# **HIGHER EDUCATION**

# **SYSTEM PERFORMANCE**

# **FRAMEWORK**

2018 - 2020

## Key System Objectives for the Higher Education System 2018 -2020

| Objective 1 | Providing a strong talent pipeline combining knowledge, skills & employability<br>which responds effectively to the needs of our enterprise, public service and<br>community sectors, both nationally and regionally, and maintains Irish leadership in<br>Europe for skill availability |
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| Objective 2 | Creating rich opportunities for national and international engagement which<br>enhances the learning environment and delivers a strong bridge to enterprise and<br>the wider community   |
| Objective 3 | Excellent research, development and innovation that has relevance, growing engagement with external partners and impact for the economy and society and strengthens our standing to become an Innovation Leader in Europe.   |
| Objective 4 | Significantly improves the equality of opportunity through Education and Training and recruits a student body that reflects the diversity and social mix of Ireland's population   |
| Objective 5 | Demonstrates consistent improvement in the quality of the learning environment<br>with a close eye to international best practice through a strong focus on quality &<br>academic excellence   |
| Objective 6 | Demonstrates consistent improvement in governance, leadership and operational excellence.  |

## INTRODUCTION

The Action Plan for Education 2016 – 2019<sup>1</sup> sets out the strategic direction and goals of the Department of Education and Skills for the education and training system and sets out an ambition for Ireland's education system to be the best in Europe by 2026. The Action Plan for Education recognises that education is at the heart of all our ambitions as a nation because education contributes to personal development as well as sustainable economic development, innovation, identifying and addressing societal challenges, social cohesion, civic engagement and vibrant cultural activities. The Plan clearly articulates the ambition, values and goals that are the basis for the ongoing work to develop the education system in Ireland which provides learners with the skills and knowledge that they need to achieve their potential and to participate fully in society and the economy. The plan contains a number of goals relevant to higher education: improving the learning experience and success of learners, improving the progress of learners at risk of educational disadvantage and learners with special educational needs, continuous improvement of education related services and building stronger bridges between education and the wider community.

#### **OUR AMBITION**

To become the best higher education system in Europe and position Ireland as a Global Innovation Leader.

#### **National Policy Framework**

The **National Strategy for Higher Education to 2030** sets out the long-term vision for higher education as having a central role in making Ireland a country recognised for innovation, competitive enterprise and continuing academic excellence, and an attractive place to live and work with a high quality of life, cultural vibrancy and inclusive social structures<sup>2</sup>.

The Strategy recognises that a diverse range of strong, autonomous institutions is essential if the overall system is to respond effectively to evolving and unpredictable economic and societal needs. It also recognises that funding and operational autonomy must be matched by a corresponding level of accountability for performance against clearly articulated expectations.

 $<sup>^{1}\,</sup>http://www.education.ie/en/Publications/Corporate-Reports/Strategy-Statement/Department-of-Education-and-Skills-Strategy-Statement-2016-2019.pdf$ 

<sup>&</sup>lt;sup>2</sup> http://www.hea.ie/sites/default/files/national\_strategy\_for\_higher\_education\_2030.pdf

This System Performance Framework represents the second phase of evolution of the changed relationship between the State and HEIs which has been developed with the implementation of the first System Performance Framework for Higher Education<sup>3</sup> published in 2013.

The purposes of the framework were articulated in 2013 and remain valid:

- To hold the system accountable for performance for the delivery of national priorities and monitor performance of the system as a whole;
- To articulate all the expectations of the system from different areas of government/agencies across the various dimensions of higher education activity;
- To increase the visibility of performance of the system to Government and the wider public;
- To contribute to system and policy development by highlighting structural and other deficits including data capacity;
- To allow HEIs to identify their strategic niche and mission and agree a performance compact aligned with funding with the Higher Education Authority

As with the first framework, the HEA will use this new framework as the context for conducting a process of strategic dialogue with individual institutions. This will lead to the agreement of performance compacts with the HEA, with institutional KPIs reflecting their contribution to overall system objectives and building on their own individual missions, capacities and strengths.

#### **Evolving Policy Context**

Since the first System Performance Framework was published in 2014, there have been significant policy developments which have further articulated the priorities and strategies for the higher education sector in order to support the achievement of wider national policy objectives related to economic and social development at regional and national level. The role of higher education in delivering on national objectives with regard to skills development, research and innovation, access and internationalisation has been articulated in a number of strategies and policy documents:

- The *National Skills Strategy 2025*<sup>4</sup> aims to make Ireland internationally renowned for its talent, for its highly skilled and adaptive people, equipped with the higher order capabilities required in the 21st century workplace and for its openness to continuous learning.
- Innovation 2020,<sup>5</sup> sets the ambition for Ireland to become a Global Innovation Leader with a central focus on excellence, talent and impact in research and development. Higher education institutions are central to the achievement of securing significant levels of competitive Horizon 2020 research funding, increasing collaboration and impact with industry and further development in postgraduate provision, with all of this requiring strong foundation investment in building research capability in higher education institutions.

<sup>&</sup>lt;sup>3</sup> http://education.ie/en/The-Education-System/Higher-Education/HEA-Higher-Education-System-performance-Framework-2014-2016.pdf

<sup>&</sup>lt;sup>4</sup> https://www.education.ie/en/Publications/Policy-Reports/pub\_national\_skills\_strategy\_2025.pdf

<sup>&</sup>lt;sup>5</sup> https://www.djei.ie/en/Publications/Innovation-2020.html

- Investing in National Ambition: A Strategy for Funding Higher Education <sup>6</sup> analyses the existing arrangements for funding the Higher Education system, identifies the challenges facing the system and sets out a range of solutions to long term sustainable funding for the system.
- The *National Plan for Equity of Access to Higher Education 2015-19*<sup>7</sup>, provides a framework of actions that over the five years of the plan to improve equality of opportunity and to ensure that the student body in higher education reflects the diversity of Ireland's population. It sets new and increased targets for participation in higher education of those from the semi-skilled and unskilled socio-economic groups, of students with sensory disabilities, mature students and the wider adult population, as well as an increase in participation among Irish Travellers. In addition it aims at an increase of part-time or flexible higher education participation and commits to a more consistent approach to access support across higher education institutions and progressing a number of projects in order to understand and to measure access data more effectively. A mid-term review of the plan is to be undertaken in early 2018.
- The Action Plan to Expand Apprenticeship and Traineeship in Ireland sets ambitious targets for the growth of work based learning, involving strong partnerships between employers, higher education and further education and training providers.
- Irish Educated, Globally Connected<sup>8</sup> targets significant increased international student numbers and an increased international focus to provision in higher education.
- **Enterprise 2025**<sup>9</sup> aims to have 2.18 million people in employment by 2020, emphasising the importance of aligning future skills needs of the workplace and the education system, so that individuals are equipped to adapt to the work environment of the future and recognises that Irish people are Ireland's primary asset and differentiator for competitive positioning through the delivery of high levels of productivity and innovativeness<sup>10</sup>.
- The *National Policy Statement on Entrepreneurship*<sup>11</sup> sets out the Government's strategic objectives as a facilitator within the Irish entrepreneurship ecosystem and recognises the importance of the education and training system as a key element of the ecosystem.
- **Foreign Languages Strategy** sets out an ambitious programme of action to improve the national level of competence in foreign languages and to diversity the range of languages in regular use in Ireland and by Irish people abroad.

<sup>&</sup>lt;sup>6</sup> https://www.education.ie/en/Publications/Policy-Reports/Investing-in-National-Ambition-A-Strategy-for-Funding-Higher-Education.pdf

<sup>&</sup>lt;sup>7</sup>http://www.hea.ie/sites/default/files/national\_plan\_for\_equity\_of\_access\_to\_higher\_education\_2015-2019\_single\_page\_version\_0.pdf

<sup>&</sup>lt;sup>8</sup> http://www.education.ie/en/Publications/Policy-Reports/International-Education-Strategy-For-Ireland-2016-2020.pdf

<sup>&</sup>lt;sup>9</sup> https://www.djei.ie/en/Publications/Publication-files/Enterprise-2025-Summary-Report.pdf

<sup>&</sup>lt;sup>10</sup> Enterprise 20205, Summary report: p. 22

<sup>&</sup>lt;sup>11</sup> https://www.localenterprise.ie/Documents-and-Publications/Entrepreneurship-in-Ireland-2014.pdf

A number of other relevant Government and agency strategies all have talent and skills as high priorities including in the areas of digital and the smart economy, international financial services and tourism. The contribution and activities of the education and training system has been a key feature of the action plans for jobs national and regional and the pathways to work initiatives aimed at maximising national employment potential.

Other relevant developments include:

- The *National Review of Gender Equality in Irish Higher Education Institutions*<sup>12</sup> which recommends the linkage of performance monitoring to funding through the HEA's strategic dialogue process and the recently established Gender Equality Taskforce.
- **A Review of Entrepreneurship in Higher Education** through the joint OECD / EU Commission HEInnovate initiative makes a number of recommendations for Irish higher education institutions including expansion of entrepreneurial teaching and learning and access to entrepreneurial education across faculties and disciplines and building more institutional capacity to understand, document and measure impact of activities and initiatives.
- *Ireland 2040 National Planning Framework* this will establish a long term strategy planning framework to guide future national, regional and local planning and investment decisions.
- The *National Strategy on Education for Sustainable Development*<sup>13</sup> provides a framework to harness the potential of the higher education sector to provide the skills, knowledge and research that will underpin further development of the green economy in Ireland.

In light of the above, a set of high level targets are proposed which will provide the main direction of travel in the coming years. These are complemented by more granular metrics under each of the objectives which are articulated in more detail in the Appendix.

Additional work needs to be undertaken to obtain full baseline data across a number of the objectives. For this reason the high level targets in many cases are indicative targets. Implementation of the new System Performance Framework will involve the collection, analysis, benchmarking and tracking of progress on these indicators and reporting through regular System Performance reports. The work to be progressed in the coming years includes how we can make better use of administrative data and link this to best effect.

<sup>&</sup>lt;sup>12</sup> http://www.hea.ie/sites/default/files/hea\_review\_of\_gender\_equality\_in\_irish\_higher\_education.pdf

<sup>&</sup>lt;sup>13</sup> https://www.education.ie/en/Publications/Education-Reports/National-Strategy-on-Education-for-Sustainable-Development-in-Ireland-2014-2020.pdf

## ACHIEVEMENTS TO-DATE

Higher Education has been central to Ireland's transformation over recent decades. Throughout the last thirtyfive years, there has been considerable progress in educating and upskilling the Irish population. The participation rate in higher education for 18-20 year olds has grown from 20 per cent in 1980 to a current level of 58 per cent. 41 per cent of people in Ireland now have a higher education qualification, and this is even higher among younger adults with over half of 25-34 year olds having completed higher education<sup>14</sup>. In 2017, Ireland was ranked 5<sup>th</sup> in the world for the availability of a skilled workforce and for university education meeting the needs of the business economy<sup>15</sup> and ranked first in Europe for knowledge transfer activities in 2011/12<sup>16</sup>.

Under the System Performance Framework 2014-2017, the HEA has now produced three System Performance Reports, the most recent report will be published shortly.

Key findings in the most recent report, and from latest national and international statistical data highlight that:

- The higher education system continues to expand and enroll more students, and to provide an increasing supply of graduates for the labour market. Overall student numbers in the sector increased from 196,000 in 2011/12 to about 225,000 by in 2016/17, an increase of some 13%.
- In addition to this general growth, additional programmes have been put in place to address specific skills needs, through the Springboard+ programme and the ICT skills initiatives.
- The National Competitiveness Council report, *Ireland's Competitiveness Scorecard 2017* reported that Ireland continues to have the highest level of maths, science and computing graduates aged 20-29 per 1,000 of the population in the EU. 'As a percentage of total undergraduates, Irish higher education and further education institutes provide more Science & maths and ICT graduates that the EU28 average. The proportion of male graduates in MST areas in Ireland, per 1,000 of the population aged 20 -29, was the highest in the EU.
- There was a 59% increase in ICT, natural science, maths and construction graduates from 2009 to 2014.
- Improvements in teaching and learning across the system, with innovations such the work of the Forum on Teaching and Learning, the Irish Survey of Student Engagement (ISSE) and the National Employer Survey being used by institutions to review and improve the quality of the education being provided to students.
- The number and share of students from disadvantaged backgrounds and of students with a disability attending third level rose between 2012/13 and 2015/16 (from 9,147 to 11,189 and 2,561 to 3,343 respectively).

<sup>&</sup>lt;sup>14</sup> OECD. Education at a Glance, 2015, table A.1.3a

<sup>&</sup>lt;sup>15</sup> IMD Talent Rankings 2017

<sup>&</sup>lt;sup>16</sup> European Knowledge Transfer Report 2013

- The research system continues to perform well, as is evident from its outputs, measured by citations and also by measures of knowledge transfer in a broader sense. Under Horizon 2020, the higher education sector has won 53.4 per cent (€253m) of the €475m secured by Ireland to August 2017.
- The Irish higher education system has continued to create more and stronger international linkages, while also attracting a greater number of students to study in Ireland. Most recent HEA data (2016/17) show that 11.6 per cent of full-time students (20,972) were international. This is an increase from some 7% in 2012/13.
- Far-reaching restructuring of the higher education landscape has taken place, with ongoing institutional merger projects designed to enhance the quality and sustainability of the education provided to students attending those institutions. Successful restructuring can be seen particularly in the process for reforming initial teacher education, and in the process for the development of technological universities.
- Improved accountability of the system for public investment is being achieved through, for example, this strategic dialogue process and the improved governance reviews introduced by the HEA.
- In terms of shared services, the sector performs well. HEAnet provides over 40 services to over one million first, second and third level staff and students in Ireland. An evaluation in 2015 found that six HEAnet services saved the Irish taxpayer just under €20 million in one year based on an operating cost of €4.9 million.

## FUTURE CHALLENGES AND FOCUS

In the wider world, globalisation, technological advancement and innovation are defining economic development, people are much more mobile internationally as they seek out career opportunities, and competition for foreign direct investment remains intense.

The changing global economy requires a changing labour market in which individuals are more than ever expected to become more entrepreneurial in pursuing employment and value creation opportunities. This economic and societal context affects the design of higher education institutions seeking to provide students – and lecturers – with suitable knowledge and skills for the labour market of the 21<sup>st</sup> century.

In 2016, two major political developments occurred which will create uncertainty for Ireland: the Brexit decision and the changing policy priorities and approaches in the United States. The Brexit decision raises particular concerns for higher education around people, access to networking and funding and changes to regulation and the broader economic environment. Brexit also provides Ireland with opportunities: Ireland will be the only English speaking country in the EU and may become a much sought-after partner for European consortia with continental European universities and research organisations. Ireland may also win foreign direct investment which will be attracted by its continuing membership of the EU and also the availability of well-educated, flexible and international workforce.

Ireland will need to ensure that the existing arrangements for staff, students and researchers with the UK will need to be maintained in any final agreement.

In the broader context, the Brexit decision has already led to a strengthening and prioritisation of policy to further diversify export markets as reflected in the new Enterprise Ireland strategy: *Build Scale, Expand Reach*<sup>17</sup>. In the context of political change in the US, the availability of talent, the responsiveness of education and training and the quality of our research and innovation will continue to be central to Ireland's value proposition for attracting foreign direct investment<sup>18</sup>.

The QQI Bill and the IEM once enacted will bring extra measures to protect and enhance the student experience of International students studying in Ireland.

Overall, enterprise policy aims to deliver growth that is sustainable, led by strong export performance; to build resilience into our economy by taking a portfolio approach to sectoral development that is underpinned by innovation, productivity and competitiveness across *all* sectors, and to ensure that employment opportunities are created in all the regions<sup>19</sup>. Higher education has a key role to play in supporting the achievement of this ambition.

The National Skills Strategy highlights areas which need to be prioritised in the coming years: increasing opportunities for lifelong learning and in particular upskilling and reskilling opportunities for those already in employment through flexible learning opportunities; providing students with opportunities to develop transversal skills as well as discipline specific knowledge to address concerns expressed by employers around employability; digital skills, proficiency in foreign languages and entrepreneurial skills are also highlighted as key transversal skills. In addition, higher education has a role to play in seeking to address skills shortages (e.g. ICT and high skilled manufacturing) and emerging skills needs<sup>20</sup>.

Other important policy developments are in train including in relation to Transitions, student pathways, retention and engagement and the purpose of this document is to provide an overall Framework for the development of the Higher Education System which allows the various policy developments to be considered in an integrated way, to identify key actions over the next period and to allow an assessment of progress to be made over time.

Education for Sustainable Development will ensure that learners are equipped with the relevant knowledge, and the key dispositions, skills and values to motivate and empower them to become informed citizens acting for a more sustainable future. This looks within and across the education system to help equip the students of today to deal with the challenges of the 21<sup>st</sup> century.

## KEY SYSTEM OBJECTIVES 2018 - 2020

In line with the analysis set out above, it is proposed that the following would be the Key System Objectives for the Higher Education System 2018 -2020:

1. Providing a strong talent pipeline combining knowledge, skills & employability which responds effectively to the needs of our enterprise, public service and community sectors, both nationally and regionally, and maintains Irish leadership in Europe for skill availability

<sup>&</sup>lt;sup>17</sup> https://enterprise-ireland.com/en/Publications/Reports-Published-Strategies/Strategy-2017-to-2020.pdf

<sup>&</sup>lt;sup>18</sup>http://www.idaireland.com/docs/publications/ida\_strategy\_final.pdf

<sup>&</sup>lt;sup>19</sup> Sector Brief DJEI, Appendix 1. October 2016

<sup>&</sup>lt;sup>20</sup> https://www.education.ie/en/Publications/Policy-Reports/pub\_national\_skills\_strategy\_2025.pdf

- 2. Creating rich opportunities for national and international engagement which enhances the learning environment and delivers a strong bridge to enterprise and the wider community
- 3. Excellent research, development and innovation that has relevance, growing engagement with external partners and impact for the economy and society and strengthens our standing to become an Innovation Leader in Europe.
- 4. Significantly improves the equality of opportunity through Education and Training and recruits a student body that reflects the diversity and social mix of Ireland's population
- 5. Demonstrates consistent improvement in the quality of the learning environment with a close eye to international best practice through a strong focus on quality & academic excellence
- 6. Demonstrates consistent improvement in governance, leadership and operational excellence.

These objectives, taken together, clearly indicate the key priorities of Government for the Higher Education system over the period ahead and will serve as the foundation for developing the system and for making investment decisions. They will also provide the basis on which to build greater transparency and accountability in the future.

OBJECTIVE 1: PROVIDING A STRONG TALENT PIPELINE COMBINING KNOWLEDGE, SKILLS & EMPLOYABILITY WHICH RESPONDS EFFECTIVELY TO THE NEEDS OF OUR ENTERPRISE, PUBLIC SERVICE AND COMMUNITY SECTORS, BOTH NATIONALLY AND REGIONALLY, AND MAINTAINS IRISH LEADERSHIP IN EUROPE FOR SKILL AVAILABILITY

In Ireland, student numbers continue to grow. In 2016/17 the higher education student population stood at just over 225,000 students, a 13 per cent increase since 2011/12. Ireland continues to have the highest level of maths, science and computing graduates aged 20-29 per 1,000 of the population in the EU. 'As a percentage of total undergraduates, Irish higher education and further education institutes provide more Science & Maths and ICT graduates that the EU28 average.

The availability of skilled, talented people is one of Ireland's key international differentiators in the attraction of foreign direct investment<sup>21</sup>. It also drives the success of our indigenous enterprise base, from innovative start-ups through small employers located throughout the country to scaling firms with high growth potential. Higher education also plays a key role in the development of the talent required to deliver high quality public services, particularly in the areas of Health and Education.

The new EU Skills Agenda<sup>22</sup> calls on member states to improve the quality of skills and their relevance for the labour market to address skills mismatch, to increase the number of people with entrepreneurial mind-sets and competences to start their own business and to ensure people can adapt to evolving requirements particularly with the increasing need for digital skills across occupations.

The National Skills Strategy and other sources identify issues to be tackled in the years ahead. Notably, there are skills shortages in certain sectors of the economy (e.g. ICT and high skilled manufacturing) and a need to further up-skill and reskill the adult population, in particular by increasing participation in further education

 $<sup>^{21}</sup> http://www.idaireland.com/docs/publications/IDA\_STRATEGY\_FINAL.pdf$ 

<sup>&</sup>lt;sup>22</sup> http://europa.eu/rapid/press-release\_IP-16-2039\_en.htm

and training<sup>23</sup>. Adult participation in lifelong learning (age 25 to 64) is 6.5% in Ireland while the EU average is 10.7% in 2015; the participation rate for those in employment is 6.4% compared to an EU average of 11.4%<sup>24</sup>. The employer survey published in 2015 suggests that lower levels of satisfaction were recorded for graduate attributes related to business acumen, entrepreneurship and foreign languages<sup>25</sup> and actions are identified in the NSS to address these concerns.

In addition to addressing skills needs, there is also the need to consider how we will address changes in the world of work due to new technologies and ways of working. Artificial Intelligence, Robotics and Automation are three areas where there is a particular need for education institutions to consider what skills graduates of the future may require.

Higher education institutions need to continually develop and enhance their approaches to learning and teaching to incorporate a lifelong learning perspective and a student-centred approach that includes collaborative and inquiry-based learning, inclusive learning environments, and digital technologies.

In the coming years, the creation of Technological Universities will be a significant development in the higher education landscape and will increase the opportunities available to learners across the country. These new higher education institutions will have a strong regional mission to support development and innovation. They will deliver a range of disciplines and levels of qualification, including apprenticeships, to meet the skills needs of the regions, and contribute to national priorities. They will play a strong role in facilitating lifelong learning, upskilling and reskilling our citizens.

The Technological Universities will play a strong role in the development of translational research which will strengthen the impact of these institutions in research, innovation and technological development.

Increases in enrolments in the HEIs will be closely aligned to areas of skill need as outlined by the National Skills Council and will also involve discussions at regional level on any new programmes.

All HEIs will undertake a STEM access programme aimed at schools in their region and will play an active part in the implementation of the STEM strategy.

#### High level targets

- Increase to 10% the number of those aged 25-64 engaged in lifelong learning by 2020 and to 15% by 2025 National Skills Strategy Target; current base line is 6.7%)
- Increase the numbers of HE entrants studying on a flexible basis by 25% by 2021 (baseline 2016/17 20% or 45,018 of total enrolments are flexible learners)
- Increase tertiary attainment among 30-34 years olds to 60% by 2020 (52.9% 2016)
- All students will have the opportunity to undertake a work placement or work-based project as part of their course by 2025 (baseline to be established and tracked)
- Introduce Employability Statements for all disciplines in all HEIs by 2020 (baseline to be established and tracked)

<sup>&</sup>lt;sup>23</sup> European Education and Training Monitor 2016

<sup>&</sup>lt;sup>24</sup> AmCham. Submission on a National Skills Strategy, p.7

<sup>&</sup>lt;sup>25</sup> Bron: speech IDA 15.9.2016

- Increase number of available Springboard places by 30% by 2021 in both universities and institutes of technology.
- Double target to 9,000 annual new apprenticeship registrations by 2020 (over 4,500 in 2017) with 78 separate apprenticeships in place.
- Increase the proportion of the higher education cohort studying a foreign language, in any capacity, as part of their course to 20% by 2026 (new baseline to be established and tracked)
- Achievement of the targets in the new ICT Action Plan

### OBJECTIVE 2: CREATING RICH OPPORTUNITIES FOR NATIONAL AND INTERNATIONAL ENGAGEMENT WHICH ENHANCES THE LEARNING ENVIRONMENT AND DELIVERS A STRONG BRIDGE TO ENTERPRISE AND THE WIDER COMMUNITY

While learners are recognised as the primary stakeholders for higher education institutions (HEIs), it is becoming increasingly important that institutions engage with and respond to the needs of a broader set of stakeholders including enterprise, civic and community organisations and groups. Government policy not only seeks engagement with the goal of economic innovation, but also broader community engagement. The *National Strategy for Higher Education to 2030* and *Innovation 2020* map continuing progress towards social innovation in partnership with civic, civil society and industry partners, with the aim of driving a strong sustainable economy and a more equitable society<sup>26</sup>.

HEIs are responding positively to this objective with a strong focus now developing on engaged teaching and learning and research. Worth noting is the rollout of studentvolunteer.ie in 2016. All seven universities, Institute of Technology Tralee, Institute of Technology Tallaght worked with Campus Engage to launch studentvolunteer.ie, an online system that is the first of its kind in the world, aimed at nurturing the next generation of civically responsible students and enhancing public awareness of students role and responsibility in contributing to solving societal challenges.

Engagement with enterprise in particular is often focused on identifying learning needs and research priorities, as well as planning to ensure resulting programmes are relevant and of high quality and value. Most of the local and regional engagement with labour market and economic actors takes place through organic links developed by individual HEIs and their teams and its stakeholder community. Engagement is being more actively through national and regional initiatives including the Regional Skills Fora, HE clusters and the Action Plan for Jobs.

Enterprise Ireland has formulated a number of key objectives<sup>27</sup> which are relevant for engagement activities in HEIs in terms of creating greater scale, driving innovation, enhancing leadership, increasing entrepreneurship regionally by 25%, increasing Eurozone exports by 50%, inspiring more companies to have global ambition and building scale in niche sectors globally. These objectives and related measures fit with the

<sup>&</sup>lt;sup>26</sup> Campus Engage 'Engaged Research', p. 5

 $<sup>^{\</sup>rm 27}$  Enterprise Ireland Strategy 2017 to 2020, p. 2

government's aim to enable the spin-outs of HEIs to create greater scale and to enhance the collaboration between HEIs and SMEs to become more innovative and competitive.

In terms of internationalisation, institutions will approach internationalisation in different ways depending on their mission, capacity and strengths. When it comes to the 15% national goal for international students in the medium term, the level of ambition for Institutions will necessarily vary and individual targets will be reflected in the individual institutional internationalisation policies. These strategies should also take into account the importance of diversification of international students and programmes.

We recognise that there are limits on the amount of engagement that institutions can prioritise and undertake at any one time. It may not be possible to satisfy the demands of all stakeholders. However, we expect to see proactive engagement and management of the tensions that arise in addressing competing needs.

All HEIs will develop targets for increased activity and turnover in their start-up hubs and incubators and will extend entrepreneurship modules to a greater proportion of their graduates.

#### **High level targets**

- Increase the output value of internationalisation to €1.15bn per annum by 2020 (International Education Strategy baseline €819m in 2014/15)
- International students to represent 15% of full-time students by 2020. (In 2016/17, 11.6% of all full-time students in HEA-funded higher education institutions were international students)
- Progress towards Bologna target of at least 20% of those who graduate in 2020 to undertake a study or training period abroad.
- Number of innovation vouchers project agreements with industry to increase by 12% by 2020 (487 in 2016)
- Increase number of commercially relevant technologies (licences, options, assignments) by 20% by 2020 (163 in 2017)
- Increase number of spin-outs established during the year by 40% by 2020 (Innovation 2020 target, 29 in 2014)
- Improve Employer satisfaction rates with HEI collaboration with enterprise by 25% as tracked in National Employer Survey (companies < 50 employees – 55% rated collaboration as good/very good; companies with 51 – 250 employees – 60% and companies > 251+ employees – 75%).
- Participation in Erasmus+ in Higher Education and other Study and Work Placements Abroad to reach 4,400 by 2022 (3,135 in 2016) in accordance with international strategy.

#### **OBJECTIVE 3:** EXCELLENT RESEARCH, DEVELOPMENT AND INNOVATION THAT HAS RELEVANCE, GROWING ENGAGEMENT WITH EXTERNAL PARTNERS AND IMPACT FOR THE ECONOMY AND SOCIETY AND STRENGTHENS OUR STANDING TO BECOME AN INNOVATION LEADER IN EUROPE.

Research and Innovation plays a central role in driving productivity growth and fostering competitiveness in a global world where knowledge and innovation are critical factors for the advanced economies. Innovation creates opportunities for new and better jobs and is instrumental in responding to global societal challenges.

Excellent research in higher education is the bedrock of knowledge generation and transfer. It supports the advancement of teaching and learning; it generates the advances at the forefront of knowledge which are too long term or risky for individual enterprises to fund, but which provide the basis for collaborative research; and it supports the entire system of postgraduate education, developing advanced human capital.

Ireland's investment in research and innovation has been instrumental in providing the highly educated workforce that we need to grow the economy. The availability and quality of our graduates, across the broad spectrum of disciplines, is essential if we are to maintain our attractiveness as a research location and grow our international reputation. Ireland is classified as a "Strong Innovator" according to the EU Innovation Scoreboard 2017.

Postgraduate education delivered by our higher education institutions is critical to Ireland's research system. In addition to contributing to knowledge, postgraduate researcher education helps participants to develop their own research and other skills that can be applied in a range of environments, in academia or industry, at home or abroad.

The impact of our research system will be determined by both the quality and productivity of our researchers and also the extent to which our researcher population is growing or declining. It is also important to develop effective career frameworks which imbue researchers with the skillsets needed to prosper within academia, and in the larger labour market where most PhDs and Postdoctoral researchers will ultimately find employment.

Collaboration between higher education and enterprise plays an important part in the overall drive for national competitiveness. In this respect, Ireland has chosen to focus its public investment within higher education and to leverage the resources of our HEI's to enhance collaboration and to maximise synergies between the public research system and enterprise. This stimulates the flow of ideas and people between the two sectors, to the benefit of both.

Knowledge transfer has been further strengthened by the establishment of Knowledge Transfer Ireland, a partnership between the Higher Education, Enterprise Ireland and the wider public and private research system.

International collaboration is also very important, with the EU Framework programmes being central. Under Horizon 2020, Ireland set an ambitious national target to win €1.25bn of funding over the lifetime of the programme (2014 – 2020). This is more than double Ireland's performance in the previous programme (FP7), and Ireland is on track to achieve that ambitious national target. In the period from commencement of Horizon 2020 in January 2014 to November 2016 Ireland had an overall success rate of 15.33% [EU average: 14.68%]. Our overall drawdown in Horizon 2020 in this period was €386.3m. Higher Education institutions continue to secure the largest proportion of Horizon 2020 funding, accounting for 57.2% of all funding (€221.2m) to date. Two of our main areas of success are the European Research Council (ERC) where researchers undertake cutting-edge frontier research across all fields and is often considered the most prestigious funding programme in Europe. The other programme is the Marie Skłodowska-Curie Actions which supports individual researchers at all stages of their careers. Ireland is continuing to drive towards the overall target, while also preparing for the successor to H2020, Framework Programme 9.

Campus Engage is a National Network to promote civic and community engagement as a core function of Higher Education and a *National Framework for Engaged Research* has been adopted to support researchers. Researchers actively work with the public, NGOs and government on 'Engaged Research' projects that aim to solve many social issues; thereby ensuring innovation and impactful research. Engaged Research emphasises the active involvement of the public and service users in the research and innovation process. This has seen such things as members of the public gathering data on biodiversity in rural Ireland, researchers developing interventions with and for young adults living with diabetes, and efforts to create new products for our ageing demographic.

#### High level targets

- Increase of 500 new postgraduate research enrolments in disciplines aligned to enterprise and other national needs by 2020. (*baseline 2,235 in 2014/15*)
- Increase by 30% the number of funded postdoctoral positions in disciplines aligned to enterprise and other national needs by 2020. (Innovation 2020 target)
- Double overall Higher Education research income derived from industry to €48m (Innovation 2020 target €24m in 2014)
- Increase research projects between enterprise and the public research system by 20% by 2020 (2014 Baseline is 878)
- Secure HEI Horizon 2020 target of €550m in funding by 2020 (over €200m secured by end of 2016)
- Increase applied research in the Institutes of technology

### **OBJECTIVE 4:** SIGNIFICANTLY IMPROVE THE EQUALITY OF OPPORTUNITY THROUGH EDUCATION AND TRAINING AND RECRUITS A STUDENT BODY THAT REFLECTS THE DIVERSITY AND SOCIAL MIX OF IRELAND'S POPULATION.

Ireland is one of only a few countries in the European Higher Education area that uses targeted measures to increase participation in higher education by under-represented groups, and is among the leading countries in providing alternative entry routes and in enrolments by students whose parents did not participate in higher education<sup>28</sup>.

The third National Access Plan for Equity of Access to Higher Education (2015 – 2019) was launched in December 2015. The vision of the National Access Plan is to ensure that the student body entering into, participating in and completing higher education at all levels reflects the diversity and social mix of Ireland's population. There are 6 key target groups identified in the Plan. These comprise:

- Entrants from socio-economic groups that have low participation in higher education
- First time, mature student entrants
- Students with disabilities
- Part-time/flexible learners
- Further education award holders and
- Irish Travellers

The Plan contains targets to increase participation rates by each of these groups. In order to achieve these targets, the Plan contains more than 30 actions around the following 5 keys goals –

- To mainstream the delivery of access within Higher Education Institutions
- To assess the impact of access initiatives
- To develop access data
- To building coherent pathways
- To develop regional and community partnership.

The latest data available from the HEA shows that access to third level by disadvantaged groups is improving. In particular, the number and share of students from disadvantaged backgrounds rose from 22% to 26%, and of students with a disability rose from 7% to 11% between 2012/13 and 2014/15.

We will carry out a mid-term review of the National Access Plan 2015-2019 in 2018 to assess progress against the Plan's goals, objectives and targets and to consider how these can be refined or further developed, particularly in view of new initiatives, including and better data that becomes available.

#### High level targets

- All HEIs will have a Student Success Strategy in place by 2020 which will embed whole-of-HEI approaches to institutional access strategies.
- Implement new data initiatives and indicators to support the development and implementation of evidenced based National Plans for Equity of Access by 2019.

<sup>&</sup>lt;sup>28</sup> National Access Plan, p. 15

- Implement the strands of the Programme for Access to Third Level (PATH) Fund to support the implementation of the National Plan for Equity of Access 2015-2019.
- Sustain the expansion from underrepresented groups with 2,000 additional enrolments from socioeconomically disadvantaged groups and 1,000 from Further education access programmes.
- Increase in enrolments from DEIS schools by ensuring that every such school will be participating in a HEI led access programme.
- Completion rates for students from disadvantaged cohorts will be specifically targeted for improvement,

### OBJECTIVE 5: DEMONSTRATES CONSISTENT IMPROVEMENT IN THE QUALITY OF THE LEARNING ENVIRONMENT WITH A CLOSE EYE TO INTERNATIONAL BEST PRACTICE THROUGH A STRONG FOCUS ON QUALITY & ACADEMIC EXCELLENCE.

The quality of provision in higher education is crucial to ensuring that graduates have the right skills, competences and experience in order to contribute fully to future economic, social and cultural development.

Quality is a broad concept that encompasses all aspects of an institution: including teaching and learning, research, the student experience, the relevance of qualifications, as well as the overall leadership and management of the institution. Progress made in this system objective is therefore closely connected with performance in relation to the other System Performance Framework objectives.

Quality assurance is an important element in ensuring the overall quality of higher education provision. In the new System Performance Framework, there is a continued focus on institutions' compliance with the overall quality assurance framework for the sector. This translates at institutional level into the extent to which institutions are engaging with the national regulator in this area, Quality and Qualifications Ireland (QQI), to establish and maintain quality assurance procedures, validate programmes, and conduct internal quality reviews.

However, internationally there is a clear move away from measuring quality through compliance with quality assurance frameworks. The 2014 EU Commission Report on Progress in Quality Assurance in Higher Education<sup>29</sup> highlighted the need for higher education quality assurance to become a means of supporting the creation of an internal quality culture rather than a box-ticking procedure. Similarly, the Council conclusions of 20 May 2014 on quality assurance supporting education and training invited Member States to "Develop and promote a culture of quality enhancement throughout education and training, with a view to improving the quality of the knowledge, skills and competences developed by learners, as well as the quality of the learning process."<sup>30</sup>

<sup>&</sup>lt;sup>29</sup> <u>http://ecahe.eu/assets/uploads/2014/01/EU-Report-on-Progress-in-Quality-Assurance-in-Higher-Education- 2014.pdf</u>

<sup>&</sup>lt;sup>30</sup> <u>http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52014XG0614(07)</u>

As a result, national authorities and higher education institutions are increasingly exploring ways to move beyond simple compliance with standards and guidelines towards a holistic approach to the enhancement of positive quality culture in higher education. This means moving from quality control to quality care, shifting the focus from process towards outcomes and putting a stronger emphasis on the management of quality culture.

In line with these international trends, the new systems performance framework contains a strong emphasis on quality enhancement. Institutions are engaged in a wide range of quality enhancement activities and information on such initiatives is collated by QQI on an annual basis as part of the annual institutional quality assurance report process. Higher Education Institutions are expected to demonstrate innovation in enhancing quality and to share with and learn from best practice in other institutions.

The shift from quality assurance to quality enhancement and the development of a quality culture poses challenges for higher education leaders. Such leaders will be expected to continue to ensure compliance with quality assurance requirements while simultaneously promoting the development of a quality culture within their institutions, and identifying areas where existing practice could be strengthened or enhanced. They are responsible for ensuring that those working within their institutions are supported and motivated to drive quality, and are also expected to ensure that quality is everybody's responsibility.

It is critical that the purpose of quality assurance and quality enhancement are targeted at supporting a quality learning experience for students. The Irish Survey of Student Engagement (ISSE) provides a rich source of data for institutions and for the Higher Education Authority on students' perceptions of the quality and relevance of their student experience. Higher education institutions are expected to reflect on, and act upon, the feedback received through the ISSE survey in order to enhance the quality of their academic provision. Another important source of data in this regard, both at institutional and national level, is student progression rates. The extent to which students are progressing through their studies can be an important indicator of the extent to which they are engaged in their academic programme and feel supported by their institution.

#### High level targets

- Implement from 2018 Continuous Professional Development Framework for all academic staff in all HEIs
- All HEIs to engage in International benchmarking by 2020
- Improve problematic non-progression rates by 10% (overall baseline of 15% for 2014/15)
- Improve non-progression rates in STEM disciplines by 10% (differing discipline baselines)
- All HEIs to have in place policies for digital teaching and learning by 2019
- The HEA will develop guidelines to steer the process of total quality management, in line with best international practice.

# OBJECTIVE 6: DEMONSTRATES CONSISTENT IMPROVEMENT IN GOVERNANCE, LEADERSHIP AND OPERATIONAL EXCELLENCE.

As outlined earlier in this document, the purpose of the system performance framework is multifaceted. Greater transparency is needed on what is delivered for the significant public investment in the sector and to support the case for greater investment in the future. Good governance, sound financial planning, strategies to diversify funding sources and good practice in operational policies and procedures are key foundations of effective institutions.

Considerable progress has been made since 2015 in strengthening the governance framework for the higher education system. Key measures have been introduced including the following:

- Submission by institutions to the HEA of annual governance statements and statements of internal control based on a revised template covering a comprehensive list of governance requirements, with non-compliance in any matter to be identified within the statement.
- Reduced timelines for the submission of draft accounts for certification by the C&AG.
- The introduction of a financial memorandum which is signed by each institution on an annual basis setting out respective responsibilities.
- Establishment of a formal policy framework for intervention when an Institute of Technology is in deficit, and core principles that should apply to universities or specialist colleges in a similar situation.
- The introduction of annual rolling reviews on corporate governance compliance themes, focusing on good practice and areas of improvement across the sector
- These measures have contributed to a robust governance and accountability infrastructure with the
  objective of providing more robust assurance of compliance with legislative and other requirements and
  more timely and responsive interventions to address any issues arising. Higher education institutions
  compliance with these governance requirements will be measured through the strategic dialogue process
  and measured against the indicators identified below.

Investment in physical and ICT infrastructure should deliver measurable impacts in terms of the student experience, the overall learning environment, innovation and other relevant opportunities for students, staff and external stakeholders.

The HEA's National Review of Gender Equality in Irish Higher Education Institutions highlighted the importance of achieving gender equality in higher education institutions as a "means to maximise their pursuit of excellence and successfully meet the many social, economic and cultural challenges of the future". The Gender Equality Taskforce appointed in November 2017, is overseeing a national systems review of the recruitment and promotion policies and practices currently in place in higher education institutions, with a view to identifying good-practice and highlighting areas that need improvement. The outcome of the Taskforce will feed into the development of a three year action plan.

In responding to the priorities and objectives set out in the framework, institutions should also use it as an opportunity for self-reflection and continuous improvement.

#### High level targets

- Implementation of the 2018 Higher Education Gender Equality Task Force Action Plan and the 2016 Expert Group recommendations.
- HEIs to have attained an Athena SWAN bronze institutional award by 2019 (TUs within 3 years of establishment)
- All HEIs to submit their annual Governance Statements to HEA on time
- 100% compliance by HEIs with public procurement rules
- Draft annual financial statements to be submitted by HEIs to C&AG within stipulated C&AG guidelines
- Full transparency in HEI financial statements about accounting for Trusts and Foundations
- 100% compliance by HEIs with public pay policy
- 100% compliance by HEIs with public sector numbers controls
- Implementation of recommendations from rolling governance reviews
- HEA will develop individual compacts with the HEIs which reflect the overall ambitions of the System Performance Framework and local/regional opportunities.
- Institutional strategic compacts will be assessed by a panel of experts, including international participants, to access their coherence and capacity for delivery.

#### PERFORMANCE INDICATORS

The performance indicators will be used to measure performance for a number of purposes, to:

- Measure and capture the performance of the HE sector at an aggregate level
- Measure and capture the diversity of activity across the sector
- Demonstrate value for money
- Inform decision-making and allocation of funding

In assessing the performance of the system we will seek to:

- Use international and national data that exists in order to minimise additional administrative burdens
- Use indicators that are meaningful to stakeholders and the general public
- Are useful for the higher education institutions in academic and strategic management and planning

The main purpose of the indicators is to measure and capture the overall performance of the HE sector, thus also providing an overall framework for the strategic dialogue process and evaluative conversations. This will lead to the development and agreement of compacts and evaluation of performance based on the evidence provided by the institutions. The indicators will also assist institutions and other stakeholders to identifying system and institutional strengths, areas for improvement and opportunities for innovation. Institutions should also use the framework to inform self-assessment. Detailed performance metrics under each of the 6 System Performance Objectives are set out in the Appendix to this document.

## INSTITUTIONAL RESPONSES

While there are a number of compulsory elements to the new system performance framework that higher education institutions (HEIs) will be required to report on, in line with the goal of system diversity set out in the National Strategy for Higher Education, the process of strategic dialogue and agreement of individual performance compacts between the Higher Education Authority (HEA) and each publicly funded higher education institution allows the opportunity for institutions to identify appropriate institutional performance indicators and targets.

We do not expect or want each institution to respond in the same way to each high level goal or report on every metric in the Framework. We recognise that not only will the form of the contribution vary between institutions, the scale of that contribution will also vary. Institutions must make their own strategic choices as to how to deploy their resources; it is not appropriate that institutions simply divide up resources to try and meet a wide range of discrete policy goals. Within the context of the overall System Performance Framework, institutional targets and indicators should:

- Be congruent with the institutions' published strategy
- Be ambitious
- Mission critical, understandable and inclusive
- Trackable on a regular basis and aligned with existing assessments
- Maintain sensitivity to external conditions and mission
- Drive continuous improvement

### DEPENDENCIES

The Department recognises that the higher education sector operates in a wider context and ecosystem which includes dependencies outside the control of higher education institutions that impact on the potential outcomes, outputs and innovations achieved in higher education.

## FUNDING

Agreement and implementation of a sustainable funding model is a critical issue for the higher education sector as the implementation of this Framework commences. Rising enrolments across the system reflects both increased student demand and increased demand from employers for high skilled graduates<sup>[2]</sup>.

The impact of reductions in resources allocated to higher education during the financial crisis, coupled with the increase in demand for places, has seen a decline in the student: staff ratios which has impacted on the ability of institutions to provide for teaching and learning experiences that benefit students most, for instance small group work, laboratory based projects and retention supports.

<sup>&</sup>lt;sup>[2]</sup> Higher Education System Performance 2014-2016, p. 9

The overall student numbers in the sector increased from 196,000 in 2011/12 to about 210,000 in 2014/15 (ESPR, 2016: p.10). The CEDEFOP predicts that over half of all job opportunities in Ireland over the period to 2025 will require higher education qualifications<sup>31</sup>. In addition, the government aims at 100 new apprentice schemes by 2020 which should lead to the provision of 50, 000 apprenticeships places by 2020<sup>32</sup>.

Research, development and innovation are seen as critical to Ireland's economic and social development in the years ahead. Innovation 2020 is targeting an increase in research student enrolments in order to increase Ireland's pipeline of early-stage researchers. A more accurate alignment between the research overheads provided by funders and the full economic cost of research will enhance the sustainability of the system. Funding is required to achieve the ambitions set out in Innovation 2020 to make Ireland a *Global Innovation Leader* and this has significant implications for refresh and expansion of infrastructure and equipment and funding requirements to increase researcher numbers across the system in areas of national priority.

An independent Expert Panel, appointed by the HEA, reported to the Minister in December 2017 with proposals to reform the current allocation model for funding higher education. The Expert Panel's report, makes 33 recommendations in total that are intended to transition towards a reformed funding model that has the potential to:

- embed lifelong learning at the heart of Irish higher education provision;
- recognise and respond to the demographic challenges and changing patterns of student demand;
- make access and innovation central to all institutional missions;
- ensure that funding can be channelled effectively to support research and skills development; and
- reward institutions for delivering outcomes and impact.

The review provides a roadmap for transitioning towards a reformed funding model that is more transparent, consistent across higher education institutions, that incentivises actions in key strategic areas, and supports improved accountability while also respecting institutional autonomy. The HEA are leading in implementing the recommendations in the Review.

The reformed funding model, as it is implemented, has significant potential to complement and support the System Performance Framework. Under the new funding model proposed by the expert panel, there are proposals for a performance fund that would reward higher education institutions that excel, either individually or collectively, in key strategic areas. While the design of the fund is under consideration at present, areas that could potentially be identified as relevant include areas that are measured and reported on through the system performance and strategic dialogue process such as student progression and graduate employability rates.

The reformed funding model also includes provision for an innovation fund. This would allow institutions, or clusters of institutions, to develop and submit proposals for funding that have the potential to support transformation within the higher education sector and maximise its impact on economy and society. The objective is to identify ways of doing things better, or deliver services or programmes more efficiently and more effectively.

<sup>&</sup>lt;sup>31</sup> Ireland: Skills forecasts up to 2025, CEDEFOP 2015

<sup>&</sup>lt;sup>32</sup> NSS

The funding model will also work in tandem with the system performance framework, and the overall governance framework for the higher education system, to ensure a robust system of governance and oversight is in place. As noted earlier in the report, the governance framework sets out a range of mechanisms to ensure comprehensive and transparent reporting and accountability for governance compliance and performance. In defining a series of key performance indicators related to such governance performance (Appendix 1, Objective 6), this system performance framework will ensure that there is a further layer of accountability and a move towards governance best practice across the system. In order to provide further assurance over 'red line' governance compliance issues which have the potential to undermine the reputation of the system, the new funding model will also have provision for a financial penalty for serious breaches of governance. These would be applied in circumstances such as unsanctioned payments to staff; failure to provide timely and accurate submission of required accounts, reports, information and data; false financial, statistical or governance reporting; and wilful breaches of the code of governance.

Following the Mid-Term Review of the Government's Capital Plan, an increase in capital funding for higher education brings total funding over the period 2018-2021 to €367 million. This funding will be prioritised to support the system objectives as set out in this Framework, with particular attention to the role of infrastructure in catering for expanded student numbers, supporting quality and academic excellence, and delivering economic and social impact nationally and regionally. This investment will take place alongside a PPP programme for the sector, which will deliver 11 new buildings across Institutes of Technology. Infrastructure planning will be undertaken with a ten year perspective, aligned with the Government's 10 Year Public Capital Investment Plan and National Planning Framework, both under development. The higher education sector has a key role to play in delivering on the objectives of the National Planning Framework with regard to a more balanced regional growth.

During the period of this System Performance Framework, and taking account of the limited Exchequer capital resources available, priority will be afforded to essential refurbishment work (or in limited cases infrastructure replacement) to address health and safety issues, support capacity expansion and align with new ways of teaching and learning, and to a limited number of flagship projects whereby Exchequer funding can be used leverage funding from other sources, such as philanthropy. The Department of Education and Skills and the HEA will work with HEIs over the immediate period ahead to review capital appraisal approaches in the sector, with a focus on ensuring value for money. The HEA will also undertake a comprehensive space survey to update the understanding of infrastructure condition and utilisation on a system-wide basis.

#### CONCLUSION

Given the importance of higher education performance to many of Ireland's ambitions, the Department has since the publication of the National Strategy for Higher Education in 2013, been developing a more strategic and performance oversight role, to assess current performance, and to guide the system toward increased performance. This System Performance Framework now sets out the objectives which Government is setting for our Higher Education Institutions for the period 2018 – 2020, together with the high level targets to be achieved in this period. This very ambitious programme of work will require a close alignment between the

various elements which together form the higher education system in Ireland, particularly in relation to funding.

The recommendations in the Review of the Allocation Model for Funding Higher Education Institutions will be complemented and be supported by this new Higher Education System Performance Framework. The Framework, and the process of mission based compacts and strategic dialogue that support it, is a key mechanism for ensuring accountability for funding allocated to the higher education sector.

The review of the Allocation Model proposes a reformed funding model that will provide greater transparency in how State investment in higher education is being allocated. It will also provide for stronger and clearer links between national strategic priorities and the types of programmes being delivered in higher education institutions. The new funding model will also incentivise higher education institutions to respond to the key System Performance Objectives - in relation to research, skills needs, and promoting access and lifelong learning. The type of reforms being proposed, including the financial penalty for serious governances breaches, will assist in ensuring that future additional investment in higher education will be targeted at key priority areas.

#### Appendix 1

This section sets out the detailed metrics and indicators associated with each of the Government objectives for the Higher Education sector. Reporting on a number of these metrics will be mandatory so that a baseline can be established and progress tracked at national and regional level. The mandatory metrics will be agreed between DES, HEA and HEIs to underpin the implementation of the Framework and the next round of strategic dialogue and performance compacts.

### **OBJECTIVE 1**

Providing a strong talent pipeline combining knowledge, skills & employability which responds effectively to the needs of our enterprise, public service and community sectors, both nationally and regionally, and maintains Irish leadership in Europe for skill availability

| INDICATOR TYPE   | INDICATORS  |
|--|---|
| TRENDS IN GRADUATE OUTCOMES PROFILE OF GRADUATE OUTFLOW BY DISCIPLINE AND RELEVANCE TO IDENTIFIED NATIONAL AND REGIONAL NEEDS  | <ul> <li>Graduation rates</li> <li>Time to graduation</li> <li>Graduate employment, earnings and further studies</li> <li>1<sup>st</sup> year retention rates</li> <li>Springboard and other evaluations</li> <li>Number and % of graduates by level and discipline</li> </ul>  |
| CONTRIBUTION TO THE NATIONAL APPRENTICESHIP<br>SYSTEM AND IMPLEMENTATION OF THE<br>APPRENTICESHIP ACTION PLAN<br>IMPLEMENTATION OF THE ICT SKILLS ACTION PLAN<br>2018 – 2026 | <ul> <li>Number of new industry led apprenticeships</li> <li>Number of apprenticeship registrations by discipline</li> <li>Number of apprentices by discipline / gender</li> <li>Annual % growth in intake (female / male)</li> <li>Graduates by level of qualification / mainstream / targeted programmes</li> </ul> |
| IMPLEMENTATION OF THE FOREIGN LANGUAGES IN<br>EDUCATION STRATEGY   | <ul> <li>Retention rates</li> <li>Proportion of students undertaking language<br/>modules programme by discipline and level</li> </ul>  |
| ROLLOUT OF SPRINGBOARD+ AND OTHER TARGETED   | <ul> <li>Institution type</li> <li>Qualification type</li> <li>Completion rates</li> </ul>  |
| PUBLIC SECTOR WORKFORCE PLANNING   | <ul> <li>Response to needs identified as part of the implementation of Health and Social Care Workforce Planning Framework</li> <li>Output of teachers to meet sector demands</li> </ul>  |

| STUDENT ENTERPRISE AND EMPLOYABILITY     | <ul> <li>IP awareness and education modules by level &amp; discipline</li> <li>Increase in availability of employability statements by institution and discipline</li> <li>Proportion of programmes and / or modules reviewed or developed in consultation with employer representatives</li> <li>Proportion of Masters/PhDs on programmes co-funded by enterprise</li> <li>Increase in work placements by discipline and level of qualification</li> <li>Increase in number of "sandwich year" courses</li> <li>Number of research masters and PhD enrolments: relative percentage by discipline</li> <li>Annual trends in these enrolments</li> <li>Proportion of post-graduates undertaking a work placement or work-based project</li> </ul> |
|--|--|
| INCREASING IRELAND'S RESEARCHER CAPACITY | <ul> <li>Numbers of Masters/PhDs by discipline</li> <li>Numbers of Masters/PhDs by industry sector</li> <li>Number of Post-Doctoral researchers and annual trend</li> <li>Number of Principal Investigators and annual trend</li> <li>Number of HE qualified researchers working in the Enterprise sector and annual trend</li> </ul>  |

Creating rich opportunities for national and international engagement which enhances the learning environment and delivers a strong bridge to enterprise and the wider community

| the wider community  |  |  |
|--|--|--|
| INDICATOR TYPE   | INDICATORS   |  |
|  | Employer satisfaction rates with HEI collaboration with enterprise   |  |
| ENGAGEMENT AND   | <ul> <li>Number of Students on Work Placement</li> </ul>   |  |
| COLLABORATION WITH   | <ul> <li>Number of Student Projects in collaboration with enterprise</li> </ul>  |  |
| EMPLOYERS AND OTHER  | Recruitment / Career Services  |  |
| ORGANISATIONS  | Use by enterprise of HEI Equipment and Facilities  |  |
|  | <ul> <li>Regional Skills Fora engagement data and reports</li> </ul>   |  |
| Community Engagement   | <ul> <li>Proportion of programmes that provide curricular options for socially engaged research and/or community based learning/ community engaged learning</li> <li>Proportion of staff engaged in socially engaged research</li> <li>Proportion of students engaged in socially engaged research</li> <li>Proportion of staff involved in community based/community engaged learning</li> <li>Proportion of students involved in community based/community engaged learning</li> <li>Proportion of staff involved in volunteering</li> <li>Proportion of students involved in volunteering</li> <li>Percentage increase in primary and second level students participating in competitions and initiatives (male / female, DEIS status)</li> </ul> |  |
| INTERNATIONALISATION   | <ul> <li>Proportion of international full-time student in the system</li> <li>Number of students from core and high potential markets</li> <li>Further development of relationships with partner countries through<br/>an appropriate increase in the number of branch<br/>campuses/articulation agreements/joint awards/international online<br/>programmes</li> <li>Number of Incoming mobility of International Academic Staff and<br/>researchers</li> <li>Publications with international peers</li> <li>Organisation of international conferences</li> </ul>   |  |
| INCREASED LEVEL OF MOBILITY<br>AND INTERNATIONAL EXPERIENCE<br>OF IRISH RESEARCHERS, STAFF<br>AND STUDENTS | <ul> <li>Organisation of international conterences</li> <li>Number of student exchange – outward and inward</li> <li>Number of courses with a mandatory built-in mobility period abroad</li> <li>Number of Marie Curie and other researchers</li> <li>Number of staff in the HEIs International sections</li> <li>Number of Academics on mobility</li> <li>Number of Staff on Erasmus+ bilateral programmes</li> <li>Number of Staff on non-EU bilateral programmes</li> </ul>   |  |

Excellent research, development and innovation that has relevance, growing engagement with external partners and impact for the economy and society and strengthens our standing to become an Innovation Leader in Europe

| INDICATOR TYPE   | INDICATORS  |
|--|---|
| PUBLIC : PRIVATE INVESTMENT IN<br>R&DI<br>RESEARCH QUALITY & ACADEMIC  | <ul> <li>HERD as a % of GNP</li> <li>Position in OECD</li> <li>GERD as a % of GNP</li> <li>Increase in proportion of income from Enterprise, EU,<br/>Philanthropic sources</li> <li>Number of publications and field-adjusted percentage share of</li> </ul>  |
| IMPACT<br>INTERNATIONALLY RECOGNISED<br>RESEARCH WHICH WILL ENHANCE THE<br>REPUTATIONS OF STAFF,<br>INSTITUTIONS AND IRELAND | <ul> <li>world output</li> <li>Number of publications per academic staff</li> <li>Field adjusted citation rates</li> <li>Citation impact</li> <li>Increase in number of research and scholarship activity/outputs per research-active academic staff</li> <li>Number of staff who have undertaken research integrity training</li> </ul>  |
| FUNDING RECEIVED UNDER HORIZON 2020  | <ul> <li>€M drawdown, and annual trend</li> <li>Number of retained proposals / signed contracts</li> <li>Sectoral distribution</li> </ul>   |
| RESEARCH EXPENDITURE, RESEARCH<br>AGREEMENTS AND CONSULTANCY   | <ul> <li>Research expenditures (less block grant)</li> <li>Income per staff member</li> <li>Number of collaborative research agreements with industry</li> <li>Percentage of overall HE research income derived from industry</li> </ul>  |
| SPIN-OUT COMPANIES, INCUBATION<br>& USE OF FACILITIES  | <ul> <li>Number of spin-outs established during the year</li> <li>Number of staff start-ups established during the year</li> <li>Number of Active spin-outs in existence at the end of the year</li> <li>Number of companies supported within the incubator in year</li> <li>Number of contracts with companies for use of facilities and equipment at the RPO</li> <li>Number of student-led companies supported within the incubator in year</li> <li>Number of spin-ins supported in each year</li> <li>Number of bespoke training programmes offered for industry and/or industry engaged in life-long-learning programmes</li> </ul> |
| IP and IP transactions   | <ul> <li>Total number of invention/software disclosures received during the year</li> <li>Total number of new patent applications filed during the year</li> <li>Total number of patents granted in year</li> <li>Total number of patents owned by the RPO at year end</li> <li>Total number of licences, options and assignments executed (LOAs)</li> <li>Types of organisations which whom LOAs were made (SME; MNC; other)</li> </ul>  |
|  | Occupancy rates in the incubator  |

Excellent research, development and innovation that has relevance, growing engagement with external partners and impact for the economy and society and strengthens our standing to become an Innovation Leader in Europe

| INDICATOR TYPE INDICATORS                   |   |
|---|---|
|   | IP generated by the HEI / campus companies in the year  |
| INCREASED COLLABORATIONS WITH<br>ENTERPRISE | <ul> <li>Number of active collaborations between institutions and<br/>enterprises</li> <li>Percentage of PhD awards involving employer partners</li> <li>Public-Private scientific co-publications (no. and per million of<br/>population)</li> <li>Number of EI Innovation Vouchers redeemed and value of EI<br/>Innovation Partnerships</li> <li>Number of SFI Industry Fellowships</li> <li>Number of IRC Enterprise Partnerships</li> <li>Multi-disciplinarily (researcher involved from more than one<br/>discipline; Irish vs non-Irish)?</li> <li>Revenue generated from contract service/consultancy with<br/>industry/non-profit</li> <li>Research collaborative agreements wholly or partly funded by<br/>industry</li> </ul> |
| OPEN SCIENCE                                | <ul> <li>% of publications deposited in Open Access repositories</li> <li>Number of researchers trained in FAIR data management</li> </ul>  |
| ENGAGED RESEARCH                            | <ul> <li>Number of active engaged research partnerships / projects</li> <li>Income generated by successful engaged research projects</li> <li>New skills and competencies generated by engaged research findings</li> <li>Number of new products /patents generated by engaged research findings</li> <li>Number of new capacity building programmes developed/revised based on engaged research evidence</li> <li>New or revised public policy based on engaged research evidence</li> </ul>   |

Significantly improve the equality of opportunity through Education and Training and recruits a student body that reflects the diversity and social mix of Ireland's population

| POPULATION<br>INDICATOR TYPE   |   |
|--|---|
| INDICATOR TYPE   |   |
| PROGRESS TOWARDS BOLOGNA OBJECTIVE TO ENSURE THAT<br>THE STUDENT BODY ENTERING, PARTICIPATING AND<br>COMPLETING HIGHER EDUCATION, AT ALL LEVELS, REFLECTS<br>THE DIVERSITY OF IRELAND'S POPULATION | <ul> <li>Progress against the National Access Plan<br/>targets including: participation by<br/>socioeconomic disadvantage, students with a<br/>disability, traveller participation, mature<br/>students and progression from further<br/>education and training</li> </ul>  |
| INCREASE NUMBER OF THOSE AGED <b>25</b> TO <b>64</b> ENGAGED IN<br>LIFELONG LEARNING FROM <b>7.2% (2015)</b> TO <b>10%</b> BY <b>2020</b><br>AND TO <b>15%</b> BY <b>2025</b>                      | <ul> <li>Percentage increase in lifelong learning /<br/>formal education participation rates</li> <li>Percentage increase in lifelong learning /<br/>employed participation rates</li> <li>Percentage increase in lifelong learning /<br/>unemployed participation rate</li> </ul>  |
| INCREASE THE NUMBER OF ENTRANTS STUDYING ON A<br>FLEXIBLE BASIS (ONLINE, PART-TIME, MODULAR) BY 25% BY<br>2021 (APE 2016-2019)   | <ul> <li>Number of students by programme type</li> <li>Sectoral distribution</li> <li>Graduate level</li> <li>Regional distribution</li> </ul>  |
| INCREASE IN NUMBERS AND PROPORTIONS OF ENTRANTS<br>FROM NON-TRADITIONAL ROUTES   | <ul> <li>Numbers and proportions entering from FET<br/>and through recognition of prior learning</li> <li>Engagement with FET provides on access,<br/>progress, teaching and learning to enhance<br/>the links and collaboration across the tertiary<br/>sector</li> </ul>  |
| HIGHER EDUCATION PERSISTENCE AND COMPLETION RATES<br>FOR UNDER-REPRESENTED GROUPS  | <ul> <li>Progression from 1st year and completion<br/>rates for socio-economic and under-<br/>represented groups</li> </ul>   |
| % OF STUDENTS IN TERTIARY EDUCATION BY MODE OF ENROLMENT   | <ul> <li>Position in EU / OECD</li> <li>Relative to EU / OECD averages</li> </ul>   |
| Part-time enrolment Undergraduate and<br>Postgraduate  | <ul> <li>2015/16: 22,192 (of which 28% in STEM)</li> <li>2015/16: 15,057 (16% STEM)</li> </ul>  |
| OVERALL PARTICIPATION BY UNDERREPRESENTED GROUPS AS<br>OUTLINED IN THE NATIONAL ACCESS PLAN BY 2019  | <ul> <li>Semi/unskilled manual worker group (new entrants to HE as a % of 18-20 year olds in the population) from 26% - 35%.</li> <li>Non-manual worker group (new entrants to HE as a % of 18-20 year olds in the population) From 23% to 30%</li> <li>Full-time mature student entrants (% of all new entrants to HE) from 13% - 16%.</li> <li>Full &amp; part-time mature student entrants(% of all new entrants to HE) from 19% to 24%</li> <li>Students with disabilities (% of new entrants to HE) from 6% to 8%</li> <li>Part-time/flexible participation (% of all students in HE) from 19% to 22%</li> </ul> |

|  | <ul> <li>Entrants on the basis of a further education qualification (% of new entrants to HE)from 6.6% to 10%</li> <li>Irish Travellers (overall number in HE) from 35 to 80</li> </ul> |
|--|---|
|--|---|

Demonstrates consistent improvement in the quality of the learning environment with a close eye to international best practice through a strong focus on quality & academic excellence

| INDICATOR TYPE   | INDICATORS  |
|--|---|
| IRISH SURVEY OF STUDENT ENGAGEMENT (ISSE)  | <ul> <li>Index scores per institution for the nine indicators of<br/>student engagement<sup>33</sup> benchmarked against national and<br/>institution type norms</li> </ul>   |
| PROGRESSION RATES  | Progression rates national, sectors, HEI, discipline and level of programme   |
| TRANSITIONS REFORM   | Number of CAO programmes: national, sectors, HEI  |
| Progress against agreed commitments to<br>reduce/review number of level 8 programmes<br>and broaden entry routes   |   |
| RATIO OF STUDENTS TO TEACHING STAFF IN   | Position in EU/OECD   |
| EDUCATIONAL INSTITUTIONS   | Relative to EU/OECD averages  |
|  | <ul> <li>National trends</li> </ul>   |
| LINKS TO WORKPLACE AND RESEARCH  | <ul> <li>Percentage of students undertaking a work placement</li> <li>Percentage of undergraduate students active in<br/>research/undertaking a research project prior to their<br/>final year of studies</li> <li>Implementation of the National Framework for Doctoral<br/>Education</li> </ul>   |
| QUALITY ASSURANCE COMPLIANCE AND<br>QUALITY ENHANCEMENT  | <ul> <li>Eurydice bi-annual report</li> <li>Quality assurance procedures established in accordance with the 2012 Act</li> <li>Linked providers reviewed</li> <li>Authorised to use the International Education Mark</li> <li>Internal quality assurance reports published</li> <li>Annual institutional quality reports published</li> <li>New programme approval/validation reports published</li> <li>Programme review/revalidation reports published</li> <li>Doctoral framework implemented</li> <li>Quality enhancement initiatives undertaken</li> <li>Students trained for participation in quality assurance</li> </ul> |
| LEARNING IMPACT<br>TRACE+ awards recognise higher<br>education disciplines in their<br>commitment to the development of<br>excellence in teaching and learning | <ul> <li>Number of disciplines with current TRACE+ awards by institution</li> </ul>   |

<sup>&</sup>lt;sup>33</sup> Higher Order Learning, Reflective and Integrative Learning, Quantitative Reasoning, Learning Strategies, Collaborative Learning, Student-Faculty Interaction, Effective Teaching Practice, Quality of Interactions and Supportive Environment.

|                  | <ul> <li>Implementation of the Continuous Professional<br/>Development Framework</li> <li>Number of staff with "Digital Badge" for completed CPD<br/>by academic year</li> </ul>                  |
|------------------|---|
|                  | <ul> <li>Percentage and proportion of research active academic staff</li> </ul>   |
| STAFF CAPABILITY | <ul> <li>Percentage of staff qualified to PhD level</li> </ul>  |
|                  | <ul> <li>Number of staff supported through research-related training, e.g. in doctoral supervision, career development.</li> <li>Number of staff on assignments into enterprise, other</li> </ul> |
|                  | HEIs or internationally.  |
|                  | <ul> <li>% of academic staff who have worked in a non-academic<br/>environment (e.g. industry, public sector, civil society,<br/>cultural body etc.)</li> </ul>                                   |

Demonstrates consistent improvement in governance, leadership and operational excellence.

|                                 | INDICATORS  |
|---------------------------------|---|
| INDICATOR TYPE                  | Annual Governance Statements  |
| INSTITUTIONAL GOVERNANCE        |   |
|                                 | Compliance with procurement rules     Accounting Timeliness: Submission of droft annual account within  |
|                                 | <ul> <li>Accounting Timeliness: Submission of draft annual account within stipulated C&amp;AG guidelines</li> </ul>                               |
|                                 | <ul> <li>Responsiveness: Submission of annual governance statements, staff<br/>statistics, SRS returns within HEA stipulated deadlines</li> </ul> |
|                                 | Pay Policy Compliance: Levels of unsanctioned payments  |
|                                 | <ul> <li>Staffing: Staff numbers within target set within Delegated Sanction<br/>Agreement</li> </ul>   |
|                                 | Implementation of recommendations from rolling reviews of   |
|                                 | governance  |
| LEVEL AND SOURCES OF FUNDING    | Public : Private  |
|                                 | Research  |
|                                 | Core Grant by Institute   |
|                                 | Spend per student   |
|                                 | International benchmarks  |
|                                 | Pay : Non-pay ratio of institutional budget   |
|                                 | Competitive process funding   |
|                                 | Level of funding secured from Performance and Innovation funds  |
| RELATIVE UNIT COSTS             | Institution Type  |
|                                 | Discipline  |
|                                 | Graduate  |
| LEVEL OF EFFICIENCY GAINED AND  | Savings achieved through:   |
| SAVINGS ACHIEVED THROUGH        | Shared Services   |
| IMPLEMENTATION OF REFORM        | Centralised procurement   |
| INITIATIVES IN LINE WITH        | External service delivery model   |
| GOVERNMENT POLICY               |   |
| IMPACT OF CAPITAL INVESTMENT    | <ul> <li>Student space ratios (measured by subject area)</li> </ul>   |
|                                 | Space utilisation   |
|                                 | New student places generated  |
|                                 | Investment in capital and equipment renewal as percentage of  |
|                                 | annual budget   |
|                                 | Provision of new spaces for RDI activity  |
| COOPERATION WITH AND            | Progress of Technological University projects   |
| IMPLEMENTATION OF               | Reform of initial teacher education   |
| RESTRUCTURING                   |   |
| SELF-REFLECTION, SUSTAINABILITY | Strategic dialogue and compacts   |
| AND STRATEGIC DIRECTION         | Outcomes and responses to self-assessment tools such as   |
|                                 | HEInnovate  |
| PERFORMANCE MANAGEMENT          | Strategic Dialogue and review of performance against compacts   |
|                                 | <ul> <li>Allocation of performance Funding</li> </ul>   |
| WORKLOAD MANAGEMENT             | National and international benchmarks   |
| GENDER EQUALITY                 | <ul> <li>Implementation of the HEA Expert Group report on Gender Equality</li> </ul>  |
|                                 |   |
|                                 | Implementation of the Gender Equality Taskforce Action Plan   |

Demonstrates consistent improvement in governance, leadership and operational excellence.

| INDICATOR TYPE               | INDICATORS  |  |
|------------------------------|---|--|
|                              | Athena Swan accreditation                           |  |
| ENVIRONMENTAL SUSTAINABILITY | Environmental sustainability policies and practices |  |
|                              | Number of green flags awarded                       |  |