However, there is a validity to using top-sliced (or additional directed funding as it becomes available) for competitive funding calls aimed at either meeting particular skills development needs or for transformative projects that could improve the performance and impact of higher education.

The role of the system performance framework is also a critical element of the future funding approach. (Of course, normal expectations of performance should be high.) Having this system in place

means that there is now direct accountability for delivery, both by individual institutions and by the sector as a whole, of a series of objectives defined on a rolling basis by the Minister for Education and Skills. This framework allows up to 10% of institutional funding to be withheld on the basis of performance against 3 year institutional compacts agreed with the HEA.

9.5 Developing Future Options

The review is now at a critical stage, where we are using the analysis outlined in this report and the findings from the consultation process to develop specific options for the future funding approach. The implications of these options will be carefully modelled to ensure a full understanding of both intended and possible unintended consequences of their implementation at both system and institution level. This will allow the panel to fully evaluate them and propose a recommended future approach in the final report. In the sections below we set out some of the key thematic areas where complex decisions will have to be made, and where our work will focus over the coming weeks.

9.5.1 Rewarding Mission Diversity in Fair and Transparent Manner

There is a need to protect a system which is generally performing well in the midst of severe resource constraints and ensure that the unique contributions made by different universities, IoTs and specialist colleges are supported and reinforced. At the same time we must recognise that the HE system itself is evolving with potential for new types of institution and larger merged entities across the system. In this context the approach as it stands seems overly rigid and we must consider the options for a fair allocation of resources which preserves mission diversity. This could include a more unitary approach as an alternative to the current two pot system (with specialist colleges also currently separated from universities and IoTs), with mission differentiation maintained through the way the drivers within the model work. From September 2017, it is expected that there will only be two specialist colleges 'outside' the university and IoT sub-sectors (down from 6 just two years ago) and we recognise it is no longer appropriate to separate their funding into what is effectively a third pot as the HEA has in the past.

A core aspect of the mission of all HEIs is their role, interaction with and contribution to the wider region. This impacts across many aspects of the funding model, including the core student driven approach, where it has been pointed out that the expected demographic bulge will not be experienced across every part of the country. There are also critical regional roles for many institutions with regard to stimulating innovation and entrepreneurship, responding to the up-skilling needs of industry, meeting the lifelong learning requirements of the local population and providing access to higher education for those that would not otherwise participate. The regional dimension will be an important consideration as we look at the different options for the future funding approach, ensuring that the unique regional contribution of institutions is supported and enhanced.

9.5.2 Reflecting the Costs of Provision

A key attribute of every higher education funding system should be a consistent and comparable understanding of the costs of that system. There is a high degree of openness in terms of sharing of costs across the Irish system, yet there are differences in the budgeting and cost measurement approach between universities and IoTs that means that there is not consistent analysis of the cost of provision across institutions. This can make it more difficult to determine the ongoing appropriateness of model weightings and the minimum standard of resource required to pay for different types of

students. It also makes the transition to a less rigid universal funding approach more complex given the challenge of determining the appropriate balance of resources.

There is also a need to address the dilution of the impact of RGAM discipline weightings, which may disincentivise STEM and other higher cost provision. There is a case for applying weightings across the basic regulated income of all HEIs, including the current free fees allocation and perhaps the student contribution, and this will be carefully considered while examining the potential impact given the different funding profiles of HEIs.

9.5.3 Recognising Outcomes from Research and Innovation

Funding for research has been a core component of the university funding approach, but has not been built into the model for IoTs, other than in a higher weighting for postgraduate students. To reflect the different missions of HEIs in this space, we are looking at whether a wider, more outcome-based approach could be adopted for allocating research and innovation funding, including whether the current level of top-slicing is appropriate for universities. The key issue of how the indirect costs of delivering competitive research funding projects are supported not only via the HEA funding model, but also by the competitive funding sources themselves, is important to future sustainability and a system-wide approach must be agreed as a matter of priority. The role of the IoTs in research, innovation and enterprise development, and in particular their contribution at regional level, also needs greater recognition as the future funding model evolves. Finally, we will consider the appropriateness of weightings for postgraduate research, including the difference between current IoT and university approaches.

9.5.4 Prioritising Access and Retention

We will also examine how a more outcomes-based approach to recognising the access role of HEIs can be achieved. The adequacy of the current premium for access has been queried. It is important that there is a clear and shared understanding of the specific access objectives that must be underpinned by future funding, and which of those commitments within the National Access Plan should be linked directly to the model. There is ongoing work on a data strategy to reflect access issues more fully across the system, and there may be a need to recommend a transitional approach while new outcome-based metrics become established and can replace the current voluntary survey as the main driver of access support. There is also a growing recognition of the different access roles of individual institutions, and the need to take account of the characteristics of different cohorts when considering progression and retention performance and we will reflect on how this should be recognised within the funding approach.

9.5.5 Effective Targeting of Skills Development

We are committed to ensuring the future funding approach supports continued and enhanced targeting of skills development needs. If additional investment can be secured from industry or other relevant sources, the model must provide the assurance that this investment can be channelled towards meeting identified skills requirements. Our recommended approach must also ensure focus on a flexible and responsive HE system relevant to the needs of indigenous SMEs as well as larger employers and the public sector. Competitive funding calls will play a key role here, as well as the performance compacts agreed between the HEA and institutions.

9.5.6 Providing a Platform for Lifelong Learning and Workforce Upskilling

This is a critical priority as levels of lifelong learning in Ireland currently lag behind international norms, and there is strong recognition of the need for continued up-skilling to meet the evolving needs of a small, open and innovative economy. Part-time, flexible and online provision is already supported in the RGAM, but we will also consider whether further supports should be provided. These could include extending part-time recognition across all HEI basic regulated income, providing developmental funding to increase institutional capacity for delivering lifelong learning, or recognising part-time access students in funding for access.

9.5.7 Embedding the Role of Performance Funding

It has been noted that the System Performance Framework needs to become a ‘cornerstone’ of the funding system, and a mechanism for providing more evidence of outcomes to support additional investment for higher education. From the institutional perspective, the framework and associated strategic dialogue process has been broadly welcomed and is seen as the key mechanism by which more specific system objectives can be pursued, allowing the simplicity of the block grant funding model to be retained. During the review process we identified a list of objectives for higher education drawn from the range of national policies and strategies in place, and the most appropriate means for ensuring that these are pursued may be via this dialogue and compact process.

However, it is also important that they are not perceived as unimportant or secondary objectives, and there is a need to consider how delivery of these system objectives is appropriately rewarded. There is a strong desire across institutions for a performance funding system which rewards as well as penalises. There could be more scope to introduce this approach now that a full cycle has been completed, processes have been embedded and provided funding is increased. We will consider how this might be achieved, looking at whether a common set of key performance indicators can be developed and agreed with the sector which can be objectively assessed on the basis of a balanced scorecard approach. It will also be important that the HEA makes clear that it now expects excellent performance as a matter of course and that there are things that can be regarded as ‘given’ – i.e. normal expectations – for any well run and well performing institution, where additional rewards should be unnecessary.

Appendix 1: Expert Panel Biographies

Short biographies for each of the Expert Panel members are provided below.

Ms Brid Horan, Chair

Brid Horan is the previous Deputy Chief Executive of ESB, having spent eight years on the ESB Executive Team with responsibilities including the Group's retail business and internal Group services.

In June 2014, Brid was appointed by the Minister for Education to the Expert Group to examine funding options for Higher Education which reported in early 2016. She has served on the DCU Governing Authority since September 2014 and chairs the DCU Audit Committee.

Brid is Chair of ISAX (Ireland Smart Ageing Exchange), a member of TLAC (Top Level Appointments Committee), Director of Chamber Choir Ireland and of Dublin Theatre Festival and Council member of Irish Management Institute. She has served as an Independent Non-executive Director of FBD Holdings plc (2011-2016), a member of Board of IDA (1996 – 2006) and as a Commissioner of National Pensions Reserve Fund (2001 – 2009). She was a member of the 2014 Arts Council Strategic Review Group. Prior to joining ESB as Group Pensions Manager in 1997, Brid headed KPMG Pension & Actuarial Consulting.

Brid is a Chartered Director and Fellow Institute of Directors, an Actuary and Fellow Irish Institute of Pension Management.

Professor Philip Gummett CBE

Professor Philip Gummett's first degree was in Chemistry. He moved into the newly emerging field of science and technology policy studies at Manchester University, UK, heading both the Department of Science and Technology Policy and later the Department of Government, and becoming Professor of Government and Technology Policy. He taught a range of undergraduate programmes and developed graduate and research specialisms in UK science policy and in relations between defence and civil technologies, on which he led a 12 nation, mainly European, research group, and published widely. His best known academic work is the monograph *Scientists in Whitehall* (Manchester University Press, 1980).

Professor Gummett was appointed Pro-Vice Chancellor at Manchester, before moving to the Higher Education Funding Council for Wales, of which he was chief executive from 2003 until retiring in 2012. A key agenda item during that period was restructuring the Welsh university system, where a series of high-profile mergers of higher education institutions resulted in reducing the initial thirteen institutions to eight. He is a trustee of JISC, the body that provides digital infrastructure, resources and advice across all UK universities and colleges, and is a consultant on higher education. Professor Gummett also has knowledge of the higher education landscape and policy in Ireland and he was Expert Secretary for a 2014 report to the Higher Education Authority on applications by consortia of Institutes of Technology for Technological University status.

Professor Sir Ian Diamond DL, FBA, FRSE, FAcSS

Sir Ian is Principal and Vice-Chancellor of the University of Aberdeen, an appointment he has held since 1 April 2010. He was previously Chief Executive of the Economic and Social Research Council. He was also Chair of the Research Councils UK Executive Group (2004-2009) the umbrella body that represents all seven UK Research Councils. Before joining the ESRC, Sir Ian was Deputy Vice-Chancellor at the University of Southampton, where he had been for most of his career.

In his research career, Sir Ian's work crossed many disciplinary boundaries, most notably working in the areas of population and health, both in the developed and less developed world. His research has involved collaboration with many government departments including the Office for National Statistics, the Department for International Development and the Department for Work and Pensions.

Sir Ian has served as Chair of British Universities and Colleges Sport, Chair of the Universities UK Research Policy Network Committee, Chair of the Universities UK Group on Efficiency and Chair of the Higher Education Review for Wales. In this latter role he set out a clear pathway to reform of the Welsh higher education funding model which is currently being implemented by the Welsh Government. Sir Ian was elected to the UK Academy of Social Sciences in 1999, is a Fellow of the British Academy (2005), a Fellow of the Royal Society of Edinburgh (2009) and holds honorary degrees from the universities of Cardiff and Glasgow.

Ms Mary Kerr

Mary Kerr is the former Deputy Chief Executive of the Higher Education Authority, where she worked for over 30 years overseeing the Irish higher education system and its funding. During her period of office she managed the development and implementation of the funding allocation model for higher education institutions. She was also involved in a number of international projects focusing on the review and development of funding models. Her roles within the HEA brought her into regular contact with all of the universities, institutes of technology and specialist colleges and she has an in-depth knowledge of their missions, operations and impacts.

Appendix 2: Organisation Submissions

1. Access Made Accessible, Disability Advisors Working Network, Mature Students Ireland (Joint Network Response)
2. AIB Centre for Finance Business Research at Waterford Institute of Technology. (Own views not those of WIT)
3. Athlone Institute of Technology
4. Cork Institute of Technology
5. Department of Public Expenditure and Reform
6. Department of Jobs, Enterprise and Innovation
7. Dublin City University
8. Dublin Institute of Technology
9. Dundalk Institute of Technology
10. Enterprise Ireland
11. Galway-Mayo Institute of Technology
12. Health Service Executive
13. Higher Education Colleges Association
14. Ibec
15. Institute of Art, Design and Technology
16. Institute of Technology, Blanchardstown
17. Institute of Technology, Carlow
18. Institute of Technology, Tralee
19. Institute of Technology, Sligo
20. Institute of Technology, Sligo (Research)
21. Irish Research Council
22. Irish Universities Association
23. Letterkenny Institute of Technology
24. Mary Immaculate College
25. Maynooth University
26. National College of Art and Design
27. National University of Ireland, Galway
28. Quality and Qualifications Ireland
29. Royal Irish Academy
30. Science Foundation Ireland
31. SOLAS
32. St. Angela's College, Sligo
33. Technological Higher Education Association
34. The Teaching Council and HEI Provides of Initial Teacher Education (Joint Submission)
35. Third Level Computing Forum
36. Trinity College Dublin
37. UCD Innovation Academy
38. University College Cork
39. University College Dublin
40. University of Limerick
41. Waterford Institute of Technology

Appendix 3: Stakeholder Meetings

1. Access Made Accessible, Disability Advisors Working Network, Mature Students Ireland Officers Network
2. American Chamber of Commerce Ireland
3. Chambers Ireland
4. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
5. Department of Education and Skills
6. Department of Health
7. Department of Jobs Enterprise and Innovation
8. Department of Public Expenditure and Reform
9. Enterprise Ireland
10. Higher Education Colleges Association (HECA)
11. Ibec
12. IMPACT
13. Industrial Development Agency
14. Irish Universities Association Presidents
15. Irish Universities Association Chief Financial Officers/Bursars
16. Minister for Education and Skills
17. Quality and Qualifications Ireland
18. Science Foundation Ireland
19. Teachers' Union of Ireland
20. Technological Higher Education Association Presidents
21. Technological Higher Education Association Secretary / Financial Controllers
22. Union of Students in Ireland (USI)

Appendix 4: Glossary

ARC	Australian Research Council
CAO	Central Applications Office
DES	Department of Education and Skills
DIT	Dublin Institute of Technology
DJEI	Department of Jobs, Enterprise and Innovation
ECF	Employment Control Framework
ERA	Excellence in Research for Australia
FEC	Full Economic Cost
GERD	Gross Expenditure on Research and Development
HEA	Higher Education Authority
HEAR	Higher Education Access Route
HEFCW	Higher Education Funding Council for Wales
HEI	Higher Education Institution
HERD	Higher Education Research and Development
HESA	Higher Education Statistics Agency
HETAC	Higher Education and Training Awards Council
ICT	Information Communication Technology
IOT	Institute of Technology
IRC	Irish Research Council
IRCHSS	Irish Research Council for Humanities and Social Sciences
IRCSET	Irish Research Council for Science, Engineering and Technology
ISSE	Irish Survey of Student Engagement
IUA	Irish Universities Association
LERU	League of European Research Universities
NCGP	National Competitive Grants Programme
NFQ	National Framework of Qualifications
NOW	Netherlands Organisation for Scientific Research
NUI	National University of Ireland
OECD	Organisation for Economic Co-operation and Development
QQI	Quality and Qualifications Ireland
RAE	Research Assessment Exercise
REF	Research Excellence Framework
RGAM	Recurrent Grant Allocation
RTC	Regional Technical Colleges
SFC	Scottish Funding Council
SLA	Service Level Agreement
SRE	Sustainable Research Excellence Universities
STEM	Science, Technology, Engineering and Mathematics
SUSI	Student Universal Support Ireland
TCD	Trinity College Dublin
THE	Times Higher Education
THEA	Technological Higher Education Authority Ireland
TU	Technological University
UCD	University College Dublin
WFTE	Weighted Full-Time Equivalent
WTE	Whole Time Equivalent

Appendix 5: Advisory Group

Dr Graham Love, Chair of the Advisory Group, Higher Education Authority (AG Meetings 3 and 4)

Ms Anne Looney, Former Chair of the Advisory Group, Higher Education Authority (AG Meetings 1 and 2)

Ms Noreen Bevens; Department of Education and Skills (DES)

Mr Joe Moore and Fionna Hallinan; Department of Jobs Enterprise and Innovation (DJEI) (Previously

Ms Jennifer Billings AG Meeting 1 and 2)

Ms Marie Mulvihill; Department of Public Expenditure and Reform (DPER) (Previously Mr John Burke AG Meeting 1)

Mr Garrett Murray; Enterprise Ireland (EI)

Ms Claire McGee; Ibec

Mr Peter Brown; Irish Research Council (IRC) (Previously Dr Eucharua Meehan AG Meeting 1 and 2)

Mr Michael Casey; Irish Universities Association (IUA)

Mr John Field; University of Limerick

Ms Karena Maguire; Qualifications and Quality Ireland (QQI)

Dr Peter Clifford; Science Foundation Ireland (SFI)

Mr Conor Dunne; SOLAS

Dr Joseph Ryan; Technological Higher Education Association (THEA)

Ms Annie Hoey; The Union of Students in Ireland (USI)

Mr Thomas Stone; President, IT Tallaght

Professor Bahram Bekhradnia; Higher Education Authority

Ms Martha Brandes; Access Made Accessible, Disability Advisors Working Network, Mature Students Ireland Officers Network

Mr Ray Bowe, Industrial Development Authority (IDA)

Appendix 6: List of Stakeholder Model Observations

How we fund?

- Move to a single tranche of funding for IoTs & Universities
- Institutions rewarded for good performance as well as penalised within the performance funding framework
- IoTs recognised for role in provision of level 6 and 7 and links to Industry
- Fee grant subsumed into core grant and allocated on basis of RGAM weightings
- Take account of student contribution within grant allocation
- Cap student numbers to ensure sustainability
- Apply a fixed unit of resource per student
- Remove pension costs from the funding model
- Mainstream activities previously supported via top-sliced funding.

How we recognise mission diversity?

- More metric-based approach to funding research in universities
- Recognition of research overhead gap from competitive research awards
- Scope for funding excellent and transformative propositions
- Recognition of the regional innovation and regional access role in IoTs
- Reward teaching and learning performance, quality and innovation
- Much wider base of access metrics taken into account in setting allocations
- Ringfence funding provided for access
- IoTs recognised for role in provision of level 6 and 7 and links to Industry
- Recognising different access roles and progression and retention of lower points students
- Recognition of wider enterprise development, innovation and knowledge transfer role
- Recognition of multi-campus provision

How do we drive skills development?

- Incentivise lifelong learning and access to higher education by existing workforce
- Support development of online learning and new forms of delivery
- Fund the development of new apprenticeships
- Support requirement for increased work placement components in provision
- Build in incentives to address regional or national skills gaps
- Introduce more targeted competitive funding calls addressing skills needs
- Introduce demand-side funding (i.e. subsidise student contribution) for courses focused on particular skills needs
- Incentivising inclusion of entrepreneurship modules in all programmes

Are there additional components which could be added to the model?

- Deal with discipline specific issues by changing weightings
- Match funding to incentivise revenue diversification
- Annual capital infrastructure maintenance and renewal contribution
- Introduce funding mechanism linked to governance compliance
- Funding strategy to support implementation of the recommendations of the Gender Review
- Weightings/incentives for collaborative provision
- Incentives to encourage 'dip in dip out' provision and transfer of credits

