APPENDICES DIT part 2

<u>**Quality assurance**</u>

DIT has clarified that in terms of maintaining the quality of provision, it has a long track record of supporting a significant cohort of research students and has since the granting of degree awarding powers, maintained a distinct structure and quality assurance framework for graduate research education. The Graduate Research Regulations Handbook, now in its 8th edition, has, since 1996, established and documented the academic guidelines and regulations of the Dublin Institute of Technology in relation to graduate research awards. These cover all aspects of recruitment, application and registration procedures; progression, confirmation and transfer arrangements; examination procedures; and arrangements for alternative modes of research such as the award of PhD by prior publications.

Quality assurance procedures incorporate best practice guidelines informed by longstanding participation in the various doctoral education projects of European University Association (EUA) and by participation and contribution to the National Framework for Doctoral Education. Particular attention is given to key milestones in the research process - recruitment, progression and transfer arrangements - to ensure good progress and timely completion. Evaluation procedures are underpinned by commitment to rigorous peer review. Each research student, for instance, undergoes an annual evaluation, comprising an independent panel alongside the supervisory team, to monitor progress and address any issues in the research. Successful completion of an annual evaluation is a requirement for re-registration on an annual cycle.

The Structured PhD programme, which was rolled out in full as of September 2016, further embeds these procedures, supported by a structured framework of education and training for research and professional development planning, employability skills training and discipline specific modules. The PhD Programme is overseen, as per Quality Enhancement procedures, by a Programme Committee representing all relevant Schools and research leaders. The regular cycle of Quality Enhancement reviews includes detailed attention to the graduate education provision of each academic unit thus ensuring that quality standards are consistent, transparent and subject to continuous improvement.

In summary, DIT is confident that the appropriate organisational structures, quality assurance procedures and arrangements are in place to provide a scalable and sustainable model to meet our objectives for graduate research education in a Technological University context. Furthermore, it is worth noting that the decline in research student numbers is of more recent origin and part of the national decline in overall research enrolment. In the period prior to 2011/12, DIT consistently maintained an average 4% of its total enrolment in Level 9 and 10 research (approx. 400 FTE). Thus, the recent drive to increase the research student base is one of restoring an appropriate profile for research activity across all Schools and Colleges.

Research

The core objectives outlined in the DIT Strategic Plan and further developed in the Research Action Plan are as follows:

- Concentrating and consolidating research activity, including PhD study, in areas of research focus of coherent verifiable strength and national significance to enhance competitiveness and sustainability including:
    - Strengthening and embedding technology transfer and entrepreneurial activity.
    - Environment, Energy and Health
    - Information, Communications and Media Technologies
    - New Materials and Devices
    - Society, Culture and Enterprise

They identified three key actions as specific areas of focus to achieve these objectives:-

a. The implementation of an Institute strategy to grow and diversify research funding and sustain its long-term development.

To date, DIT has secured reasonable levels of national funds for research and development. It has been particularly successful in securing awards from bodies such as Enterprise Ireland for collaborative research and proof of concept support. In order to diversify the research funding base, DIT has implemented initiatives to increase the level of funds secured from other national and European funding agencies with a focus on projects of larger scale.

b. Development of research capacity through: a) increasing the number of full-time academic staff that hold a PhD qualification or equivalent and b) growing the proportion of research-active colleagues.

The Research-Action Plan identified several specific -interventions intended to support and/or incentivise academic colleagues to engage in research for the first time, to re-engage or build their engagement further in terms of research activity. This activity was stimulated by a significant investment programme funded by DIT and underpinned by a team of research support staff across the Institute. As reported through the successive cycles of the Compact, DIT has achieved success in growing its core academic staff with a doctoral qualification from 39% in the baseline year to 45% in 2016.

Increase number of research students outlined in our Research Action Plan and in self-evaluation reports, this action has received significant attention and over the course of the Compact has increased research student numbers from the baseline figure of 300 FTE to just under 500. The focus on increasing the numbers of research students has not been taken in isolation but rather in the context of the overall planned development of the research student profile required both to meet criteria for Technological University designation and to achieve the appropriate level of research activity within Schools and in line with disciplinary norms. Particular attention has been given to ensure that all research activity is underpinned by a robust and rigorous system of quality assurance and that the structures supporting research are effective, scalable and meet best international practice.

As previously indicated, reporting on research students numbers has logically been done on a TU4D Consortium basis. With the full implementation of the joint Graduate Research School in January 2016, all graduate education planning has been undertaken on a joint basis between DIT, IT Tallaght and IT Blanchardstown. Our common goal is to develop the research student base on a joint basis,

meeting the target of 4% of our total Level 8-10 enrolment as research. For this reason, we have presented total enrolment figures on a combined basis.

A system of devolved targets by School, College and Institute has been developed based on research capacity and existing share of research student numbers. This has provided the principal planning vehicle by which targets in individual areas are identified and monitored. (Details of our planning schema are available on request). Reports are presented on a monthly basis to the Graduate Research School Board and tabled at the Academic Councils of the three institutions as well as to the senior management teams. DIT as the largest partner has taken the biggest share of research enrolment. However, an important emphasis of our research development has been to support an even and consistent approach, enabling all Schools to develop their research mission taking into account their various different starting points.

In respect of research funding, figures consist of award values from external competitive research

	2013	2014	2015	2016	2017	2018
HEA Target	€4,443,600	€4,830,000	€5,250,000	€5,750,000	€6,210,000	€6,706,800
DIT Performance (External Awards)	€12,821,407	€4,097,517	€3,792,445	€5,878,587	€4,000,074	€0
Delta	€8,377,807	-€732,483	-€1,457,555	€128,587	-€2,209,926	-€6,706,800

In the baseline year for 2013, the DIT performance figure included significant PRTLI funding. This, as we point out in our 2015 SER, had the effect of distorting subsequent years' performance and hence our decision to recalibrate targets based on actual awards on an annual cycle with a projected year-on-year increase. As such, funding performance was below target in 2014 and 2015. However, following a number of important new interventions under the Research Action Plan, this has been turned around so that in 2016 we have met and slightly exceeded the target. Projecting into 2017 and 2018, DIT is on track to comfortably meet its targets, reflecting increased activity and improved performance in external competitive funding rounds.

In respect of publications, data is collected on a calendar year basis and uses Scopus, Web of Science and other databases to collect annual publication and citation figures. Therefore, the data should be read in terms of the baseline in the calendar year of 2013 and subsequent years.

To clarify the institute's research strategy in the context of the criteria for TU designation, we offer the following:-

DIT with its partners, IT Tallaght and IT Blanchardstown, remain committed to meeting the criteria for Technological University designation, including attaining the target of 4% research student enrolment. Over the course of the Compact period, we have developed strategies to meet this goal, adjusting to the challenging national funding environment and seeking to diversify our funding base. We also look to the increased capacity of the three Institutes combined in order to meet this target and indeed to work towards a sustained process of development to support a trajectory of attaining 7% research student enrolment.

To support this ambitious target within a tight timeframe, DIT as well as our partners in Tallaght and Blanchardstown have increased supports for research development from alternative sources, including philanthropy, self-generated income and industry funding. This, in the context of reduced overall national funding, has been challenging. However, as supported by the evidence supplied in successive SERs, the partners have made significant progress and continue to work towards achieving the common goal for staff and research student profiles.

Going forward, DIT with ITT and 1TB will build on this research strategy and continue to deploy a targeted approach towards a) consolidating and concentrating research activity, b) grow and diversify the research funding base, c) develop new capacity through staff recruitment and development policies as well as researcher career supports. We will build on and leverage our strong performance in applied research and knowledge transfer to support new funding streams both in terms of industry partnerships and on the basis of philanthropy. The Strategic Plans of the three Institutes share the same goal 'To be a Force for Research and Innovation', building research & innovation capacity in a number of targeted fields, creating useful knowledge, enhancing each Institute's profile and addressing real challenges in new and innovative ways. This combined approach will be used to harmonise planning processes, build capacity and achieve sustainable growth in research & innovation in a coordinated way.

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