

2017 STRATEGIC DIALOGUE CYCLE 4 SELF-EVALUATION REPORT



SECTION 1

OVERVIEW

1.0 Introduction

This document provides a self-evaluation of performance for Cycle 4 of the Strategic Dialogue. It also provides a review of progress since the commencement of the process.

2.0 Review of Cycle 4

With reference to the 2016 KPI's, AIT has achieved 17 out of the 18 Targets that were set out in the compact, this includes the upward revision to the research KPI, as set out in 2015.

The overarching and interrelated priorities of:

- Student Experience
- Applied Research
- Fulfilling Technological University Criteria

as outlined in Cycle 3, remain the focus of our strategic dialogue.

2.1 Reflection and stretch targets

The Institute continues to make significant progress in implementing its Strategic Plan objectives. To date, over half of all targets have been met. Building on Cycle 3, the institute continues to focus on quality enhancement and is committed to evidence based actions and strategy to progress our priority areas.

AIT has robust processes and systems that support the coherence and delivery of an effective strategy, which are informed by the Strategic Plan, its Strategic Risk processes, Executive Management, Governing Body, stakeholders and the student voice.

The Institute is encouraged by the recognition that has been shown by QQI. In its Annual Dialogue Meeting with QQI on 23rd January 2017 QQI noted that *“the institution is actively promoting a culture of ownership in terms of QA activities across the organisation.”*

As documented throughout this submission, we continue to benchmark our provision across the breadth of activities within and beyond the sector. In March 2017 the Institute agreed to engage with U-Multirank to extend our benchmarking to International peer HEIs. The Institute expects that it will report on this process as part of the next round of Strategic Dialogue. Benchmarking in conjunction with additional datasets (e.g. ISSE, exit surveys, etc.) will help define future thematic priorities and associated targets.

Within the context of the current financial constraints, the balance between resource allocation and enhancement of provision remains the acute focus of the Institute as we progress towards TU.

3.0 Institute Priority Areas

3.1 The Student Experience – Enhancement and Action from the ISSE results

Data collated from ISSE plays a significant role in defining the enhancement agenda with respect to the student experience. Confidence in the validity of the data (61% participation rate), enables focused action with respect to the delivery of faculty pedagogical training, PASS advice and guidance, programmatic reviews, programme boards and bespoke grassroots initiatives (e.g use of clickers, flipped labs, screencasts, ePortfolios). Exemplifying the use of ISSE data for enhancement and action is the institutes focus on feedback to the learner. Since 2014, this thematic focus has seen an increase of over 21% of ISSE respondents who acknowledged they received prompt and detailed feedback over that period.

With 53% of students now receiving prompt and detailed feedback, the success of the associated actions is apparent. Additionally, the impact of ISSE on practice has helped sustain exceptionally high participation rates (consistently the highest of all HEI's) and furthered the integration of research and teaching. For example, AIT identified 1st year feedback as a theme for a collaborative project with our MEND partners that was successful in securing funding via a competitive process from the National Forum for the Enhancement of Teaching and Learning in Higher Education, to conduct a research project to enhance first year feedback. The results of this research has led to a significant fall from 19% to 11% of first year students who did not receive any feedback. Additionally, there is a significant engagement by faculty, in research activity associated with contemporary understanding of learning, pedagogy and assessment practices. The integration of evidence based practice and research enhanced teaching and learning will remain the focus of the Institute into subsequent cycles.

3.2 Applied Research

We are strategically focusing our activities on applied research and growing critical mass in core competency platform areas (namely bioscience, materials and software) that were built up over many years. These priority areas are aligned with national priorities (namely, future networks and communications, data analytics, management, security and privacy, digital platforms, content and applications, smart grids and smart cities, medical devices, diagnostics, therapeutics, manufacturing competitiveness, processing technologies and novel materials), and are commensurate with the research criteria for becoming a Technological University - which we have met and exceeded. AIT has focused on growing scale in delegated authority areas (Microbiology, Toxicology, Polymer and Mechanical Engineering, and more recently (2015) Software and ICT) to award at Level 10 - which align with our core competency areas and AIT's Strategic Plan 2014-18. The developed research expertise is of strategic importance to the development of contemporary and relevant undergraduate, postgraduate, professional, springboard and bespoke offerings. For example, the development of a new Polymer apprenticeship, the restructuring of science offering and the development of core pillars are directly benefiting for the research activities within the Institute.

3.3 Technological University Criteria

Becoming a Technological University is a key priority of AIT and is underpinned by our investment and commitment to our regional mission. The Institute in Cycle 3 stated: “..... a Technological University is essential if the Midlands is to achieve its untapped potential.” During the Spring of 2017 the Institute collaborated with Regional Public Bodies and Industries in responding to the new National Planning Framework, and all parties emphasised in their submissions, how essential it was to have a Technological University in the Midlands. International expert Professor Simon Marginson stated:

“The designation “University” is not a small issue for the Midland Region. It is one of the key issues for the long term development of this Region. In fact, the designation ‘University’ is essential if higher education is to make its full contribution in the Midlands.” (1)

Notwithstanding the fact that AIT currently meets all the criteria to become a TU, with the exception of merger, the Institute is committed to sustaining the development of a QA culture, an enhanced student experience and support for research activities that span early stage research to state of the art contributions.

4.0 Review of Strategic Dialogue 2013-2016

The formulation of the Compact Key Performance Indicators during 2013 was informed by the Institutes new Strategic Plan (launched in September 2104). However, the commencement of the Compact was during a time of continuing cuts in funding and while the injection of an additional €36m in 2017 is most welcome, a significant proportion of this funding is top-sliced. The Institute would like to note, that with the current financial pressures the level of top slicing of the recurrent grant is too high.

In general the targets were stretched, and for many the stretch comes not only from the target levels that are set, but from considering the on-going and longer term ability to embed practices and initiatives so as to ensure sustainable impact. Some targets - notably in Research - were met earlier in the Compact period than projected/anticipated. The success of the unit and the research centres is commendable and gives us a significant platform to build a TU. The international student target turned out to be difficult to achieve due to major difficulties in some market segments that could not have been foreseen, but we suspect would be significantly aided by TU status.

Having now been engaged in four cycles of the dialogue, there is merit in reviewing the frequency of the process. Each cycle of the process involves considerable resources of the Institute and it is our view that a yearly review may be too short a period to fully review activities. There is a case to be put that the cycle should be over a longer timeframe.

(1) Report for AIT 2016 Professor Simon Marginson

SECTION 2

STRATEGIC DIALOGUE CYCLE 4

1. Regional Clusters

Dublin/Leinster II Cluster (Midland, East & North Dublin – MEND Cluster)

During 2016 the Cluster was involved in the delivery of four projects:-

1. Maintenance and development of the Higher Education and Further Education Network – A formal Network of Further Education and Higher Education providers was established for the purposes of collaboration on enhancing access, transfer and progression opportunities across the region. The Network consists of HE and Education and Training Board Partners from across the region, as well as participation from QQI and SOLAS.
2. Maintenance of the FE-HE portal, and the investigation of the feasibility of establishing a national portal – MEND ‘Pathways to Higher Education’ Phase II (2016): A national web-based portal was developed which shows pathways from further education (FE) to higher education (HE). The strategic objective of the project was to develop and test a working prototype of a national FE_HE Portal populated with current programme data which could then be hosted by a suitable national organisation, subsequently launched and used to support access routes from FE to HE. The portal can be viewed at http://pathways.maynoothuniversity.ie/mend/index_mend.html
3. Development of the short and medium term academic planning process as an exemplar for the sector – The four HEIs in the cluster shared their enrolment data and intake projections for the purposes of shared enrolment analysis.
An analysis of courses did not reveal significant opportunities for efficiencies. Where there were courses with small intake they were either:
 - Strategically important for the Institute
 - Largely sharing modules with other programmes or
 - Feeder courses at Level 6 designed to widen participation
4. Mapping of the small and medium sized enterprise across the region and developing systematic engagement with SMEs – Our goal in creating the map, was to enable enhanced dialogue with enterprise within the MEND region, and to enable more focused academic planning that is informed by the requirements of enterprise.

These projects were supported by the HEA and it was recognition that the MEND Cluster was considered a best practice exemplar for the sector.

Regional Clusters – Targets

Institution objective	<p>Agree and implement processes to establish and support a sustainable and shared academic planning process to ensure coherent, coordinated and rational higher educational provision across the region. The shared academic planning process will involve:</p> <ol style="list-style-type: none"> Preparation of projections of demand for higher education in the region and consideration of options for a strategic approach to provision by the cluster institutions, Preparation of a scoping study that will map existing course provision, student numbers, catchment areas, and arrangements for access, transfer and progression. It will seek to identify areas of demand, potential for collaboration, and potential for more coherent and rational provision, and A review of the student records and administrative systems and agreement of protocols for the delivery of joint programmes, and also shared registration, alignment of marks and standards, and quality assurance procedures.
Performance indicator	<p>The cluster institutions will agree and implement a regional cluster enrolment plan for higher education provision. More specifically, we will monitor (a) the number of CAO entry routes by institution and (b) the number of, and enrolment on, joint academic programmes as per published Compact.</p>
Baseline	<p>There is a complete absence of systematically compiled data and information at the regional cluster level.</p>
Final target, end 2016	<ul style="list-style-type: none"> Commence implementation of plan for regional academic programme provision and commence implementation of rationalised entry routes, The number of, and enrolment on, joint academic programmes as agreed in shared academic programme finalised in 2015, Complete review of pilot phase of delivery of shared and joint programmes at undergraduate and postgraduate levels.
Progress against 2016 Target, Commentary and data source	<p>The MEND Cluster Enrolment Analysis and Projections 2016 project has given each MEND partner a valuable data set which is of great benefit for Academic Programme Planning. The Institute is currently reviewing and has identified courses for rationalisation.</p>
Summary	<p>Target achieved</p>

Institution objective	Develop a regional approach to access, transfer and progression
Performance indicator	The cluster institutions will: (a) develop an integrated regional approach to access, transfer and progression, and (b) Prepare regional inventory of all options and mechanisms for ATP from FE to HE at programme and institutional level. The quantitative performance indicator will be the number of students transferring into or between institutions.
Baseline	There is an absence of systematically compiled data and information at the regional cluster level.
Final target, end 2016	To have the full implementation of new transfer and progression pathways underway.
Progress against 2016 Target, Commentary and data source	<p>The MEND Cluster has reviewed procedures for access transfer and progression between HEIs and also between the FE and HE Sector.</p> <p>The MEND Project “Pathways to Higher Education Phase II” has developed a portal that</p> <ul style="list-style-type: none"> • Identified pathways from FE Programme to HE Programme • Identified the entry requirements and modes of entry for programmes • Identified geographical locations of relevant FE programmes with their subsequent links to one or more HE Programmes <p>The unique feature of the Phase II FE-HE portal is that this data has never existed in one easy to use location previously.</p>
Summary	Target achieved

2. Participation, Equal Access and Lifelong Learning

Participation, Equal Access

AIT is committed to widening participation at HE level and to providing a supportive equal opportunity learning environment for all of our students. In particular, our Access strategy and supports focuses on those within our society who are under-represented in third level (The National Plan for Equity of Access to Higher Education, 2008).

We provide pre-entry supports for example:

- Saturday Maths Programme targeting 2nd level students from DEIS communities
- Assistive Technology Summer Camp for second level students with Specific Learning Difficulties
- Afterschool Homework Club for DEIS students
- DARE clinics

While attending AIT a myriad of supports are offered to students including:

- Learning supports such as the Academic Writing Centre
- Subject specific tutors in maths, chemistry, biochemistry, business and programming
- Peer Assisted Study Support Programme (PASS),
- Counselling and pastoral care,
- Financial support,
- Educational and career guidance, advocacy, and personal development opportunities

We continue our relationship with Graduate Alumni through the provision of education and career guidance and fulltime post graduate education and research opportunities and part time evening courses through our Department Lifelong Learning.

AIT endeavours to increase participation of under - represented groups through links with DEIS schools in the midland region, PLC colleges, VTOS centres, SOLAS, local youth groups, training for employment centres, education and training boards, the national learning network, Intreo and the probation services.

The Institute continues to attract a significant number of mature students. However, as the economy continues to improve and alternative work opportunities are available for prospective mature learners this will become more of a challenge. AIT continues to benchmark intake against national data and we remain in line with national trends. The most recently published data from Higher Education System Performance Institutional and Sectoral profiles of 2013/2014 show:-

Benchmark

	AIT	CIT	DKIT	GMT	IT Blanch	Carlow	Sligo	Tallaght	Tralee	L/kenny	Limerick	WIT
Mature Entrants	24%	7%	20%	21%	26%	24%	16%	17%	21%	28%	24%	18%

Source: Higher Education System Performance Institutional and Sectoral profiles 2013/2014 (most up to date published data)

There is a considerable effort made to increase participation and diversity. Links are maintained with disability related organisations (AHEAD, DARE, PWDI, NLN, DAI, Deafhear, NCBI, IWA, MESA, Offaly PPN), and to schools and Education and Training Boards in the region and nationally. We place a strong emphasis on supporting the mental health of our students and have increased counselling resources in the past 2 years in line with ever increasing student demand. We are also actively working on a **Direct Provision Centre project** which is a collaboration between Residents, New Horizon, Westmeath Community Development, AIT Student Resource Centre, Chaplaincy, AIT Student Union, students and staff. The institute is in the process of applying for University of Sanctuary status, (<https://universities.cityofsanctuary.org/>,

Note: See Appendix 1 for a list of work ongoing with the Direct Provision Centre in support of this application; Appendix 2 for Access – Post entry support for students

Department of Lifelong Learning

The Institute has a dedicated department focussing on the lifelong learner and towards the creation of learning opportunities for the lifelong learner. This department is in partnership with the Institute Community to provide student-centred, career and work-focused education, training and applied research programmes for our diverse cohort of lifelong learners within a professional and supportive environment

In particular, in recent years the Institute has offered lifelong learning outreach programmes in Galway, Tullamore, Castlebar and off –campus in Athlone as depicted in table below:

Centre	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Tullamore	22	22	22	17	0
Galway	--	21	21	43	21
Castlebar	--	--	--	17	17
Athlone (Alkermes) -	--	--	--	20	20
Total	22	43	43	97	58

Strategically the Dept. is addressing two core enhancement issues, funding and flexible delivery. Funding for adults participating in part-time programmes has remained a challenge in 2016/2017 for those in the midlands region. To address this and support those adults who wish to return to learning, the Department of Lifelong Learning has introduced a flexible payment plan, enabling fees to be paid over the academic year and not all up front. For some, this involves students making weekly contributions. The Department of Lifelong Learning is also in discussions with local Credit Unions in relation to supporting students with perhaps preferential student loans for adults.

In 2016/2017, the department successfully delivered its first in-service e-learning certificate programme demonstrating that it is incrementally increasing the delivery channels available to students as they attempt to access the various programmes on offer.

Participation, Equal Access and Lifelong Learning – Targets

Institution objective	To increase the number of non-standard learners engaging through Lifelong Learning
Performance indicator	To realise an increase in student enrolments from the current annual population of some 800 learners. The funding challenge is perceived to be an obstacle currently to growth.
Baseline	827 students registered in September 2012
Final target, end 2016	Total Part time students of 1,200
Progress against 2016 Target, Commentary and data source	1058 part-time students registered as at 1 March 2017. <u>60</u> part-time students registered as e-learning and in-service March 2017. 1118 part-time academic registered students <u>204</u> part-time students registered on Hobby programs. 1322 part-time students registered as at 1 March, 2017
Summary	Target Achieved

Institution objective	Participation in new AIT ENGAGE programme
Performance indicator	Student membership of clubs and societies, in particular those societies involving civic engagement and volunteering.
Baseline	This is a novel departure and thus has a zero baseline engagement currently. There are, however, various examples of local engagement and volunteering to be found currently within the faculties.
Final target, end 2016	300 active members, 30 students to complete student leadership training
Progress against 2016 Target, Commentary and data source	<p>Clubs :29 Societies: 34 Active members: 420</p> <p>Target of 300 is achieved with 420 student members across all faculties. AIT is actively working towards University of Sanctuary, Gaisce and Green Campus awards for next year as part of the AIT ENGAGE programme.</p> <p>AIT is actively engaged with our Students' Union in the National Student Engagement Programme which is a collaborative initiative under development by the Higher Education Authority (HEA), the Union of Students in Ireland (USI), and Quality and Qualifications (QQI). A common student representative training programme is being developed. http://usi.ie/nstep/</p> <p>The annual USI Student Achievements Awards Ireland held in April 2017, saw Athlone Students' Union emerge as winners in two of the three categories for which they were shortlisted. (Welfare Campaign of the Year and Outstanding Mental Health Activism).</p> <ul style="list-style-type: none"> • Welfare Campaign of the Year (AITSU Your Welfare Week) • Mature Student of the Year (AITSU Declan Rodgers) • Outstanding Mental Health Activism (AITSU – AIT Please Talk Society)
Summary	Target Achieved

Institution objective	Further develop and embed Peer Assisted Student Support programme (PASS)																																																		
Performance indicator	Increase in number of 1 st year courses offering PASS																																																		
Baseline	8 courses in 2012/13																																																		
Final target, end 2016	23 courses																																																		
Progress against 2016 Target, Commentary and data source	<p>PASS Programme Progression</p> <p>2016/17 ended with 33 Leaders facilitating sessions across 26 programmes</p> <table border="1"> <caption>Data for Figure 1: Progression of the PASS programme since 2009</caption> <thead> <tr> <th>Year</th> <th>PASS Sessions</th> <th>Programmes</th> <th>Leaders</th> <th>FY students</th> </tr> </thead> <tbody> <tr> <td>2009 Pilot</td> <td>3</td> <td>3</td> <td>3</td> <td>53</td> </tr> <tr> <td>2009/10</td> <td>9</td> <td>9</td> <td>19</td> <td>260</td> </tr> <tr> <td>2010/11</td> <td>10</td> <td>10</td> <td>28</td> <td>169</td> </tr> <tr> <td>2011/12</td> <td>9</td> <td>12</td> <td>30</td> <td>257</td> </tr> <tr> <td>2012/13</td> <td>8</td> <td>17</td> <td>26</td> <td>305</td> </tr> <tr> <td>2013/14</td> <td>14</td> <td>16</td> <td>31</td> <td>386</td> </tr> <tr> <td>2014/15</td> <td>12</td> <td>17</td> <td>23</td> <td>403</td> </tr> <tr> <td>2015/16</td> <td>12</td> <td>17</td> <td>23</td> <td>466</td> </tr> <tr> <td>2016/17</td> <td>15</td> <td>26</td> <td>33</td> <td>514</td> </tr> </tbody> </table>	Year	PASS Sessions	Programmes	Leaders	FY students	2009 Pilot	3	3	3	53	2009/10	9	9	19	260	2010/11	10	10	28	169	2011/12	9	12	30	257	2012/13	8	17	26	305	2013/14	14	16	31	386	2014/15	12	17	23	403	2015/16	12	17	23	466	2016/17	15	26	33	514
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Figure 1: Progression of the PASS programme since 2009

PASS Programme and Retention

- 10 students stated that the PASS programme influenced their decision to remain in college; 8 of those students explained why:
- 'Because I made friends in the PASS class' – Pharmaceutical Science.
- 'It helped me to make class mates and adjust to college life' – Pharmaceutical Science student.
- 'It was reassuring to know the PASS leaders felt the same way in first year, but they got through it and are now in second year' – Veterinary Nursing student.
- 'It was a great way to make friends' – Pharmaceutical Science student.
- 'See the good sides and the fun that can be had in college should be done for 1-3 years' – Sports Science with Exercise Physiology student.
- 'It encouraged me to work' – Pharmaceutical Science student.
- 'I would like to be a PASS leader and help first years' – Software Design student.
- 'It made me excited for the future of my course' – Health Science with Nutrition student.

Future Planning:

- At present, AIT is reviewing the possible addition of Digital Marketing; Business Psychology; Athletic and Rehabilitation Therapy; and Pharmacy Technician for next year.
- Two new members of the PASS programme team were identified from Student Resource Centre staff to help support the programme going forward. One of these staff members has already attended PASS Supervisor training.

Summary

Final target of 23 courses has been achieved with PASS offered on 26 programmes this year

3. Excellent teaching and learning and quality of the student experience

Learning and Teaching Unit

A key strategic goal of the Institute is:

“To sustain and develop an inclusive learning community that empowers learners to be successful in a dynamic environment”

All activities of the Learning and Teaching Unit are aligned to achieving this objective, informed by findings in the ISSE, National Forum enhancement themes and the Digital Roadmap.

- By 2016, 51 staff have completed at least one special purpose award at level 9 thereby contributing to AIT Strategic Plan 2014-2018 objective of increasing the number of staff with a pedagogical qualification.
- In keeping with an objective of the AIT Strategic Plan 2014-2018 the L&T Unit devised and implemented a 2 day staff induction process. This was subsequently approved by the Executive Management Team (EMT) for implementation annually with new appointees.

ISSE

AITs response rate continues to be the highest in the country by a considerable margin which is achieved via a partnership approach between the Quality Office, Academic Staff and the Students Union.

Completion Rates Table

Year	AIT Response Rate	National Response Rate
2014	41%	16%
2015	51%	22%
2016	54%	22%
2017	61%	27%

The results for AIT continue to be positive with 87% of student rating their overall academic experience as being good or excellent. This rating has increased from 84% in the first year of ISSE in 2014. In addition, 84% of students would chose AIT if they were to start again in Higher Education. This rating has remained constant since 2014.

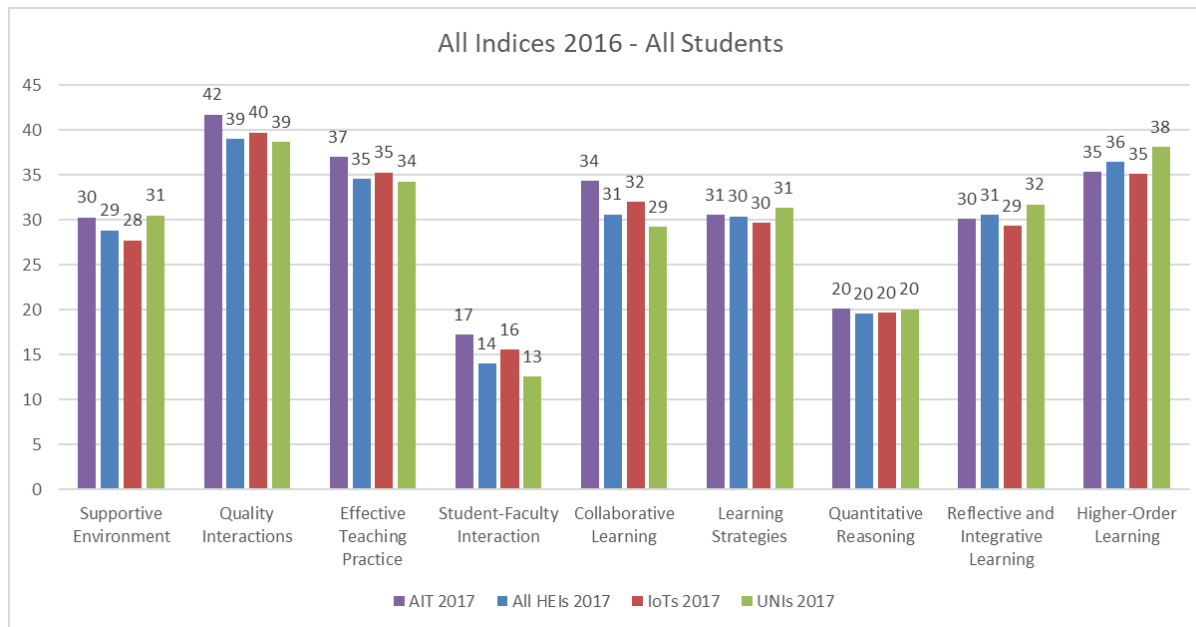
How would you evaluate your entire educational experience at this institution? (The following questions provide you with an opportunity to comment on the overall academic experience at your institution.)

Rating	2014	2015	2016	2017
Good/Excellent	84%	83%	87%	87%

If you could start over again, would you go to the same institution you are now attending? (The following questions provide you with an opportunity to comment on the overall academic experience at your institution.)

Rating	2014	2016	2016	2017
Probably Yes/Definitely Yes	84%	83%	84%	83%

ISSE Indices for AIT as benchmarked against all the HEIs that take part in ISSE, all the Institutes of Technology and the Universities. This benchmarking is completed for all students, first year, final year and taught postgraduate students.



(ISSE 2017 Indices AIT results for 'All Students' benchmarked to All HEIs, IoTs & Unis)

AIT is performing above the norm in the following categories

- Supportive Environment
- Quality Interactions
- Effective Teaching Practice
- Student Faculty Interaction
- Collaborative Learning
- Learning Strategies

**Level 6/7 Provision
Benchmark**

	AIT	CIT	DKIT	GMT	IT Blanch	Carlow	Sligo	Tallaght	Tralee	L/kenny	Limerick	WIT
Level 6	24%	12%	5%	5%	8%	15%	8%	15%	8%	13%	16%	8%
Level 7	26%	37%	42%	55%	38%	19%	46%	29%	40%	41%	23%	26%
TOTAL	50%	49%	47%	60%	46%	34%	54%	44%	48%	54%	39%	34%

Source: Higher Education System Performance Institutional and Sectoral profiles 2013/2014 *(most up to date published data)*

The Institute continues to support provision at level 6 and 7 and continues to support the LADDER System

Excellent teaching and learning and quality of the student experience - Targets

Institution objective	Increase participation and attendance at new student induction															
Performance indicator	Increased metrics around attendance at sessions, library facilitation visits, and engagement with HEA Equal Access Survey completion during induction.															
Baseline	As example, 44% completed the HEA Equal Access Survey in 2012/13 based on first year intake.															
Final target, end 2016	85% completion															
Progress against 2016 Target, Commentary and data source	<p>60% Engagement in the Equal Access Survey of 2016-2017. We achieved our 85% completion rate target in 2015-16 using Equal Access Survey Completion rates as our baseline. In 2015-16 we achieved 86.5% of students engaging with the survey. For the year 2016-17 however, the survey was removed from the IT Session in the Induction programme of activities and incorporated into the on-line Registration process. This change warrants further evaluation. The Library Tour had a participation attendance rate of 79%.</p> <table border="1"> <thead> <tr> <th>Academic year</th> <th>Induction Day</th> <th>International Students</th> <th>Post Induction Sessions</th> </tr> </thead> <tbody> <tr> <td>2015-2016</td> <td>784 (697 Main Library + 87 Nursing Library)</td> <td>134 (including 10 lecture attendees)</td> <td>199 (including 60 Springboard + 66 Life Long Learning Students)</td> </tr> <tr> <td>2016-2017</td> <td>803 (623 Main Library + 125 Nursing Library)</td> <td>76</td> <td>104 (including 22 Cavan Institute transfers)</td> </tr> </tbody> </table>				Academic year	Induction Day	International Students	Post Induction Sessions	2015-2016	784 (697 Main Library + 87 Nursing Library)	134 (including 10 lecture attendees)	199 (including 60 Springboard + 66 Life Long Learning Students)	2016-2017	803 (623 Main Library + 125 Nursing Library)	76	104 (including 22 Cavan Institute transfers)
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Summary	Target Achieved															

Institution objective	To promote excellence in learning, teaching and assessment, thereby enhancing learning experience of all students.
Performance indicator	65 members of AIT staff and 72 external participants have commenced on the flexible pathway to the LIN/AIT Postgraduate Diploma in Learning, Teaching and Assessment since 2009. Prior to this, between 2007 and 2010, 18 members of staff completed the off-campus DIT Postgraduate Certificate under SIF 1 funding.
Baseline	L&T Unit commenced offering accredited programmes in 2008. L&T Unit commenced targeted training in the use of the VLE in 2008. Prior to this such training was provided on an ad hoc basis. The figures above provide the baseline. AIT is working with Cluster partners to consider a mechanism for best sharing of expertise in this area.
Final target, end 2016	To promote excellence in learning, teaching and assessment, thereby enhancing learning experience of all students subject to resourcing-
Progress against 2016 Target, Commentary and data source	<p>Accredited Professional Development</p> <p>Postgraduate Diploma in Learning, Teaching & Assessment - SPA/modules offered 2016 Certificate in Learning & Teaching (15 ECT) Certificate in Action Research for Educators (15 ECT) Certificate in Technology Enhanced Learning (15 ECT) Certificate in Formative Assessment Feedback (15 ECT) Implementing a UDL Curriculum (5 ECT) Capstone Module: Reflection, Action & Evidence Review (5 ECT)</p> <p>25 AIT and 15 external candidates were awarded the Postgraduate Diploma in Learning, Teaching and Assessment by 2016. The relationship between pedagogical development and the student experience is one the institute will continue to develop over time. The relationship attaining L&T qualifications and research engagement is evident (figure below) when examining the numbers of graduates who have progressed to further studies (n=4 PhD) or are involved in or leading externally funded educational research projects (n=8). In 2016, 8 AIT and 4 external candidates completed the major award. In addition, by 2016, 51 staff members have completed at least one special purpose award at level 9 thereby contributing to AIT Strategic Plan 2014-2018 objective of increasing the number of staff with a pedagogical qualification.</p>

Non-accredited professional development

First Steps in Learning and Teaching: In keeping with an objective of the AIT Strategic Plan 2014-2018 the L&T Unit devised and implemented a 2 day staff induction process. This was subsequently approved by the Executive Management Team (EMT) for implementation annually with new appointees. The Learning and Teaching unit was awarded funding by the National Forum for the Enhancement of Teaching and Learning for the **What works and Why? Project:** <http://www.teachingandlearning.ie/digital-enhancement-funding/showcasing-and-developing-digital-capacity-tel-week-projects-febmarch-2016/technology-enhanced-learning-what-works-and-why-2/>

7 digital themed development events held in 2016 in AIT

10 “What works and why?” small scale educational research projects commenced exploring the use of technology in learning, teaching and assessment. Additional on-going staff development opportunities were provided throughout the academic year.

Technology Enhanced Learning

The restructuring and establishment of three Faculties and changes to the reporting from Banner has led to greater efficiency in deploying learning analytics and the reporting of usage by lecturers and students. This now becomes the baseline data for future reporting. The 2016 data indicates that the virtual learning environment is used across all academic areas to provide a blended learning experience for students across all programmes.

Moodle Usage

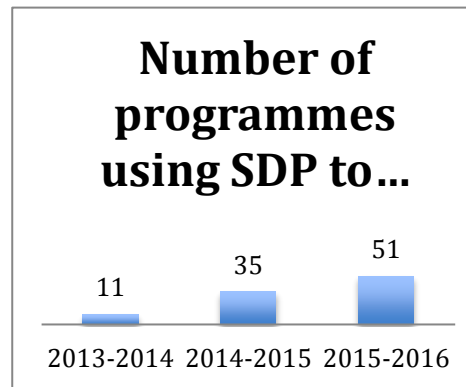
School	Lecturer Usage 2015-2016	School	Student Usage 2015-2016
Business	157	Business	1689
Engineering	101	Engineering	1083
Science	172	Science	2053
Adult and Continuing Education/LLL	97	Adult and Continuing Education/LLL	566
Total	527	Total	5391

The data also shows increased use of activity features in Moodle which support learning, teaching and assessment.

Activity Name	2014-2015	2015-2016
Assignments	2869	2901
Turnitin	440	592
Quiz	859	960
Attendance	402	431
Wikis	119	118
Forums	134	137
Database	54	56
Glossary	23	36

Placement and Student Diary Pro

2016 data shows increased use of SDP to support student learning and feedback on placement or work-based learning modules.



Digital Capacity – educational research projects

The AIT Learning and Teaching Unit is a collaborative partner on the Supporting Transition: Enhancing Feedback in First Year Using Digital Technologies (Y1 Feedback) project funded by National Forum for the Enhancement of Teaching and Learning <http://y1feedback.ie>

Two key contributions to the feedback literature were published by the project team in 2016:

Y1Feedback (2016). Feedback in First Year: A Landscape Snapshot Across Four Irish Higher Education Institutes. Available from:

<http://y1feedback.ie>

Y1Feedback (2016). Technology-Enabled Feedback in first Year: A Synthesis of the Literature. Available from: <http://y1feedback.ie>

24 case studies commenced across partner Institutes - 6 in AIT.

In 2015-2016, the Learning and Teaching Unit was involved in a successful collaborative bid under the National Forum’s discipline specific funding call. The Technology Enhanced Assessment Methods (TEAM) project is exploring ways to enhance practical assessment using digital technologies in Science and Health programmes (<http://teamshp.ie/about-the-project/>). The multi-institute project led by DKIT also involves IT Sligo and IT Carlow.

Promoting Excellence in Academic Writing

The Learning and Teaching Unit was instrumental in setting up Academic Writing Centre (AWC) established in 2015, in conjunction with the International Office and the Students Resources Centre. The L&T Unit evaluated this new initiative which sought to promote excellence in academic writing. The study, received ethical approval and sought to determine the benefits offered and challenges faced by the service to date, and to seek information would help develop and improve the service. The ensuing report presented to the EMT provided the justification for additional resourcing for the AWC in 2016-2017.

L&T Unit National Seminar 2016 funded by the National Forum for the Enhancement of Teaching and Learning entitled “Assessing and Evaluating Writing – Defining what ‘good’ writing looks like across the disciplines” presented by visiting academic Dr. Peggy O’Neill, Professor of Writing at Loyola University.

Focus on Internationalisation

The L&T Unit supported the development of **AIT English Online** – an online programme which provides an introduction to academic writing for prospective students from Chinese Partner Universities. Piloting and evaluation commencing in 2016-2017.

Supporting international students has been incorporated as a key theme in the L&T Unit accredited modules. This included Diversity in the classroom – working with international students (December 2015) and Supporting international students (October 2015).

Cultural awareness training was provided in conjunction with the International Office

Preparation for student visit to China (March 2016)

Preparation for USA placement – Athletic Therapy & Sports Science students (March 2016)

Student Engagement

In partnership with the AIT and GMIT Students’ Union, the L&T Unit devised the **Step Forward** training programme for student representatives for implementation and evaluation in 2016-2017. This is based on the Student Partnership in Quality Scotland (sparqs) initiative, which has informed the QQI national student engagement project.

L&T Unit educational research conferences/dissemination activities

5 national and 3 international

**See Appendix 3 for supplementary information*

Summary	Targets achieved
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High quality, internationally competitive research and innovation

AIT has met and exceeded all objectives and performance targets for research and innovation for 2016 and over the course of our HEA Compact 2014-16 - with a prioritised focus on applied research and meeting/exceeding the criteria for becoming a Technological University.

AIT's objective has been to build critical mass by focusing our efforts on a number of strategic platforms based on core competencies (namely materials, bioscience and software) built up over the years - aligned with regional needs and national research priorities, driving market-informed research in collaboration with industry partners.

AIT has delivered top quality postgraduate research programmes at levels 9 and 10 aligned with these core areas, and undergraduate programmes, providing a sustainable pipeline of high-calibre researchers to drive our impact-focused applied mission. Other performance indicators have included delegated authority to award at PhD levels (Microbiology, Toxicology, Polymer and Mechanical Engineering, and Software and ICT), a Research HUB facility, appointing a Director of Graduate Studies, providing structured postgraduate training through THEA's 'Graduate Research Alliance' and MEND Cluster programmes, implementing professional development plans and researcher progression processes.

Core cross-cutting strategic competencies are mirrored with our Research Institutes, Technology Gateway centres (APT and COMAND) and Centre for Industrial Services & Design (CISD) that outwardly support regional industries and communities and inwardly inform teaching. This transdisciplinary ecosystem of research and innovation delivers improved knowledge/technology transfer to enterprise via commercialisation of AIT's research activities along with underpinning Horizon 2020 and SFI Research Centre funding success. *(See Appendix 4 for details of Funding Schemes)*

Our self-reflection has identified activities for improvement moving forward including securing longer-term projects for retention of researchers, continued incentivisation of staff involvement in research, greater links with programme boards and programmatic design and review, greater capital investment in infrastructure and equipment, greater successes in EU funding initiatives, greater participation in SFI Research Centres, and expansion of our core strategic domains to reflect growth in new disciplines.

Benchmark

	AIT	CIT	DKIT	GMIT	IT Blanch	Carlow	Sligo	Tallaght	Tralee	L/kenny	Limerick	WIT
Research Income	3,303	12775	5410	2377	225	1048	1344	3675	2107	1160	4882	13809

Source: Higher Education System Performance Institutional and Sectoral profiles 2013/2014 *(most up to date published data)*

High quality, internationally competitive research and innovation - Targets

Institution objective	Build critical mass around focused areas of core research capability aligned with regional needs and national research priorities, and leverage to drive market-informed research in collaboration with industry partners.
Performance indicator	Number of industry projects Number of companies engaged Total € value of projects Value of industry contribution to projects
Baseline	Projects = 53 Companies = 48 €000 value of projects = €625 €000 industry contribution = €212
Final target, end 2016	Projects = Revised to 193 Companies = Revised to 162 €000 value of projects = Revised to €2,943 €000 industry contribution = Revised to €526
Progress against 2016 Target, Commentary and data source	Projects = 230 Companies = 161 €000 value of projects = €3,551 €000 industry contribution = €633 Progress against 2016 targets has been in line with strategic planning and demonstrates continued growth in industry engagement and industry contributions to AIT. Value of projects increased by 2% and value of industry contributions increased by 6%.
Summary	Targets achieved.

Institution objective	Deliver top quality postgraduate research programmes at levels 9 and 10, aligned with our focused research areas and undergraduate programmes, in order to provide a sustainable pipeline of researchers to drive our impact-focused applied research mission. A key catalyst would be the reestablishment and maintenance of a postgraduate research foundation funding programme for the IOT sector.
Performance indicator	<ul style="list-style-type: none"> • Delegated Authority to award at L9 and L10 by research • Director of postgraduate research studies – position in place and operational • Provision of structured generic and transferrable skills modules; professional development plans; and progression review processes for all research candidates • Support infrastructure in place.
Baseline	<ul style="list-style-type: none"> • Delegated Authority currently in place to award at L9 and L10 by research in our focused research areas: polymer, biosciences (toxicology, microbiology) and software (level 9 only at date of Compact submission). • Director of postgraduate research studies in place since 2010 • Structured postgraduate research training modules developed via ‘Graduate Research Alliance’ in place and operational for L9/L10 candidates and for research supervisors. • Structured professional development training plans and progression review process in place and operational for all postgraduate research students. • Research Hub facility in place providing the critical physical and management support infrastructure to meet the needs of top quality postgraduate research candidates.
Final target, end 2016	100% of agreed shared postgraduate research modules in place and operational with Maynooth University and Cluster partners. With the same proviso as already stated.
Progress against 2016 Target, Commentary and data source	<p>AIT postgraduate candidates have access to the Entrepreneurship and Creativity taught modules (5 ECTS credits) by agreement with Maynooth University. A number of AIT postgraduate candidates have completed this module in the past. This is in addition to the mandatory Certificate in Research Practice (30 ECTS credits delivered in AIT and open to Cluster partners) undertaken by all AIT postgraduate candidates.</p> <p>AIT postgraduate candidates can also access advice and a repository of online supports and training from VITAE - of which AIT is a member - the global leader in supporting the professional development of researchers, experienced in working with institutions as they strive for research excellence, innovation and impact. The professional development of postgraduates is also supported in the offering of generic modules such as Intellectual Property, Research Ethics, etc. Postgraduates are offered the opportunity to undergo peer review by way of postgraduate lunchtime presentations.</p> <p>Alignment of Undergraduate programmes with core research activity that capitalise on the research expertise (feedback) and pipeline (feedforward) into research opportunities and PG qualifications is in progress</p>
Summary	Targets achieved

Institution objective	Improved knowledge/tech transfer to enterprise via the commercialisation of AIT's research activities, in the form of technology licensing to Irish-based companies, and the creation of knowledge intensive 'spin-out' companies
Performance indicator	<ul style="list-style-type: none"> • Licenses, options and assignments • Spin-outs • Invention disclosures • Priority patent applications
Baseline	AIT IP Policy currently in place and operational
Final target, end 2016	<ul style="list-style-type: none"> • Licenses, options and assignments = 3 • Spin-outs = 1 • Invention disclosures = 4 • Priority patent applications = 2
Progress against 2016 Target, Commentary and data source	<ul style="list-style-type: none"> • Licenses, options and assignments = 5 • Spin-outs = 0 • Invention disclosures = 5 • Priority patent applications = 0 <p>AIT's objective is to ensure that the benefits of our research flow to the economy and society. In choosing a route to knowledge transfer / commercialisation, our objective is to maximise the value and societal return of our research and scholarship. For example, in considering a spin-out or licencing route for commercialising a particular technology, we will select the route that we believe will produce the best economic return for Ireland. So while the interchange between individual metrics may vary [Cumulative targets Compact 2014-16: LOAs 8, Spin-Outs 2; Achieved: LOAs 13; Spin-Outs 1], cumulatively we have exceeded our commercialisation targets for the period.</p> <p>Separately, over the course of TTSI2 and the Compact, AIT has seen a pattern emerging in LOAs which are based primarily on non-patented software and know-how in materials. Patenting is either not appropriate or not seen as having value by our company partners. While this resulted in a reduced number of actual patent applications, targets for (underlying) technology transfer were met and exceeded by AIT over the Compact period.</p>
Summary	Targets achieved

5. Enhanced engagement with enterprise and the community and embedded knowledge exchange

The report of the Enterprise Strategy Group pointed out that:

After education and research, educational institutions have a third role: the promotion of enterprise....The exploitation of knowledge and commercialisation of research must become embedded in the culture and infrastructure of the higher education system. This requires continued emphasis on new campus company start-ups, a pro-innovation culture of intellectual property protection and exploitation, programmes in entrepreneurship, consulting services, information services, new forms of graduate development programmes and greater links between higher education institutions and private enterprise.

This “third role” of engagement with enterprise and the community and knowledge exchange is a key strategic priority – and differentiator - of AIT and we continued to grow this activity during 2016. We continued to support enterprise in the region in developing its innovation capacity and assisting companies to develop new products, processes and designs. We continued to make support of entrepreneurship in the region part of our core mission. A key strategic priority for AIT – working in partnership with Enterprise Ireland - is to significantly increase the number of high-growth knowledge-intensive export-focused businesses in the Midlands.

AIT was awarded funding by Enterprise Ireland in 2016 for expansion (more than doubling) of the Midlands Innovation and Research Centre, our campus business incubator. An expanded MIRC will increase the research, innovation and entrepreneurship infrastructure and capacity of the Midlands - and will be cross-dimensional in its impact on Ireland’s targets under the EU’s Europe 2020 growth strategy. An expanded MIRC will support smart (knowledge and innovation driven) growth, will improve competitiveness, foster significant job creation, support graduate retention and increase Gross Value Added in the Midlands - in line with the overriding goal of AIT’s Strategic Plan 2014-2018 - the building of regional competitiveness and innovative capacity in the Midlands.

(See Appendix 5 for details)

Benchmark

	AIT	CIT	DKIT	GMIT	IT Blanch	Carlow	Sligo	Tallaght	Tralee	Letterkenny	Limerick	WIT
Technology Gateways	2	2	0	1	0	1	1	1	2	1	1	3

Source: Higher Education System Performance Institutional and Sectoral profiles 2013/2014 *(most up to date published data)*

A clear indicator of our strength in applied research is the awarding of two Technology Gateways to the Institute by Enterprise Ireland. They are as follows:

- Applied Polymer Technology
- COMMAND – Connected Media

Enhanced engagement with enterprise and the community and embedded knowledge exchange - Targets

Institution objective	Working with Enterprise Ireland, support the development of knowledge-based start-ups in the Midlands region via MIRC campus business incubator, including the New Frontiers entrepreneur development programme delivered in partnership with Maynooth University.
Performance indicator	# Number of New Frontiers Phase 2 participants/year. # Number of other entrepreneurs/projects supported per year (including incubation clients and New Frontiers clients not progressing to Phase 2).
Baseline	13 New Frontiers Phase 2 participants in 2013. 35 other entrepreneurs projects supported in 2013.
Final Target, end 2016	14 New Frontiers Phase 2 participants. 44 other entrepreneurs/projects supported.
Progress against 2016 Target, Commentary and data source	14 New Frontiers Phase 2 participants in 2016. 53 other entrepreneurs/projects supported in 2016.
Summary	Targets achieved.
Institution objective	Provide a broad range of knowledge intensive innovation services to regional and national industrial clients, delivering results in a time frame that matches industry needs, and with a focus on start-ups and SMEs.
Performance indicator	# Industry projects # Companies supported # Innovation Vouchers
Baseline	# Industry projects = 166 # Companies supported = 82 # Innovation Vouchers = 30
Final Target, end 2016	# Industry projects = Revised to 224 # Companies (Ref Section 4, CISD now part of MRI) # Innovation Vouchers = Revised to 39
Progress against 2016 Target, Commentary and data source	# Industry projects = 230 # Companies = 161 # Innovation Vouchers = 40 2016 was a good performance year in terms of AIT's knowledge intensive services. Our Technology Gateway centres consolidated their positions. We exceeded target metrics for 2016.
Summary	Targets Achieved.

6. Enhanced internationalisation

AIT has played a catalytic and leadership role in attracting international students to the region. The presence of international students on the AIT campus contributes to the economic, social and cultural development of the Midlands region and the economy of Athlone town, with 62 nationalities currently on campus. It is estimated that an international student spends on average €7000 in the local economy per annum as well as paying tuition fees to the Institute, which is a total spend for the region of €8,000,000. Parents, relatives and friends often visit the student during their studies and this contributes to spending in the local economy and attracts visitors to tourist attractions in the region and further afield.

Benchmark

	AIT	CIT	DKIT	GMIT	IT Blanch	Carlow	Sligo	Tallaght	Tralee	Letterkenny	Limerick	WIT
International (F/T)	10%	2%	11%	6%	3%	6%	5%	4%	4%	0%	2%	9%

Source: Higher Education System Performance Institutional and Sectoral profiles 2013/2014 (most up to date published data)

Traditionally, AIT has received Erasmus students from our long established agreements with universities in France, Italy, Spain, Germany, Poland, Lithuania, Belgium and Holland since the signing of our first Erasmus bilateral agreements during the Nineties. The presence of Erasmus and other international students at AIT leads to the internationalisation of the campus, whereby students learn about cultural values, how to carry out business in other markets and develop mutual respect for other cultures. Irish and international students are encouraged to participate in clubs and societies to share cultural exchanges.

The Institute's reputation for the holistic development and education of the student has played a pivotal role in the success of our international strategy. Appropriate emphasis is placed on the integration and care of incoming international students and a multi-cultural awareness is promoted throughout the student community. The International Office liaises with Learning & Teaching Unit, Student Resources and Office of Research to achieve objectives set out in the current strategic plan. International students can avail of services such as Academic Writing Centre to support them in their transition to the Irish higher education sector. AIT students who engage in international study or placement opportunities are offered the opportunity to complete cultural awareness training. These services will prepare students for their future careers and differentiate AIT graduates when commencing their careers.

The International Office and Research Office collaborate on new funding programmes, such as SFI Ireland-China programme in 2017. Research Institutes at AIT have hosted Government of Ireland researchers as well as postgraduate students funded by the Brazilian CAPES and 'Science Without Borders' programmes.

Promoting internationalisation of the campus is not possible without the support of staff across the Institute. Faculty encourage AIT students to participate in outward mobility programmes to our partner universities in Europe, China and North America and visit students to monitor their progress. Ten academic staff from all three faculties of the Institute will participate in mobility programmes to Non-EU partner universities in India, Canada, Zambia and China during academic year 2016-17. Six staff will participate in outward mobility to European partner universities with Erasmus+ funding. This integrated approach assists in promoting internationalisation and AIT students to become interested in exploring new higher education systems at partner universities and learning new cultural values.

Enhanced internationalisation - Targets

Institution objective	Extend the internationalisation of the campus,
Performance indicator	The ambition is that international students should comprise 15% of full-time learners by the academic year commencing 2020.
Baseline	Currently international students represent some 11% of the student cohort
Final target, end 2016	A target of 15% for end 2018 as set in AIT Strategic Plan 2014 - 2018
Progress against 2016 Target, Commentary and data source	<p>The performance and strategic target linked to this project was to increase international student intake from baseline 11% in 2013-14 to 15% by Q4 2018. International students comprise 12% of total AIT student population during academic year 2016-17 (SRS Returns March 2017). It is challenging to reach the target of 15% due to two factors, neither of which were foreseen at the time of writing the strategic plan. Firstly the difficulties in the market in the Middle East and secondly the decision to cease the 'Science without Borders' programme which had provided AIT with a significant number of students from Brazil. The cohort of 'Science without Borders' students from Brazil decreased from 96 in 2013/2014 to zero in 2016/2017. If these programmes had remained, AIT would have been on target to achieve the 15% by Q4 2018.</p> <ul style="list-style-type: none"> • AIT is committed to strengthening relationships with existing partner universities in Europe, Middle East, Asia, Africa and North America and liaising with government agencies to develop new markets. • AIT has six Ministry of Education approved undergraduate programmes in China, one of the highest approval ratings for any Irish HEI. • The experience of developing joint programmes in China will prepare AIT to expand collaborations with Chinese universities. • Collaboration on research projects is planned and the development of links with Chinese partner universities at postgraduate level. • The Materials Research Institute, Bioscience Research Institute and Software Research Institute attract a number of international students and researchers each year. • The Research Institutes at AIT will host increased number of researchers from our partner universities during 2017-18. <p>It is also recognised that the status of TU would be a strategic advantage in attracting international students.</p>
Summary	Progress has been made from baseline of 11% and is currently at 12%.

Institution objective	Further internationalise the curriculum of AIT programmes
Performance indicator	This has to be determined in the context of the current strategic review.
Baseline	Currently there is one full-time dedicated international programme.
Final target, end 2016	A target of 80 students undertaking an international placement, study or training abroad programme by 2018 has been set in AIT Strategic Plan 2014-2018.
Progress against 2016 Target, Commentary and data source	<p>Each Faculty has been very supportive in motivating students to consider international study and placement abroad during 2016-17. AIT launched an International Scholarship programme during 2016-17 to support students who are completing a minimum 12 week unpaid placement or study abroad programme in a Non-EU market where traditional funding mechanisms are not available. Twenty students will receive financial assistance from this scholarship for placements in China, USA and Canada during academic year 2016-17. International Office and Learning & Teaching Unit have collaborated on delivery of cultural awareness training programmes for students undertaking placement in international markets during 2016-17, as well as training programmes for staff. A staff training programme was also delivered during academic year 2016-17. Participation by staff in mobility programmes to European partner universities and Non-EU partner universities funded by the Institute promotes student mobility and promotes internationalisation initiatives on campus. One of the targets of the current strategic plan is to increase outward mobility of students and staff to our long established network of universities in Europe and Non-EU markets. AIT was a pioneering Institute of Technology in participating in the first Enterprise Ireland Trade Mission to China in 2001. AIT is proud that we have partnership agreements with 180 higher education institutions around the globe. The majority of international students choose AIT as a result of partnership agreements in place with their home institute. This established network of partner universities presents an opportunity for outward mobility of students from AIT to Europe, India, China, Malaysia, Zambia, North America to name a few of our international markets.</p> <p>The AIT network of established partner universities will assure students and their parents of support from the AIT partner university while abroad. Faculty members and international office staff will support students and parents in this decision to undertake an international experience.</p> <p>The strategic plan sets a target of increasing the number of students undertaking an international placement, study or training programmes abroad by Q3 2016 to 80.</p>

Summary of international placements and study abroad for AIT students

Faculty	2015-16	2016-17	2017-18
Business & Hospitality	11	4	12
Science	33	25	30
Engineering	7	9	13
Total	51	38	55 *

Summary of international study visits for AIT students (1-2 weeks duration)

Faculty	2015-16	2016-17	2017-18
Business & Hospitality	59	57	65
Science	10	10	10
Total	69	67	75*

Combined international placement, study or training abroad for 2015-16 = 120 , for 2016-17 = 105 and the estimate for 2017-18 = 130*

Note: *Estimated number of students

AIT is continuing to develop international links:

- Campaign to internationalise the curriculum with particular reference to the Faculty of Business and increase outward student mobility from AIT has been embraced by senior management, faculty and international office staff during academic year 2016-17.
- EMT approved the establishment of a working group comprised of two staff from International Office, one from Finance Office and three Deans of Faculties during academic year 2016-17.
- Increased outward mobility of students and staff to champion this initiative will be a key objective for this working group.

Summary

Target achieved

Institution objective	Develop mobile technologies to communicate with international students
Performance indicator	Greater ease of access and through a variety of media for international students. This is currently under active consideration
Baseline	There is currently a usage of social media tools, the intention is to develop this further with the use of a more flexible mobile platform.
Final target, end 2016	Continue to develop mobile technology in line with ICT developments and budgetary flexibility.
Progress against 2016 Target, Commentary and data source	<ul style="list-style-type: none"> • New AIT website launched with web-site design optimisation for multi-platform mobile devices during 2016-17. • Increased use of social media to communicate with international students. • Development of mobile platform for promotion of AIT to international students in priority markets with on-line application facility. • Development of on-line tuition fee payment system for international students. • Delivered Pilot “English on-line” programme for students at Chinese partner universities with support of Learning & Teaching Unit during 2016-17. • Staff at International Office will participate in social media training and on-line training programmes during 2016-17. • International Office to participate in Working Group on delivery of on-line modules to partner universities in priority international markets with support from Learning & Teaching and Heads of Faculties.
Summary	Target achieved

7. Institutional consolidation

A key strategic goal of the Institute is to achieve Technological University Status. The Institute currently fulfils the criteria. The Institute continues to seek a path that will lead to designation. This would be greatly assisted if there was legislation in place that would confirm the criteria and pathway to Technological University Status. The Institute has, during 2016, fully engaged with the MEND Cluster and has fully engaged with our partner Institutes in collaboration projects in the areas of:

- The establishment of a FET2HE
- MEND Pathways to Higher Education Phase 2
- MEND Cluster enrolment analysis and projections 2016
- Mapping of SME Enterprise across the region
- Internal reviews and enhancements (ongoing)

All of which have been successfully completed.

Institutional consolidation - Targets

Institution objective	To put in place the foundations for enhanced collaboration with partners within the MEND cluster.
Performance indicator	<ul style="list-style-type: none"> • A scoping study that will map existing course provision, student numbers, catchment areas, and arrangements for access, transfer, and progression. • A study of the student records and administrative systems • A scoping and feasibility study for a system to allow for seamless transfer of student information and records. This will be a phased project which eventually may extend to AIT.
Baseline	By the nature of the exercise, it is difficult to establish a baseline in this regard. The cluster, although it has various pockets of valuable collaboration, is effectively starting from scratch.
Final target, end 2016	An implementation plan for sharing and transfer of student information across the cluster.
Progress against 2016 Target, Commentary and data source	A working group has issued a “Protocol for the initiation, approval, management and implementation of joint academic activities within the Midlands, EAST, North Dublin (MEND) Cluster”. Part of the work of this group was to examine the requirements for effective, reliable and efficient systems for student data exchange for joint academic programmes.
Summary	Target achieved

Institution objective	To build a collaborative platform for digital learning
Performance indicator	We will create a network of expertise in digital pedagogy, which is the key enabler in capitalising on the affordances of digital technologies.....
Baseline	As performance indicator
Final target, end 2016	A set of 'learning analytics dashboards' that will systematically underpin a process of continuous improvement of the curriculum.
Progress against 2016 Target, Commentary and data source	<p>The Learning and Teaching unit continues to enhance the Institutes Learning Analytics. The unit ran several events during National Digital Capacity Week. The unit is a collaborative partner on the Supporting Transition: Enhancing Feedback in First Year using Digital Technologies Project. The unit is also involved in a collaborative bid in a project – “Exploring ways to enhance practical assessment using digital technologies in Science & Health programmes: Technology Enhanced Assessment Methods (TEAM).”</p> <p>The Institute recognises that high quality institutional data is central to understanding our students. The Institute is currently looking at ways to improve the existing evidence base by adopting a structural and robust approach to the evaluation of engagement, retention and progression.</p>
Summary	Target achieved

Institution objective	Increased collaboration with further education to enhance coherence, access, transfer, and progression.
Performance indicator	Conduct a scoping exercise which identifies and brings together the cluster's regional FE stakeholders and examines existing instruments and mechanisms for access, transfer and progression (ATP) from FE to HE at programme and institutional level.
Baseline	As above, there are some platforms in place and AIT has a strong and successful series of relationships with local ETBs and FE colleges. The proposal here is to embed these within the Cluster and to join them with parallel initiatives established by our partners.
Final target, end 2016	A bridging or foundation programme developed and ready to be offered with a number of FE providers and which is recognised by all HE providers in the region.
Progress against 2016 Target, Commentary and data source	<p>The Institute has set up a Regional Education Forum with agreed Terms of Reference for engagement with FE Providers. Meetings are currently commencing with FE to further develop engagement between the Institute and the sector.</p> <p>A formal Network of Further Education and Higher Education providers was established for the purpose of collaboration on enhancing access, transfer and progression opportunities across the MEND region. The Network consists of HE and Education and Training Board Partners from across the region, as well as participation from QQI and SOLAS.</p>
Summary	Target achieved

I hereby submit to the HEA the Self-Evaluation report for Strategic Dialogue Cycle 4.

Signed:

Date: 18th May 2017

A handwritten signature in black ink, appearing to read 'Ciarán Ó Catháin', followed by three horizontal lines indicating a signature line.

Professor Ciarán Ó Catháin
President

Appendix 1

Some of the activities in support of the application for University of Sanctuary status include:

Direct Provision Centre Project

- Fund raising for asylum seekers
- Clothes and toy collection and delivery to the direct provision centre
- Access course and English class participation for residents of direct provision centre
- Help with CV's and career advice for residents of direct provision centre
- Kids Christmas party for residents of direct provision centre
- Library membership for residents of direct provision centre
- Women's inclusion initiative for female residents of direct provision centre
- FAI Link to the direct provision centre
- Establishment of a legal information clinic by Institute staff
- Exploring free educational opportunities on line.

Appendix 2

Access - Post entry support includes the following:

- Advice and individual needs assessments available for all students on entry to AIT so they will be familiar with their strengths and individual learning styles
- Financial support and advice - 538 students benefited from the Student Assistance Fund in the past academic year. The average payment was 630 EUR. Review of last year's progression rates showed 80% of those receiving funding complete their year.
- A pilot Academic Writing Centre was established in 2015 through SIDF funding and AIT has continued to invest in this resource in the academic year 2016-17 beyond the conclusion of the pilot and external funding.
- Assistive Technology Centre (ATC) where students have access to training, PC's, specialised software, printing, photocopying and an Assistive Technology Trainer
- Needs assessment and support planning for students with mental health difficulties/conditions provided by Student Counselling Service
- Psychological services provided by the Student Counselling Service for students with mild, moderate and severe/enduring mental health difficulties/conditions. Liaison with HSE Community Mental Health Services to support transition of students with mental health difficulties/conditions into AIT, and support their academic and personal progression.

- Academic accommodations for students who need to take time out of academic courses due to mental health difficulties/conditions and support in transitioning back to studies
- On-campus group treatment and recovery classes for students with mental health difficulties/conditions, allowing students to attend these without negatively affecting their attendance at classes e.g. Decider Skills, Recovery College
- Encourage active student engagement with promoting mental health through our work with the Students' Union and AIT Engage societies e.g. Please Talk Society
- Educational Support Workers (Personal Assistants, Academic Assistants, Note takers) for certain categories of disability (Students with Sensory or Physical Disabilities)
- Examination Supports (reader/scribe, separate room or smaller shared venue, additional time, rest periods, alternative furniture, use of computer and/or audio recordings of exam papers, Read & Write Software to read paper, marking guidelines for students with SpLD and hearing impairments)
- Learning Support Tutor (focusing on students with SpLD, but available for all registered service users)
- Decider Skills training through a collaboration with the HSE and AIT for students with mental health difficulties
- Promote the use of Assistive Technologies in the lecture setting, e.g. Livescribe pen, to give greater autonomy to students in the classroom.
- Site licencing of the most commonly used Assistive Technology Software to enable their usage at all locations on campus.
- Tutorial Support (individual tuition available but also integrated with Accountancy, Science and Maths & IT Tutors available for all students). There was an overall progression rate of 90% for those students who attended the maths tutor over the summer period 2016 in advance of autumn repeats.
- Transport assistance (for students with physical/mobility difficulties)

Appendix 3

LEARNING & TEACHING UNIT KEY ACTIVITIES 2015 2016

Academic Year 2015/2016

Postgraduate Diploma in Learning, Teaching & Assessment

Certificate in Learning & Teaching (15 ECT)

Certificate in Action Research for Educators (15 ECT)

Certificate in Technology Enhanced Learning (15 ECT)

Certificate in Formative Assessment Feedback (15 ECT)

Implementing a UDL Curriculum (5 ECT)

Capstone Module: Reflection, Action & Evidence Review (5 ECT)

Other key development events 2015-2016:

The Learning and Teaching was awarded funding by the National Forum for the Enhancement of Teaching and Learning for the What works and Why? Project: <http://www.teachingandlearning.ie/digital-enhancement-funding/showcasing-and-developing-digital-capacity-tel-week-projects-febmarch-2016/technology-enhanced-learning-what-works-and-why-2/>

From 7th to 11th March 2016, the AIT L&T Unit held a number of Technology Enhanced Learning Events to coincide with the National Digital Capacity Week across the HE sector.

- Enhancing Feedback using Rubrics in Turnitin and Moodle (Geraldine McDermott/Nuala Harding)
- Moodle Step Up 1 - using glossary and databases (Geraldine McDermott)
- Technology Enhanced Feedback Approaches (Lisa O'Regan & Morag Monroe, Maynooth University)
- Google Apps: using Google Apps for student collaboration and co-operative learning (Luke Fannon & Geraldine McDermott)
- Moodle Step Up 2 - using Moodle Quizzes as an assessment tool: gapfill, MCQs and calculated questions (Geraldine McDermott & Noel Tierney)
- Universal Design for Learning (UDL) - using advanced PowerPoint to create interactive resources (Michael McMahon)
- Universal Design for Learning (UDL) - using advanced PowerPoint to create interactive resources (Michael McMahon)

Additional supports were provided for the What works and Why?

Project Themes awarded

- Technology Enhanced Teaching within the Clinical Practice Setting
- Animate – ideas worth sharing
- Exploring the use of the Flipped Classroom with Learning and Development for Higher Education (LDHE)
- Using Audience Response Technologies (ART) to Enhance Student Engagement and Learning
- AIT English Online - an introduction to academic writing for prospective students from Chinese Partner Universities
- Using OERs, PERs, Blending and Flipping to Deliver a Computer Systems Module for Year 1 Students
- iPads as Virtual Hard Back Notebooks – science students documenting their own learning experience
- Comparison Digital Mediums for use within the Online Classroom
- Evaluating the "Virtual Enterprise Hub"
- BYOD Classroom

AIT L&T Unit National Seminar funded by the National Forum for the Enhancement of Teaching and Learning

Dr. Peggy O'Neill, Professor of Writing Loyola University presented "**Assessing and Evaluating Writing – Defining what 'good' writing looks like across the disciplines**". (14 June 2016)

Learning & Teaching Unit Annual Showcase (14 June 2016) Show and Tell presentations by AIT staff undertaking action research projects:-

- *'Can you hear what I've just written?' Using Texthelp for Academic Writing*
Miriam Croke, Faculty of Science
- *Learning about Teamwork Assessment*
Joe O'Brien, Faculty of Engineering
- *Group work and its' impact on teaching practice and on the students' learning experience.*
Eileen Lane, Faculty of Science
- *How do we support students to become independent learners?*
Kirpa Chandan, Faculty of Science

Technology Enhanced Feedback Approaches (14 June 2016) (Nuala Harding & Seamus Ryan)

In order to support Phd and Ed D researchers training in the software package Nvivo for Qualitative Research was held on 20 May and 13 June 2016 supported by the Professional Development Committee.

Additional Ongoing Staff Development: -

- New Staff Induction Programme - the two-day staff induction programme piloted in September 2015 and subsequently approved by the Executive Management Team and will be offered at the start of each academic year to all new appointees.
- Academic Module Manager in preparation for programmatic review
- Examination Workshops
- Student Diary Pro – software for monitoring and assessment for students on placement
- Classroom technologies including Moodle, , eAssessment and online learning
- Developing Assessment Rubrics
- Curriculum Design

Educational Research

The AIT Learning and Teaching Unit is a collaborative partner on the The Supporting Transition: Enhancing Feedback in First Year Using Digital Technologies (Y1 Feedback) project funded by National Forum for the Enhancement of Teaching and Learning <http://y1feedback.ie>

Two key contributions to the feedback literature were published by the project team in 2016:

Y1Feedback (2016). Feedback in First Year: A Landscape Snapshot Across Four Irish Higher Education Institutes. Available from: <http://y1feedback.ie>

Y1Feedback (2016). Technology-Enabled Feedback in first Year: A Synthesis of the Literature. Available from: <http://y1feedback.ie>

The Learning and Teaching Unit was involved in a successful collaborative bid under the National Forum's discipline specific funding call. The project "Exploring ways to enhance practical assessment using digital technologies in Science and Health programmes: the Technology Enhanced Assessment Methods (TEAM)" is led by DKIT and involves IT Sligo and IT Carlow.

The Learning and Teaching Unit conducted an evaluation of the Academic Writing Centre (AWC) which was established in 2015. The aim of the study was to evaluate this new initiative which sought to promote excellence in academic writing, to determine the benefits offered and challenges faced by the service to date, and to seek information would help develop and improve the service. Approval was sought from and granted by the AIT Research Ethics Committee for the research. It was conducted using an online student survey and focus groups and individual, semi-structured interviews with academic staff, all of which took place in the institute throughout May 2016. The ensuing report presented to the Executive provided the justification for additional resourcing for the AWC.

External Representation

Education Matters Yearbook, Editorial Team representing the IoTI. Link: <http://educationmatters.ie/education-matters-yearbook/>

Conferences and dissemination activities

"Y1Feedback: Technology Enhanced Feedback Approaches for First Year". O'Regan, L., Munro, M., Maguire, M., Harding, N., Brown, M., McDermott, G., Gallagher, G., Cranny, D., McKeivitt, C., Ryan, S. SEDA Spring Teaching and Learning and Assessment Conference 2016, The Carlton Hotel, Edinburgh, Scotland, May 12-13th 2016.

'Making the transition to third level - different voices and different experiences', Harding, N., Ryan T. and Walsh, A. National Forum Seminar, Global Room, Hamilton Building. Trinity College Dublin, February 26th 2015.

"Exploring ways to enhance practical assessment using digital technologies in Science and Health programmes: the Technology Enhanced Assessment Methods (TEAM) project approach" Bree, R., Healy, E., Maguire, M., Faller, D., Harding, N., Mulvihill, A., Brazil, D., Dowling, D., Akande, A., Bird, J., Doyle, D. EDTECH The 17th Educational Technology Conference of the Irish Learning Technology Association. Law Society, Dublin, Ireland, May 26th – 27th 2016.

"Y1Feedback: Technology-Enabled Feedback Approaches for First Year" O'Regan, L., Harding, N., Brown, M., Maguire, M., Munro, M., Gallagher, G., McDermott, G., Ryan, S., Cranny, D., McKeivitt, C., Farrell, O. EDTECH The 17th Educational Technology Conference of the Irish Learning Technology Association. Law Society, Dublin, Ireland, May 26th – 27th 2016.

"VLEs – What Lecturers Want and Do". Farrelly, T., O'Grady, M., Rafetery, D., Riskey, A., Harding, N., McAvinia, C., Costello, E., McSweeney, D., Logan-Phelan, T. EDTECH The 17th Educational Technology Conference of the Irish Learning Technology Association. Law Society, Dublin, Ireland, May 26th – 27th 2016.

'Supporting Transition: Enhancing (Assessment) Feedback in First Year using Digital Technologies. A Current Practice Review.' O'Regan, L., Walsh, E., Brown, M., Maguire, M., Gallagher, G., Harding, N., & McDermott, G. The Online, Open and Flexible Learning Conference, Hagen, Germany, 29-30 October 2015.

'A Flexible Approach to Transforming Academic Professional Development, Harding, N., Fannon, L., McDermott, G., McMahon, M., Palmer, M., Russell, M. The Online, Open and Flexible Learning Conference, Hagen Germany 29-30 October 2015.

'Retention and Transitions – Addressing the Challenges and Opportunities', Ginty, C. and Harding, N. Keynote presentation at the Limerick Institute of Technology staff development day, February 12th 2015.

Appendix 4

Research

AIT has met and exceeded research performance targets for all Compact objectives as defined in Cycle 1.

Key activities that helped to achieve our performance objectives included our centralised Research HUB that fosters cross-cutting researcher collaboration between our three Research Institutes with nexus to Faculty undergraduate programmes; the appointment of a Director of Graduate Studies; and the delivery of structured postgraduate training programmes (levels 9 and 10) by way of partnering on the 'Graduate Research Alliance' coordinated by THEA, and the Dublin/Leinster II MEND Cluster programme - shared with DkIT, Maynooth University and DCU. AIT partners on the DOCTRID programme, which is one of the largest programmes in the world devoted to intellectual disabilities and/or autism research consisting of 20 institutions and organisations across Ireland, the UK and the US.

AIT's Software Research Institute is coordinating and leading a €4.7m Horizon 2020 project under the Secure Societies Call. The PROTECTIVE project runs from September 2016 to August 2019 and is designed to improve an organisation's ongoing awareness of the risk posed to its business by cyber security attacks. The PROTECTIVE consortium includes 3 National Research and Educational Networks, 3 academic and 4 commercial partners from 8 countries so as to maximise the technical and commercial impact of the outputs and the dissemination and uptake of the results.

AIT is contributing to 9 EU COST actions funded under H2020 (www.cost.eu) which support the networking of researchers in particular research fields to international consortiums. During 2016, 10 staff joined different COST actions.

Initiatives to maintain pipeline numbers of postgraduate researchers aligned with core competencies include *inter alia* introduction of academic staff time release for research, staff registration at partner universities for PhD via AIT's Staff Development Programme, operation of AIT President's Seed Fund programme that supports 15-20 postgraduate scholarships per annum, appointment of dedicated grant writer, appointment of dedicated Research HUB officer for induction and laboratory service provision, facilitating undergraduate research projects in the Research HUB to retain high-calibre pipeline graduates, appointing Visiting Research Fellows to mentor novice researchers, promoting greater cross-cutting projects between our research institutes and Enterprise Ireland funded Technology Gateway centres with collaborative links to industry and communities. We operate a research seminar programme that facilitates cross-cutting researcher presentations and specialist guest lectures from partner institutes and industry.

AIT is committed to creating a positive learner knowledge exchange environment for our researchers and staff - as attested by our *HR Excellence in Research* award in 2015. The Institute is a member of VITAE, which is a global leader in supporting the professional development of researchers, experienced in working with institutions as they strive for research excellence, innovation and impact, thus facilitating our researchers to access an international benchmarking repository of guides, training and a forum.

Research activities linked to societal and community engagements are very much encouraged. Since 2015, AIT has partnered on the SFI-Funded *Cell EXPLORERS* science education and outreach programme (led by NUI Galway) that aims to inform, inspire and involve the general public in science, technology and local research by connecting primary, second level, third and fourth level students, lecturers, researchers and the general public.

Our Research Institutes operate steering groups comprised of PIs, researchers, Faculty staff, industry representatives and leading collaborating researchers from partner HEIs that inform gaps and opportunities.

There is a commensurate need to invest in upgrading equipment and infrastructure to support activities across core domains and to embrace emerging developments in other growth areas such as sport, health science and nursing.

AIT aims to further grow numbers of research active Faculty staff, linked to innovation, enterprise and community engagements - continuing to grow critical scale and capacity in core strategic platform areas aligned with regional industry and community needs - and to create jobs. This includes recruiting postgraduate researchers linked to industry partners for funded studies (such as IRC employment-based graduate programme, Enterprise Ireland funded Partnerships and Commercialization Funds). Postgraduate researchers and staff undertake Innovation Voucher projects on behalf of SMEs. Employees from regional companies register for our postgraduate programmes.

AIT has a clear plan to grow our Research Institutes and in particular to foster cross-cutting activities - enriched by facilitating undergraduate applied research projects in the (postgraduate) Research HUB, linked to Faculties for connected student experience – fostering growth in cross-cutting strategic domains/projects/initiatives between our Research Institutes, Faculties and Technology Gateway centres and creating an annual pipeline of graduates in core competencies - where a majority are retained via external competitive funding or supported by the President's Seed Fund.

Postgraduate students are aligned with groups which include at least one postdoctoral researcher that are coordinated by Research Institute directors. These groups partner with Dublin/Leinster MEND Cluster HEIs and with other HEIs nationally and internationally. Postgraduate students progress through structured L9 and L10 programmes in four DA10 domains through partnering on Research Alliance and MEND Cluster programmes. This connected experience informs teaching programmes where researchers support innovation activities through engagement with our Research Institutes, Technology Gateway centres and Midlands Innovation and Research Centre.

CONFIRM Centre for SMART Manufacturing

As outlined in our Cycle 3 Self-Evaluation Report, AIT in partnership with regional and national stakeholders plans to position the Midlands as a Centre of Excellence for the development and adoption of advanced manufacturing processes and technologies through the development of the **Midlands Manufacturing and Polymer Technologies Campus** – with a focus on Advanced/Discrete/Additive Manufacturing and Polymer technologies, Industrial/Product Design and ‘Smart Factories’ - on a 1.7 hectare AIT site in the Garrycastle Business and Technology Park.

Since early 2016, AIT has been a partner in a Consortium led by University of Limerick and Tyndall National Institute which developed and submitted a proposal focused on Advanced Manufacturing under SFI’s Research Centres Programme Call 2016.

On 2-May-17, Science Foundation Ireland announced that it will invest €72 million over the next 6 years in four new world-class SFI Research Centres in Ireland – including the **CONFIRM Centre for SMART Manufacturing**. The decision followed a comprehensive international peer review process involving leading industry and academic experts over the previous 12 months.

CONFIRM’s vision is to transform and grow Irish manufacturing by integrating intelligence within products, machines, production systems and supply chains. To achieve this vision, CONFIRM will undertake fundamental scientific and engineering research to deliver disruptive innovations in digital manufacturing. CONFIRM will also develop dedicated testbeds and prototype lines for validation of CONFIRM’s technologies.

AIT is involved in or leading a significant number of the Centre’s proposed Work Packages and Targeted Projects.

Innovation

AIT’s objective during the 2014-16 Compact to improve knowledge transfer through the commercialisation of research was underpinned by our Technology Transfer Strengthening Initiative 2 Consortium (led by Maynooth University and partnered with WIT and IT Carlow). Enterprise Ireland / Knowledge Transfer Ireland funded/supported TTSI2 was linked to nationally important metrics; operating as a national programme ensured that individual HEI strategy and outcomes were coherent with a national agenda and that HEIs were collectively focused, acting nationally but operating locally.

Examples of excellent performance by AIT under TTSI2 were reflected by:

1. Recognition of the performance of AIT as part of an ‘A’ rated Consortium.
The Consortium was issued an A rating by an international panel in the mid-term programme review (December 2014) - which was an affirmation of the effectiveness of our operations model. The Panel recognised our alliance *“as an impressive consortium that truly sees itself as a team serving four institutions and working together in partnership. A strong KT strategy with effective KT operations is evident. There is also strong evidence of trust, sharing and a good working relationship between the partners”*.
2. The award of follow-on TTSI3 Core funding to our existing Consortium and the award of funding for a pilot Consultancy programme to a MU/AIT/ITC Consortium.

3. Exceeding our targets of Licences/Options/Assignments for 2015 and 2016, many of which were to companies new to HEI collaboration. TTSI2 facilitated AIT in providing a first-class service to companies seeking to exploit a national system of expertise, knowledge and research; AIT and the wider TTSI2 Consortium provided a set of key impacts of value to the national economy, promoting new company growth, existing company expansion and bringing to market competitive new technologies and services.

For example, AIT's ongoing collaborations with Shabra Group, a plastics recycling and reprocessing company, are testament to the impact our applied research has had on companies. From an initial collaborative project establishing their R&D department, the company has accessed expertise and equipment during many collaborations - driving their own R&D capacity and informing key decisions on capital investment. In addition, the company has invested in a dedicated R&D laboratory as a direct result of findings from research completed in AIT and has located a pilot line at AIT's APT Technology Gateway, choosing it as its strategic partner for trialling new materials.

Appendix 5

Enhances engagement with enterprise and the community and embedded knowledge exchange

Key activities and developments during 2016 in relation to AIT's engagement with enterprise and the community and embedded knowledge exchange included as follows:

Midlands Innovation and Research Centre

As mentioned in our Cycle 3 Self-Evaluation Report, in February 2016, the Board of Enterprise Ireland awarded AIT €3.0m funding for the 1,135m² expansion of MIRC facilities on the Institute's East Campus. An expanded MIRC will have the following impacts on the region:

- (1) An expanded MIRC, working in partnership with Enterprise Ireland, will bring the rate of High Potential Start-Up generation in the Midlands significantly above the national average.
- (2) The MIRC and Enterprise Ireland will work with these HPSU companies helping them to build their capabilities and secure international market access for their products and services.
- (3) An expanded MIRC will support student and graduate entrepreneurship via the MIRC-based *InnovAIT* Entrepreneurship Academy.
- (4) An expanded MIRC will support graduate retention in the region by creating high quality sustainable employment and supporting graduate entrepreneurship.
- (5) An expanded MIRC will increasingly support enterprises in the region which do not have a formal R&D capacity to make the transition to R&D performance by developing collaborative relationships with AIT and acquiring the knowledge they need to develop new products, processes and designs – thereby improving their productivity, quality and efficiency.
- (6) An expanded MIRC will be key to achieving the Government's targets in the Midlands Action Plan for Jobs to increase the number of entrepreneurs/start-ups in the region by 25% in the coming years, improve the 5-year survival rate by 25% and improve scaling performance of companies by 25%.
- (7) An expanded MIRC will significantly enhance the enterprise, innovation, research and ICT infrastructure and capacity of the Midlands.
- (8) An expanded MIRC will support the necessary shift in the Midlands towards a regional economic base which creates more sustainable and diversified sectors of employment, is more innovative, more knowledge-based, and can increasingly compete on an international basis.

Former MIRC client MooCall - a calving alert system that notifies a farmer around one hour before calving - won the Agri-Food category in the Irish Times Innovation Awards 2016. Moocall is now used in 30 countries around the world, with more than 13,000 sensors sold and has just announced a multi-million dollar contract with Animal Health International, a leading US distributor. Current MIRC client Reprinfo – a smart diagnostic technology for bovine reproduction - was a runner-up in the same category.

New Frontiers

AIT's New Frontiers Programme, delivered in the Midlands-Mid-East region in partnership with Maynooth University, supported 14 participant start-ups in 2016/17 – the first cohort under a €1.9m contract awarded to AIT by the Board of Enterprise Ireland in February 2016 to deliver the Programme over the period 2016-2020. Products being developed by the 14 start-ups include project management software, performance enhancing car parts, craft beer and innovative footwear for triathletes.

5 of our New Frontiers 2015/16 clients won €50k Competitive Start Funding from Enterprise Ireland during 2016. Acres Machinery won the Best Farm Machinery Award at the National Ploughing Championships 2016 for its *Supercrop1* machine which improves the wilting process of hay and silage.

Sweepovac, a participant start-up on our New Frontiers 2012 programme (HPSU 2013), which collaborated with AIT's Centre for Industrial Services & Design in the development of its product - a self-contained vacuum device that fits in any kitchen or utility - saw a video of its product on Insider Design's Facebook page go viral in the US in May 2016 - being viewed **48 million** times.

ESA Space Solutions Centre Ireland

ESA Space Solutions Centre Ireland – in which AIT is a partner along with Tyndall National Institute, Maynooth University, the Irish Maritime and Energy Resource Cluster, the European Space Agency and Enterprise Ireland – was launched in September 2016. ESA Space Solutions Centre Ireland facilitates access to ESA programmes, promotes the adoption of space solutions and supports the development of Irish companies, new and existing, in space and downstream sectors. ESA Space Solutions Centre Ireland operates across the four partner locations – including the MIRC at AIT. In January 2017, the first meeting of the Tender Evaluation Board of ESA Space Solutions Centre Ireland met in the MIRC to evaluate applications received in response to the Centre's permanent Open Call for Business Incubation.

Innovation Vouchers

The Institute continues to make our knowledge resources available in a flexible manner to respond to the needs of SMEs – completing 40 Innovation Voucher projects on behalf of SMEs during 2016. In June 2016, Enterprise Ireland confirmed that “Of the 37 participating Knowledge Providers with Vouchers processed to date [from 2007], AIT is ranked 2nd”.

Dublin Design Studio which collaborated with AIT’s Centre for Industrial Services & Design - supported by an Innovation Voucher - in the design and materials specification of its Scriba Stylus – a digital pen for use with tablets which has a unique squeeze motion – won the Creative Industries & Design category in the Irish Times Innovation Awards 2016.

Knowledge Intensive Services

AIT delivers a broad range of knowledge-intensive services for regional and national industrial clients - delivering results in a time frame that matches industry needs. Key drivers in relation to our knowledge intensive service provision to SMEs and industry are our two Enterprise Ireland Technology Gateways – in polymer processing and testing (Applied Polymer Technologies) and connected media (COMAND) - and our Centre for Industrial Services & Design. AIT staff actively engage with clients to provide services including product design, product prototyping, analytical testing, polymer processing, bioscience collaborations, and software development (focused on digital media communications and applications and network and infrastructure management).

AIT through the APT Technology Gateway continues to provide access to polymer materials processing facilities unrivalled on the island of Ireland. The access to this cutting-edge technology and the expertise of the staff in polymer materials processing has benefited a range of companies across sectors as varied as medical device manufacture, construction, food packaging and aerospace. A recent collaborative project with ThinStone Ireland, funded by Enterprise Ireland’s Innovation Partnership Programme, has resulted in the launch of the *Cozy Stone* product range, an aesthetic external stone panel for homes with built-in insulation provided by polymer foam. The *Cozy Stone* range has allowed ThinStone to expand its workforce, develop a purpose-built manufacturing facility and develop a presence in export markets, primarily the UK.

AIT completed 230 collaborations with 161 companies during 2016 ranging from Innovation Voucher projects, to direct/contract funded projects, to large Innovation Partnerships. We will continue to grow and develop our knowledge intensive services to assist an increasing number of industry partners, with a particular focus on supporting regional SMEs and start-ups in driving increased levels of regional innovation, competitiveness, growth and employment. We continually engage with industry/enterprise partners to determine their future research needs. For example, APT expanded its service offerings in 2016 in areas such as melt spinning, blown film extrusion, filament production and 3D printing.

Increasing Awareness of AIT's Knowledge Resources

The following were among measures undertaken by AIT during 2016 to increase awareness of our R&D facilities and knowledge resources:

- New content was - and continues to be - created for the Materials Research Institute (MRI), Applied Polymer Technologies (APT), Software Research Institute (SRI), Connected Media Application Design and Delivery (COMAND), Bioscience Research Institute (BRI) and Centre for Industrial Services & Design (CISD) internet portals. This content provides updates on facilities, expertise and case studies of completed industry interactions.
- A vibrant social media presence has been established and maintained utilising Twitter, Facebook and LinkedIn. Content is regularly refreshed to drive traffic and engagement.
- AIT's R&D capabilities were showcased at Maynooth University's *Connect* event in April.
- AIT participated in the National Industry 4.0 Summit in April.
- Participated in an IBEC regional event in May.
- Participated in a Technology Gateway Network Industry Showcase in May.
- APT and COMAND were represented in Enterprise Ireland's Innovation Arena at the Ploughing Championship in September.
- In September, AIT hosted a Life Science Career Fair in collaboration with the Biopharma and MedTech sector and the Midlands Regional Skills Forum. The event brought together over 50 companies across the sector who were actively recruiting for positions.
- An industry Innovation workshop was hosted by APT in October.
- AIT participated in Maynooth University's *Connect eHealth* event in November.
- Enterprise Ireland and IDA client visits are hosted by AIT on an ongoing basis.

Midlands Action Plan for Jobs 2015-2017

AIT leads 7 Actions and is a partner with other stakeholders in a broad range of Actions across the Midlands Action Plan for Jobs. During 2016, we submitted six-monthly Progress Reports to the Plan's Monitoring Committee in relation to the Actions which we lead.

Local Economic and Community Plans

AIT engaged closely with the County Councils in the region during 2015 in the development of their 6-year Local Economic and Community Plans (as mandated under the Local Government Reform Act 2014). We continued to work with the Councils during 2016 in relation to the extensive range of Actions for which we are either Lead or Partner in the LECPs of Westmeath, Longford, Offaly, Laois and Roscommon County Councils for the period 2016-2021/22.

MEND Cluster SME Engagement Working Group

During 2016, a MEND Cluster SME Engagement Working Group – supported by the HEA - completed work on a pilot portal mapping company engagement and skills needs of SMEs across the Cluster region – based on 155 SMEs in the Biopharma and MedTech sector as a pilot.

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