

Institiúid Teicneolaíochta Cheatharlach



INSTITUTE *of*
TECHNOLOGY
CARLOW

At the Heart of South Leinster

Institute of Technology Carlow

Self-Evaluation Report

Strategic Dialogue Cycle 2

Submission to the Higher Education Authority

22nd June 2015

***"Engage with Society, Learn through Engagement,
Challenge through Learning and Lead through Innovation"***

Engage, Learn, Challenge and Innovate represent the pillars of the revised mission of Institute of Technology Carlow as articulated in the Institute's Strategic Plan published in early 2014; a year that saw the Institute become the Sunday Times Institute of Technology of the Year for 2014, become the 4th largest Institute of fourteen institutes, exceed 2000 graduates for the first time in our 45 year history, open the multi-disciplinary *Dargan Centre for Research and Innovation* funded from non-exchequer sources, and commence planning for a new teaching wing.

In 2014 when IT Carlow was named the Sunday Times Institute of Technology of the Year the judges in making the award stated that the Institute was deserving of the award "off the back of a strong academic performance, a high completion rate and a good record in the graduate jobs market". In making the announcement Alastair McCall, Editor of the Sunday Times Good University Guide, said: "IT Carlow represents all that's good about the buoyant IT sector and made a compelling case to be our IT of the Year. Investments in outstanding facilities such as the new Dargan Centre funded from the institution's own income streams and a mission that puts students and student-support at the heart of everything makes IT Carlow stand out from the crowd."

This accolade was welcomed by staff and learners, and the broader stakeholder community, as a positive endorsement of the work being done at IT Carlow.

IT Carlow has a strong culture and set of Core Values, which puts the ***Learner Experience*** at the centre of our values system, supported by the core values of the ***Achievement of Excellence, Connectedness, Knowledge, Creativity & Innovation, and Ethics***.

The mission of IT Carlow frames this compact review and provides the overarching principles under which the mission, strategies and operations of the Institute are aligned. The publication of the Institute's Strategic Plan 2014-2018 followed a six step iterative process involving internal and external stakeholders and formed the basis for the objectives and projections contained within the Mission-based Performance Compact between IT Carlow and the Higher Education Authority. The plan and the compact contain challenging objectives and targets. The interim review of this compact in early 2015 recognised this fact and cautioned against such high targets. But this review will show that not only have the vast majority of targets been achieved for 2014 but many have been exceeded. Those not achieved to date are beyond the control of the Institute and were dependant on cooperation from external parties; cooperation not forthcoming during the period under review.

Our full time and part time learner cohort continues to grow and now approaches 7000 learners from level 6 to level 10 on the NFQ. We have made enormous steps forward in the provision of taught and research postgraduate provision that sees learners at levels 9 and 10 now comprising more than 10% of our full-time learner cohort. The Institute is a key driver of progress and development in Carlow and the regions; our linkages with the economic development agencies across the region and nationally have never been stronger. Considering its location at a strategic point midway between Dublin and Waterford, it is not surprising that a key feature of IT Carlow is its dual role in servicing students and enterprises from both the South East and the Mid-East /Greater

Dublin area. Our collaborations are seen as the benchmark against which collaborative provision should be established and maintained. IT Carlow's current student diversity is reflected in its mix of traditional leaving certificate entrants, a growing European and international student body, an increasing proportion of mature students and learners from disadvantaged backgrounds, as well as a significant number of part-time learners (approximately 33% of the total IT Carlow WTE).

At IT Carlow strategic planning is at the core of how the Institute expresses its values and expectations and makes these explicit to all of its stakeholders, both internal and external. Such planning articulates these as goals and objectives for schools and functions. These planning processes ensure that all developments are consistent with the strategic intent of the Institute and that proposals are supported by evidence-based research.

IT Carlow has adapted to the rapid pace of change in the higher education sector and is committed to playing a leading role in the the sector and the development of the economic, cultural and social life of the State. We will continue to drive quality assurance and enhancement to the benefit of our learners. Our staff are committed to the development of programmes of study and research that will present our learners with the opportunity to reach their potential; staff highly motivated in teaching their academic area of expertise; staff who have a thorough understanding of the pedagogy of third level education; who are committed to the highest standards in teaching, learning and research, and who provide learners and potential learners with opportunities to access and progress to the highest levels of qualifications, achievement and success.

P. Mulcahy
Dr Patricia Mulcahy
President

**Institute of Technology Carlow
Profile 2016 / 17**

STUDENT NUMBERS						
Entrants			Graduates			
	No.	% Change over current		Undergraduate Graduates	Postgraduate Graduates	
New Entrants (Full-time Undergraduate)	1,268	12				
Enrolments						
	Full-time	Part-time	Remote	Total	Other Enrolments (IoTs only)	
Other Enrolments (IoTs only)	No.			264		
Foundation	No.	40		40	Foundation	%
FETAC Cert	No.		0	0	FETAC Cert	%
FETAC Advanced Cert	No.	224		224	FETAC Advanced Cert	%
of which are apprenticeships	No.	224		224	of which are apprenticeships	%
				0	Undergraduate	%
				808	Diploma/Cert	%
Undergraduate	No.				Ordinary Degree (L7)	%
Diploma/Cert	No.	411	397	1,515	Honours Degree (L8)	%
Ordinary Degree (L7)	No.	1,035	480	3,176	Occasional	%
Honours Degree (L8)	No.	2,480	696	350	Postgraduate	%
Occasional	No.	30	320	0	Postgrad Diploma/Cert	%
				104	Masters Taught (L9)	%
Postgraduate	No.				Masters Research (L9)	%
Postgrad Diploma/Cert	No.	38	66	230	PhD (L10)	%
Masters Taught (L9)	No.	145	85	72	Occasional	%
Masters Research (L9)	No.	64	8	24	Total UG and PG Enrolments	%
PhD (L10)	No.	20	4	55	Total UG and PG Enrolments	%
Occasional	No.	55		6,334		
Total UG and PG Enrolments	No.	4,223	2,111	6,334		100%

DISCIPLINARY MIX				
Full-time Undergraduate New Entrants		PhDs (All modes)		
	No.	%	No.	%
General Programmes	0	0%	General Programmes	0%
Education Science	0	0%	Education Science	0%
Humanities & Arts	110	9%	Humanities & Arts	0%
Social Science, Business & Law	332	26%	Social Science, Business & Law	0%
Science	240	19%	Science	20 83%
Engineering, Manufacturing & Construction	160	13%	Engineering, Manufacturing & Construction	4 17%
Agriculture & Veterinary	0	0%	Agriculture & Veterinary	0%
Health & Welfare	303	24%	Health & Welfare	0%
Services	123	10%	Services	0%
Combined	0	0%	Combined	0%
Total	1,268	100%	Total	24 100%

PARTICIPATION				
(No. of Total Enrolments incl. Flexible Learning)		(No. of New Entrants)		
	No.	%	No.	%
Flexible Learners (PT, Distance, E-Learning, In-Service)	2,107	33%	Mature Entrants (Full-time Undergraduate)	
Participants in Labour Market Activation (Springboard)	265	3%	Estimate: Entrants with Disability (EAS)	
(% of National Participation)				
Regional Intake (% of Full-time Enrolments)			Estimate: Entrants from Non-Manual, Semi- and Unskilled Socio-economic Backgrounds (EAS)	
from the institution's county	24%		311 25%	
from the institution's county and bordering counties	63%			

INTERNATIONALISATION								
			No.					
			% Erasmus Students Outgoing (excl. work placements)					
International Students (Full-time) (% of Full-time Enrolments)			370 9%					
EU			120 32%					
Non-EU			250 68%					
International Students (Part-time)* (% of Part-time Enrolments)			0% 0% 0%					
EU			0% 0% 0%					
Non-EU			0% 0% 0%					
TEACHING AND LEARNING								
Non-Progression Rate from 1st to 2nd Year								
			Level 6 % Level 7 % Level 8 %					
Education			5% 17% 14% 26% 27% 22% 20%					
Healthcare			6% 8% 11% 8%					
Combined & Other Disciplines			Engineering (excl. Civil) Construction & related Services Computer Science					
Soc. Sci., Business, Law, Arts, Humanities			20% Total					
Science & Agriculture & Veterinary			17% 18% 13%					
RESEARCH AND KNOWLEDGE TRANSFER								
			No. No. of Doctorate Graduates per 10 Academic Staff					
Priority Patent Applications			0.3					
Total Patents Granted			No. 3					
Invention Disclosures			No. 1					
Licence agreements (institution - private industry)								
Spin-out companies created								

STAFF

FINANCIAL DATA

	No.	%	€ 000	%
Core Staff	393			
Academic Staff	254	65%		
Support staff	139	35%		
Contract Research & Specialist Staff	51			
Academic Staff	27	53%		
Support staff	24	47%		
Total Staff	444			
Total Academic	281	63%		
Total Support	163	37%		
Total Income			42,229	
State Grants			17,500	40%
Fees				
Exchequer			9,175	21%
Non-Exchequer			8,554	20%
Research Grants & Contracts			4,000	9%
Other Income			4,000	9%
Total Expenditure			42,256	
Core - Pay			26,221	62%
Core - Non-Pay			12,635	30%
Research Grants & Contracts - Pay			1,800	4%
Research Grants & Contracts - Non-Pay			1,600	4%

1. Regional Clusters

Context

Members of Regional Cluster - South Region
Institute of Technology Carlow; Cork Institute of Technology; University College Cork; Institute of Technology Tralee; Waterford Institute of Technology

Governance Arrangements

The following provides a summary of the current agreed position for governance of the Southern Cluster:

- Clear terms of reference and a Framework of Cooperation for the operation of the cluster have been agreed and signed.
- The use of a rotating rather than an independent chair has been agreed. This is rotated on a six-monthly basis. This is continually reviewed as the cluster evolves and the possible use of an independent chair whose role and responsibilities are to be defined is now being considered.
- Presidents and Registrars of each of the five HEIs form the cluster board.
- Agreement that industry, further education and other stakeholder participation is required in cluster specific projects.
- Compact objectives on clusters are harmonised across all members of the cluster.
- A strategic work-plan is in place for delivering on cluster objectives.
- Arbitration mechanisms exist as part of the governance structure.

The primary objectives of the South Region Cluster are to:

- Increase the capacity and responsiveness of the Irish higher education system particularly in the South Region;
- Deepen partnerships and collaborations among the cluster higher education Institutions;
- Provide improved progression pathways between higher education institutions;
- Enhance co-operation across the cluster higher education institutions in support of regional economic, social and cultural development;
- Build on existing successes in the areas of course development, collaborative research, entrepreneurialism and innovation.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
Create a formal regional cluster between the named member institutions .	Agree and implement a framework for cluster operation and commence implementation of agreed collaborative projects.	Many inter-institutional relationships exist but no formalised cluster structure is in place	Agree and implement a governance framework for joint activities including:	<ul style="list-style-type: none"> • The establishment of a cluster board • Creation of an MOU for operation of the cluster • Development of arbitration procedures • Development of a co-ordinated work plan for the implementation of agreed projects 	<p>A cluster board has been established comprising of the Presidents and Registrars of the five cluster HEIs.</p> <p>A Framework for Cooperation comprising of terms of reference for the cluster has been agreed and signed for the cluster (shown in Appendix 1).</p>	<p>Complete a progress review in terms of delivery of the work plan and implementation of agreed projects.</p>	<p>Progress of the work plan is monitored at the Cluster Board meetings.</p> <p>The five HEIs have agreed to re-examine the governance arrangements in place, specifically the possibility of an independent chairpersonship.</p> <p>The role and responsibilities of this position are being detailed.</p>

		A work plan focusing on the areas of mapping, academic progression and research is in place.	Develop uniform access/ progression scheme for the cluster.	Review pathways profile based on new academic developments.	In addition to the ongoing work on improving student pathways, all five HEIs form part of the membership of one of the two Regional Skills Fora in the South West/ South East regions which link education providers across many domains.
Improve Student Pathways.	Produce a mapping profile which outlines learner opportunities and pathways for all disciplines and levels across the cluster region which will assist in future academic planning and delivery.	Initial focus of the cluster is anticipated to be on improving student pathways given priority attached to the transitions initiative. Perform baseline mapping process in terms of student pathways from secondary through to tertiary education and graduate destination (this will require engagement of secondary and FE providers as well student representative bodies).	This has captured provision at Levels 6-8 of the NFQ.	Individual HEIs have engaged with secondary, FE providers and the recently formed Education and Training Boards as part of continually enhancing student pathways. Formal agreements are now in place between HEIs and ETBs/FE providers.	Final output - mapping profile.
Shared Academic Planning	Develop a cluster wide academic planning structure focused on the	No cluster wide academic planning structure exists. However there is an understanding that:	Baseline mapping of academic programme provision across the cluster completed.	Implementation of joint academic developments which are informed by the baseline mapping continuously reviewed.	Review operation of academic planning process with a view to identifying new

<p>delivery of national priority objectives such as the Transitions Programme, Horizon 2020 and other objectives focused on improving the economic, social and cultural profile of the cluster region.</p> <p>Individual institutes will continue to provide a broad base of undergraduate course opportunities up to level 8 to satisfy needs of individual hinterlands given the geographical scale of region;</p> <p>External stakeholders such as regulatory and professional bodies will also influence the planning and delivery process;</p> <p>The number of CAO entry paths is anticipated to reduce with the collective implementation of the transitions initiative;</p> <p>Agreement that there are benefits to shared academic planning in specialist areas, most notably at level 9 and above; Acceptance this will lead to the creation of strong thematic areas in individual and co-operating institutes in the cluster.</p>	<p>Research mapping completed to identify potential research synergies (Programme and research mapping will provide a profile across the cluster and will inform next steps – complete during academic year 2014/15).</p> <p>A research mapping has been completed.</p>	<p>process across the cluster and targeted at delivering on regional economic and social needs.</p> <p>areas for collaboration in the next round of institutional compacts.</p>	

	<p>This activity is particularly relevant to the delivery of Horizon 2020, Government objectives, targets for R&D activity and enterprise and industry development. It is also relevant to the delivery of industry and employer needs, hence engagement with employers in the region is significant to academic planning agenda.</p>	

2. Participation, equal access and lifelong Learning

Context

"We embrace access, equality of opportunity and progression in order that our diverse learner population is empowered to succeed as citizens of a challenging world."

(Extract from IT Carlow Vision Statement)

IT Carlow's vision embraces a commitment to continuous life-long learning, equity of access, transfer and progression for all learners. We believe that this has a positive impact on the civic, social, environmental and economic life of our region. As acknowledged national leaders in the provision of Lifelong Learning programmes, our strategy will stimulate and inspire greater participation and inclusivity in higher education by all members of our community.

A key pillar of our Lifelong Learning activities is the Springboard since it was first launched as part of the Government's Job's Initiative in 2011. IT Carlow Springboard courses range from levels 6 to 9 on the NFQ; a large proportion of the programmes awarded are at level 8 and level 9. IT Carlow has demonstrated a commitment to designing and delivering level 8 Higher Diploma programmes that facilitate upskilling and re-skilling of holders of degrees in other disciplines. The majority of courses offer a work placement element that increases our engagement with industry and ensures the relevancy of the qualifications earned by graduates of the programme.

The Strategic Plan 2014 -2018 of the Institute is informed by the HEA National Plan for Equity of Access to Higher Education 2014-2016. IT Carlow has continued to strengthen and sustain access, transfer and progression opportunities for all learners. The building of new and stronger links with the Education and training Boards in our region and beyond will open new pathways for learners to enter at a level appropriate to their prior learning and to achieve their academic and personal potential.

Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components ensuring the learners' progress in their studies, while promoting mobility. IT Carlow's Policy and Procedure for the Recognition of Prior Learning (RPL) offers clear pathways to the learner to recognise previous learning conducted and offer every credit to the learner in completing such learning, while ensuring the practice for recognition is in line with the principles of the Lisbon Recognition Convention. Specific examples include the alignment of professional aviation licences and linking with leaders, such as the Defence Forces. In doing so, IT Carlow co-operates with other institutions and collaborative partners and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
To maintain National Access Plan student entrant numbers by developing further non-standard entry routes through FE and other providers, including RPL opportunities .	(1) Mature student entrant numbers (2) Non-standard student entry routes to Institute of Technology Carlow.	Mature student entrants to Institute of Technology Carlow September 2012 – 26% of full-time student enrolments.	Maintain National Access Plan numbers Review avenues of non-standard entry routes.	Interim target achieved. It is clear from the IT Carlow profile 2013-2014 (HEA) that IT Carlow has maintained and exceeded the student entrant numbers as per the National Access Plan. IT Carlow continues to provide accessible entry opportunities for all and has expanded its non-standard entry route.	Maintain National Access Plan numbers.	Maintain and exceed National Access Plan numbers RPL to be used in all schools/ centre/ campus	Maintain and exceed National Access Plan numbers.
To maintain Institute position as market leader of	Lifelong Learning returns. National	Lifelong Learning returns 2012. Springboard allocations 2013.	Maintain current provision.	Interim target achieved. IT Carlow continues to be the market leader of Life-Long Learning and flexible learning	Respond to Springboard call.	Review supports provided and strategies employed in the teaching and	Maintaining our position as a market leader. Participation in

<p>Life-Long Learning and flexible learning WTE student numbers to 2016 (Appendix 1) contributing to the national priority of facilitating work-ready graduates contributing to economic development</p>	<p>Springboard reports.</p> <p>Lifelong Learning student numbers grew from 1681 in 2012/13 to 2494 in 2013/14.</p> <p>In February 2014, IT Carlow responded to the Springboard call and was successful in securing 142 places across six programmes from levels 7-level. IT Carlow have filled all 142 places.</p>	<p>WTE.</p> <p>Lifelong Learning student numbers grew from 1681 in 2012/13 to 2494 in 2013/14.</p> <p>In February 2014, IT Carlow responded to the Springboard call and was successful in securing 142 places across six programmes from levels 7-level. IT Carlow have filled all 142 places.</p>
		<p>assessment of our varied lifelong and flexible learning student population.</p> <p>Course offering through Springboard application.</p>

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

Context

We foster an inclusive and positive environment that values and supports learners in achieving their highest potential.

We expect learners to be successful and to have pride in the achievement of their goals.

(Extract from IT Carlow Values)

The centrality of the Learner Experience is demonstrated through its placing as the #1 strategic goal of the Institute and also by its import in the Value Statement. The Institute has long prided itself in being a learner-centred institution; a pride publicly acknowledged in the testimony of the judges making the award of *Sunday Times Institute of Technology of the Year* for 2014.

IT Carlow is committed to providing the highest-quality education for all its students, enabling them to achieve success in their career paths and make a valuable contribution to society. IT Carlow embeds a learner centred approach in the development and review of its programmes where learner-centred learning remains at the heart of IT Carlow's mission. This results in a central role in stimulating learners' motivation, self - reflection and engagement in the learning process.

When implementing learner-centred learning, IT Carlow continually strives to ensure that, in addition to learners being involved in programme design, the delivery method of programmes encourages learners to take an active role in the co-creation of the learning process. This is achieved by the learner representation on the Governing Body, at Academic Council and its committees, specifically on the Quality Assurance and Enhancement Committee, where learner engagement remains a standing item on the agenda. The view of the learner is captured in a variety of methods at IT Carlow including the Irish Survey of Student Engagement (ISSE) where our engagement response rate in 2015 is amongst the highest across the Higher Education Sector nationally at 31%.

Quality assurance processes exist to ensure that all resources are fit for purpose, accessible and that the learners are informed about the services available to them. All services are in constant review, both internally and externally, with annual reviews conducted for each individual service provider.

Staff development is a strategic priority for the Institute. The published criteria for TU designation requires institutes to have a minimum of 90% of full time academic staff to hold a level 9 qualification and 45% of staff to hold a "doctoral qualification or terminal degree appropriate to their profession". To develop a trajectory towards meeting this criteria the Institute has introduced a process of supporting staff undertaking level 10 qualifications. The Institute is well advanced towards meeting this target.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
To implement the Institute of Technology Carlow staff development plan focusing on: the enhancement of teaching, learning, assessment and curricular development skills and the development of knowledge linked to IT Carlow's strategic research goals.	28% of academic staff qualified to doctoral level by 2016. <u>Sub-indicators</u> Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	18% of WTE Academic Staff with doctoral level qualifications (2010).	Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	Interim target exceeded at 28% of staff qualified to doctoral level in December 2014. IT Carlow has reviewed its Staff Development plan including for allied and professional services staff. Additionally a number of staff are undertaking doctoral studies (14% in 2014). Review of Staff Development Plan.	Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme.	Continued implementation and recognition of Academic Professional Development suite of courses including delivery of MA in Teaching and Learning programme. Further implementation of staff development plan. 24% of staff qualified to doctoral level.

To further embed quality assurance and enhancement arrangements, leading best practice and meeting all statutory requirements.	To continue to implement QA&E work plan.	Approved QA&E work plan.	60% recommendations in QA&E work plan.	All 2014 Interim targets achieved.	80% of work plan implemented.	100% of work plan implemented.	
To enhance the first-year experience of students through the provision of more broad-based entry at regional	Development and delivery of market-led programmes meeting the dual demand of applicants and industry at regional	Current academic portfolio and CAO presence.	In line with national Transitions Initiative, provide broad-based entry to programmes in two schools.	IT Carlow has revised its CAO offering to reduce the number of programmes on offer at Level 8.	Continued review of CAO footprint to provide broad-based entry to remaining school and	Further accommodate integrated module provision across levels, programmes	

<p>based, multi-disciplinary presence while facilitating progression to highest possible level in specialist demand-based programmes meeting social and economic regional and national need.</p> <p>and national needs while enhancing the transition from second to third-level for entrants via that route.</p>	<p>2014-18 with graduate attributes as a key theme.</p> <p>Audit and publish graduate attributes across programmes.</p>	<p>Level 9 developments.</p> <p>Audit and publish graduate attributes across programmes.</p>	<p>level 9 Masters programmes, many of which have been funded under the HEA Springboard Programme.</p> <p>IT Carlow has audited and published a draft of its Graduate Attributes.</p>	<p>campus programmes.</p> <p>Level 9 developments and continued delivery of Levels 6-10 provision.</p>
				<p>and campuses as part of programmatic reviews.</p> <p>School/ Centre/ Campus programmatic reviews.</p> <p>School/ Centre/ Campus strategic reviews with key element being graduate attributes.</p>

4. High quality, internationally competitive research and innovation

Context

During 2014 the IOTs jointly developed a submission to the Department of Jobs, Enterprise and Innovation on the *Successor to the Strategy for Science, Technology and Innovation*. This paper re-commits the IOTs including IT Carlow to further growing strategically-oriented, impact focused research, development and innovation. Horizon 2020 programme performance is identified as a key driver in building international research collaboration and engagement and this is a key focus of the Institutes capacity building initiatives.

The Institute, under its Strategic Plan 2014-2018, aims to provide for the continued development of its RDI activities, underpinned by the essential physical infrastructure and human resources required. The IT Carlow goal for research is clearly divided into a series of key objectives and actions addressing the key themes of Capacity Building, Economic and Social Development, Fourth Level and Knowledge Transfer (See Appendix 3, section 1.3). The Institute has a track record of academic and industrial impact in thematic areas including:

- Bioenvironmental technologies;
- Product design;
- Computer Gaming;
- Advanced Security and Protection Technologies
- Microelectronics Circuits Design
- Applied Social Policy.

In 2014 the Institute developed human resources capacity in supervision and research and physical resource capacity through the integration of the Dargan Centre for Research and Innovation into the Institutes RDI ecosystem (see Appendix 3, Sections 1.3-1.4). The Dargan Centre has been designed to allow us to capitalise on the opportunities for idea generation, knowledge production and knowledge exchange, through the co-location of specialised multidisciplinary research facilities and personnel, and training facilities and with a range of high quality research, commercialisation, enterprise development and postgraduate support services.

The Institute is already seeing an increased involvement in research activities from staff members and in particular those associated with IT Carlow's Centres of Research and Enterprise (CORE's). The Institute in 2014 / 15 introduced two Research Support Initiatives. One targeted to support the ongoing development and enhancement of IT Carlow's strategic Research COREs and strategic research areas -by providing academic time release for a staff member/ members to play a leadership role in advancing the strategic objectives of the CORE; and the second to enable IT Carlow's academic staff actively engaged in research, to build capacity in targeted areas of strategic research aligned to IT Carlow's COREs and allied areas, with a particular focus on increasing external research funding for IT Carlow's research and innovation activities. These initiative will enable IT Carlow academic staff engaged in research to target significant strategic funding through international programmes e.g. EU Horizon 2020 and national agencies e.g. Enterprise Ireland, SFI in order to build a level of critical-mass in these strategic areas of core competence.

These initiatives are seeing an increase in the postgraduate research cohort and in the number of research active academics (currently > 60% of full time staff)

involved in supervision and researcher training programmes. Through the Head of Postgraduates Studies a structured programme in research practice was implemented in 2014 involving over 50 postgraduates and 30 academic researchers engaging in seminars and workshops on methodologies, academic writing, research ethics, and career planning among others. This programme was delivered by national and international experts in addition to our own research cohort.

In parallel with these initiatives the postgraduate policy and procedures entitled Postgraduate Awards by Research and Dissertation at NFQ Level 9 and Level 10 (Admission, Registration, Supervision and Examination) were updated and submitted to an expert peer review panel chaired by an international chairperson.

The impact of this is a growth from 33 registered research postgraduates in 2010/11 to 55 registered research postgraduates in 2014/15; it is projected that there will be 80 registered research postgraduates in 2015/16. This will represent an increase of over 140% in the timeline under review against a sector forecast of 83% (Institutional Trend Data published by HEA, 2013). This growth rate will see IT Carlow reach and exceed the IOT average for research as a proportion of all level 8 and over FTE and meet the TU criteria within 3 years.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
To integrate the new RDI building (Dargan Centre) into the Institute's Research and Innovation environment. This will include the establishment of appropriate structures to manage and support campus based spin-out companies, Institute companies and other enterprises emerging from or linked to the Institute's research activity	Fully commissioned RDI building, innovation and enterprise supports in place, spin-out/industry led RDI	Current research facilities (2013) and campus incubation and innovation Centres	Research facilities fully functional – strategic RDI transferred to new building. -	Dargan Centre fully operational; consultation process and industry / stakeholder group being progressed.	Industry orientated/led research groups established.	The RDI building activities fully integrated with the Institute's RDI and teaching activities.	Centre of the Institute's postgraduate studies provision.

				maximising engagement and impact	
To develop a multi-campus Graduate School in collaboration with WIT as a key component of a South East Technological University.	Progress towards a multi-campus graduate school initiative.	Current postgraduate research provision and delegated authority position within each Institute; Current research strategies; Strategic plans and research prioritisation plans.	Through the SETU Graduate School working group, development of the overarching framework for the Graduate School of the South East	The achievement of this target was dependent on the outcome of phase 2 of the TU iterative process.	<p>The achievement of this target was dependent on the outcome of phase 2 of the TU iterative process.</p> <p>Agree and implement academic and QA arrangements for the graduate school.</p> <p>Initiate the roll-out of the graduate school in 1-2 prioritised cross-campus research areas</p> <p>See Section 7 and Appendix 2.</p>
To increase the number of post graduate research students by beginning of academic year 2016/17 - Note:	Post graduate registered students	Registered students as at beginning of academic year 2012/13	55 Registered students as at beginning of academic year 2014/15	Target achieved	<p>100 Registered students as at beginning of academic year 2016/17</p> <p>80 Registered students as at beginning of academic year 2015/16</p>

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

Context

The development of a ‘regional engagement forum’ is a strategic initiative proposed by IT Carlow under phase 2 of the process towards Technological University. The Regional Engagement Forum was proposed to provide advice and critical guidance on the Institute’s strategic objectives in the light of regional need and through the Regional Engagement Forum the Institute would receive objective advice on its role in contributing to the development of the local, regional and international economy and society and in achieving the Institute’s strategic objectives for all aspects of the its activities. However due to the withdrawal of WIT from the South East Technological University process in October 2014 this initiative did not proceed.

The opening of the Dargan Centre for Research and Innovation in 2014 was an important milestone in the development of process linkages between the Institute’s research activities, infrastructure, potential funding mechanisms and company formations (see Appendix 3, Section 1.3). The creation of the Research and Commercialisation Support Centre (RCSC) recognises the continuing need to enhance and expand business liaison, regional involvement and commercialisation activities as an essential part of our overall strategy.

A mid-term review of the Technology Transfer Strengthening Initiative Stage 2 programme (TTSI2) reported in January 2015. While the report is very positive it did highlight some concerns regarding the capacity to grow this area under the resources currently available. This feedback has been taken on board by the RCSC manager and he is working with Enterprise Ireland (EI) to ensure that the potential for bottlenecks is alleviated. The review found that IT Carlow is meeting the majority of targets agreed with EI and there are plans well advanced to ensure the 2015 period is successful under the TTSI2 metrics.

The Institute is committed to promoting start-up businesses and transferring IT Carlow’s technology and know-how into viable commercial entities. Microgen Biotech, a spin-out company from the Institute was nominated by EI as a high potential start up, as was Alarm Manager one of the participants on the New Frontiers Entrepreneurial Development Programme. Working closely with both industrial and commercial sectors nationally and internationally, IT Carlow is continually developing collaborations with existing businesses. The Institute places a strong emphasis on researchers’ engagement with industry. The Institute has consistently been in the top two IOTs participating in the EI Innovation voucher scheme and has worked closely with the Local Enterprise Offices and the Enterprise Ireland offices in our catchment area to develop strong indigenous companies.

The Institute Strategic Plan 2014-2018 identifies as one of its five core goals, ‘to continue to strengthen our engagement with the regions communities and sectors we serve.....so that we may enhance our contribution to the development of a creative, sustainable and fair society’. To that end the IT Carlow President’s Volunteer Award was established in association with UNUM, a US multinational based in Carlow, and Carlow Volunteer Centre to harness, acknowledge and support the contribution that students at the Institute make to their communities whether on campus and its environs or within their own local community, or overseas. The response to this initiative has been very positive with year-on-year growth of almost 100%. Successful participants in the programme are recognised at the annual conferring ceremonies in the Autumn.

The Institute is a signatory to the Campus Engage initiative and is committed through the programmatic review process to the review of curricula against defined

engagement criteria through the Strategic Review process by Schools, Campus and Departments. A staff survey on engagement found that 72% of respondents stated that they had some form of engagement with business or community organisations external to the Institute and 64% of respondents agreed that IT Carlow should develop innovative schemes of collaboration with different sectors of society to ensure that higher education and research programmes effectively contribute to local, regional and national development. Therefore there is a strong internal support for external engagement.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
Enhance our contribution to the economic, social and cultural development of the region in partnership with WIT through the expansion of partnerships and alliances across all our activities.	Establishment of Regional Engagement Forum as per TU Stage 1 submission. Staff and institute engagement audits with WIT	Extensive engagement and collaborations across region in economic, social and cultural activities. IT Carlow staff and Institute Engagement Audit 2013/14	Regional Engagement Forum established. Work plan developed	The achievement of this target was dependent on the outcome of phase 2 of the TU iterative process.	Regional Engagement Forum operating	Evaluation of Regional Engagement Forum. Report on staff and institutional engagement audit.	The achievement of this target was dependent on the outcome of phase 2 of the TU iterative process.
To increase IT Carlow output of economically relevant knowledge, know-how and patents through	Agreed IT Technology Transfer Office metrics	El Technology Transfer Office metrics 2012	El Technology Transfer Office	El Technology Transfer Office metrics for 2014 are Spin outs (1); Licences/ Options/ Assignments (2); Research agreements with industry (>25K) (0); Invention disclosures (5); Priority patent applications (3); PCT Patent Applications agreements with	El Technology Transfer Office	El Technology Transfer Office metric targets for 2015 are Spin outs (1); Licences/ Options/ Assignments (3); Research	El Technology Transfer Office metric targets for 2016 are Spin outs (1); Licences/ Options/ Assignments (3); Research agreements with

<p>strengthening institutional competence at TTO level and among researchers.</p>	<p>industry (>25K) (1); Invention disclosures (3); Priority patent applications (2); PCT Patent Applications (0); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)</p> <p>(0); Research agreements with industry (<25K) (36); Start-ups, spin-ins etc (16); ITC will see in 2015 an increased activity in research agreements with industry (<25K) and is on target to meet with research agreements metric with industry (>25K) All other metrics are in line with projected.</p>	<p>industry (>25K) (2); Invention disclosures (4); Priority patent applications (2); PCT Patent Applications (1); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)</p> <p>(2); PCT Patent Applications (2); Patent Applications (1); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)</p>	<p>agreements with industry (>25K) (2); Invention disclosures (4); Priority patent applications (4); Priority patent applications (2); PCT Patent Applications (1); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)</p> <p>agreements with industry (>25K) (2); PCT Patent Applications (1); Research agreements with industry (<25K) (50); Start-ups, spin-ins etc (15)</p>
<p>To strengthen learner engagement and civic identity through module and programme delivery</p>	<p>Proportion of modules reviewed against learner engagement and civic identity criteria approved by academic council. Number of students participating in Presidents Volunteer Awards 2012/13</p> <p>Programmatic review documentation as completed. Number of students participating in Presidents Volunteer Awards 2012/13</p> <p>Number of students participating in Presidents Volunteer Awards</p>	<p>Development of learner engagement and civic identity criteria for individual modules and programmes and included in policy and procedure for the design of new programmes.</p> <p>Increase of 10% in the number of students participating in Presidents Volunteer Awards</p>	<p>Schools undergoing programmatic review to have reviewed modules against learner engagement and civic identity criteria</p> <p>Increase of 10% in the number of students participating in Presidents Volunteer Awards</p> <p>All schools to have reviewed modules against learner engagement and civic identity criteria</p> <p>Increase of 10% in the number of students participating in Presidents Volunteer Awards</p>

6. Enhanced internationalisation

Context

IT Carlow benchmarks its international strategy against the other IOTs and also examines closely the activities of similar sized institutions from competitor countries. The Institute profile in 2010/11 showed that 5% of full time enrolments were represented by International students against a national figure for IOTs of 3%. In 2013 the figure for IT Carlow had risen to 6.7% and in 2014 has further increased to 9%. The target for 2016 is 10%. The national objective is a very challenging 15% of full time enrolments.

UK HEIs of a similar profile to IT Carlow would attract incoming non-EU students of approx. 10%. The UK system as a whole would show that 13% of full time enrolments were represented by International students in 2012/13. However the figure for the current year is forecast to show a drop to approx. 12% as a result of UK Border Agency changes. In addition to that change Australian competitors have become more active in the market after 3 – 5 years of relative inactivity. Canadian colleges have also entered the Indian and SE Asian markets and are attracting large numbers of students, largely on the back of the country's immigration policies. All of this has to be considered against a market share of 0.3% for Irish HEIs of the global international education market

IT Carlow remains a leader in international recruitment among the IOTs and continues to perform in excess of national averages for the sector in terms of student recruitment. Targeted recruitment in EU supported markets continues to be the strategic focus of the Institute. We carefully monitor intake by country and programme to ensure that incoming students have an enriching Irish educational experience and also that the experience of Irish students is enriched by the presence of international peers. The achievement of our recruitment objectives is enhanced by the approval in 2014 of a Reserved Places Policy and also the approval of an Institute Policy on the Admission of International Learners in January 2015. This gives some certainty to the International Office of places available on programmes that have strict capacity restrictions. The implementation of these policies and also the overall recruitment activities of the Institute are overseen by a cross-institutional steering group made up of Heads of Department and Professional Services staff and chaired by the Head of Development.

IT Carlow actively seeks and welcomes collaborative / co-operative arrangements with other organisations. This commitment is an inherent feature of the Institute's basic mission and permeates many aspects of the Institute's Strategic Plan 2014-2018. IT Carlow has significant educational and research partnerships and collaborations with national and international industries and higher educational institutions in Europe. These include transnational collaborations providing dedicated feeder, progression or recognition arrangements, and exchange programmes with the international institutions. These collaborations are an important aspect of our international recruitment. In 2014 following extensive international peer evaluation the Institutes Policies and Procedures for Collaborative and Transnational Provision and Joint Awards were approved. These now provide the institutional framework for forming new international partnerships.

The Schools and Centres of the Institute are currently (June 2015) undergoing a programme of peer evaluated strategic reviews. As part of these reviews a cross-institution working group was established to examine internationalisation in higher education. The National Strategy for Higher Education to 2030 acknowledges that internationalisation is both necessary and multi-faceted and that it encompasses a range of practices and activities. While internationalisation involves international student recruitment and partnerships, it also includes the development of inter-cultural experience as a core competence for graduates in an export-driven and innovation-based economy. As part of the Programmatic Review each Programme Board/Stream will review its curricula to incorporate international/global element(s)

by considering criteria identified by the group, and informed by literature and practice, as key to embedding internationalisation in the Institute. These will include the enhancement of student exposure to global perspectives by developing an internationalised curriculum; by promoting study and work placement in industry (for industrial projects) abroad; student exchange programmes; by providing a culturally diverse environment to study in; by allowing students to undertake mobility programmes with international partners (not only academic but also industrial partners), and by ensuring that the ethos in which students learn reflects the global nature of education today.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
To implement an effective strategy for student recruitment, focusing on strategically identified key markets with the objective of increasing the Institute's international student population to a minimum of 10% of the total full-time student population as per the baseline measure.	Admissions data for percentage of full time student population coming to IT Carlow whose normal place of residence is not in Ireland	Percentage of full time student population coming to IT Carlow whose normal place of residence is not in Ireland	Senior management approve the establishment of a cross-institute international steering group to ensure co-ordination of effort in international recruitment and efficiencies in the system; Reserved places policy and procedure implemented; Existing markets analysed and new opportunities identified; International student population is a minimum of 7.5% of the total full-time student population as per the baseline measure.	All targets achieved; Approximately 9% of registered full time students are international learners;	International student population is a minimum of 9.0% of the total full-time student population as per the baseline measure	International student population is a minimum of 10% of the total full-time student population as per the baseline measure	International student population is a minimum of 10% of the total full-time student population as per the baseline measure
To develop internationalised	Proportion of modules reviewed	Programmatic review	Development of internationalisation	All targets achieved. Criteria for the	Schools undergoing	All Schools to have	

curricula and against internationally-focused programmes, learning outcomes and assessment of students in line with international goals	internationalisation criteria; Increased number of alliances and collaborations with international HEIs (by 10%) over the lifetime of the plan; Percentage of students and staff involved in overseas exchange & mobility programmes	documentation as completed; Data from Collaborative register as at 31/12/13; Erasmus returns for 2012/13	criteria for individual modules and programmes and included in policy and procedure for the design of new programmes; Develop clearly defined criteria based on strategic priorities in pursuing and forming new international partnerships and strategic alliances	internationalisation of criteria have been agreed through the Strategic Review process by Schools and Departments.
Increase the number of alliances and collaborations with international HEIs by 10% over the lifetime of the plan.	Number of alliances and collaborations listed in Institute Collaborative Register	Data from Collaborative register as at 31/12/13	Develop clearly defined criteria based on strategic priorities in pursuing and forming new international partnerships and strategic alliances. - 20% of target achieved	programmatic review to have reviewed modules against internationalisation criteria; 0.5% of students and 3% of academic staff to have participated in overseas mobility programmes
To enhance student exposure to global perspectives by promoting study and	Percentage of students and staff involved in overseas exchange	Erasmus returns for 2012/13	0.5% of students and 3% of academic staff to have participated in overseas mobility	reviewed modules against internationalisation criteria; approved; 0.75% of students and 5% of academic staff to have participated on Erasmus funding received

work placement in industry (for industrial projects) abroad; staff & student exchange programmes; and by encouraging students to undertake mobility programmes with international partners (not only academic but also industrial partners).	& mobility programmes	programmes	through the HEA.	participated in overseas mobility programmes	staff to have participated in overseas mobility programmes

7. Institutional consolidation

Context

An acknowledged deficit in the South East Region of Ireland is the absence of a University. The Government provided an opportunity to create a multi-campus South East Technological University (SETU) to fulfil this need under the *National Strategy for Higher Education to 2030 (Report of the Strategy Group, January 2011)* and the *Programme for Government 2011-2016*. Government policy subsequently detailed a process and comprehensive set of criteria to help guide this development (*Process and Criteria for Technological University Designation, February 2012*). This included a requirement to merge with at least one other Institute of Technology before TU status can be conferred. IT Carlow, with its history of serving the region for the past 45 years and its reputation as a dynamic, entrepreneurial and regionally engaged higher education institution, is committed to delivering a TU for the region.

IT Carlow has been following a three-track approach:

1. Working diligently to be TU-ready in terms of the national criteria
2. Developing a vision and implementation framework for the TU based upon a detailed consideration of the unique set of regional, national and international environments in which the TU will be established and developed; the characteristics of leading international TUs; and the experience of various universities that have been through the process of merger and the establishment of multi-campus institutions
3. Engaging in intensive discussions with WIT regarding a joint vision and merger planning from Jan 2012-October 2014

In July 2012 the Institutes of Technology (IOTs) at Carlow and Waterford (WIT) submitted a joint Stage 1 proposal to the Higher Education Authority (HEA) for the establishment of a SETU entitled "*The South East Institutes of Technology in the Future Higher Education Landscape*". This Stage 1 SETU application was made under the national four-Stage process for Technological University (TU) designation and proposed a multi-campus TU for the South East with campuses in Carlow, Kilkenny, Waterford and Wexford. The Stage 1 SETU application detailed:

- An Agreed Mission and Vision;
- A joint mapping of 2010 metrics relevant to TU criteria;
- Agreed 2017 projections to ensure trajectory towards TU criteria;
- An MOU signed by the Chairs and Presidents of IT Carlow and WIT on behalf of their Governing Bodies;
- An agreement, subject to due diligence, for merger in order to initiate the application for designation as a multi-campus TU.

Approval was forthcoming from the Minister for Education and Skills in May 2013 to progress to the preparation of a Stage 2 SETU Business Plan.

On the 21st October 2014 WIT decided to 'suspend all activities' on the SETU project citing 'concerns about the process of delivering a Technological University in the South East'. An *IT Carlow Executive Summary of the SETU Project* is presented in Appendix 2. This Executive Summary was submitted to the Oireachtas Public Accounts

Committee (PAC) in January 2015 as part of an IT Carlow submission detailing the SETU Project process from 2011-2014 (PAC-R-1657, Correspondence 3B, 15A, Meeting 148 22/01/15).

On the 4th of November 2014 the Minister for Education and Skills appointed Mr Michael Kelly to lead a new process of consultation with the Governing Bodies, staff and students in both IT Carlow and WIT in order to develop a shared vision for a TU in the South East. Mr Kelly's report to the Minister is imminent.

In the intervening period (October 2014-present) IT Carlow has continued to make significant progress on reaching and exceeding TU-criteria as summarised in Appendix 3.

The goal of achieving a Technological University for the South East is seen by management and staff of IT Carlow as an essential and progressive step which will further transform the Institute and its status in the region and beyond. The breadth and depth of the change since publication of *Towards a Future Higher Education Landscape* (HEA February 2012) in the Institute is clearly shaping a distinctive, ambitious and TU ready organisation.

The most noteworthy of these transformative changes include:-

- A clear and embedded institute strategy which sets an ambitious course that aligns well with national strategies and Technological University expectations.
- An increase in student numbers across all disciplines and levels, increasing from 4,800 in 2012 to almost 7,000 in 2015. This growth rate is underpinned by higher progression and throughput rates.
- Research has come to the forefront of academic life with approximately 60% of staff research active and driving a research culture which is increasingly informing and leading the teaching, learning and engagement programmes.
- This cultural shift is impacting on wider curriculum development with the embedding of enquiry based learning, research methods, research practice, research ethics, principles of knowledge exchange and commercialisation of intellectual property as essential elements integral to the configuration of modules and programmes at all levels.
- The ambition of the Institute is matched by the vision of its external stakeholders from across the region in their desire to realise the establishment of a Technological University.
- There is a high level of engagement surrounding the development of the Institute and the creation of a Technological University.
- The intellectual capital of the Institute has been enriched by the ongoing development of existing staff through their pursuit of higher degrees. This has been further enhanced by the recruitment of additional staff who have joined the Institution to help build the Technological University. This has resulted in a qualifications profile going from 83% Level 9 to 96% currently, and 18% at Level 10 to 30% plus 14% in progress.
- There is a cultural shift toward ongoing transformation, underpinned by strong leadership and management focussed on the needs of the learner and on the Institute's role in supporting and driving economic and social growth. The outcome of graduate surveys point to a strong and supportive relationship between the learner and the Institute. Successive independent peer quality reviews confirm an open and proactive engagement with continuous improvement.
- The commitment of staff to the development of the Institute over the past three years, during a period of widespread retrenchment in the public services, highlights a fundamental strength and resilience that the Institute possesses which will ensure future success in achieving its vision.

Institution objective	Performance indicator	Baseline	Interim target, end 2014	Progress against 2014 target, commentary and data source	Interim target, end 2015	Final target, end 2016	Summary
To progress the development of a multi-campus Technological University (TU) for the South East in partnership with WIT	Progress through stages for designation as a TU in line with the process set out in the HEA 2012 publication <i>'Process and Criteria for Designation as a Technological University'</i>	Memorandum of understanding between IT Carlow and Waterford IT (Appendix 6)	Completion of due diligence, submission of an agreed Stage 2 business plan for the TU for the South East by the Governing Bodies of IT Carlow and Waterford IT	As outlined in the Compact Statement this objective is based on the assumption that 'That all parties contribute to the successful achievement of these objectives'. As activities with WIT have not developed as expected during 2014 and are currently suspended by WIT it has not been possible to develop this objective. Please see Appendix 2 for further details.	Subject to the outcome of the Stage 3 review panel and decisions of the governing bodies of IT Carlow and Waterford IT,	Advanced implementation of business plan for the establishment of the TU	See Appendix 2.

Appendix 1 – South Regional Cluster



Waterford Institute of Technology

Framework for Co-operation

1. Introduction

- 1.1 Institute of Technology Carlow, Cork Institute of Technology, University College Cork National University of Ireland Cork, Institute of Technology Tralee, and Waterford Institute of Technology, in mutual respect for each other's mission and vision, wish to strengthen and extend the scope for collaboration building upon past successes. To this end the institutions have agreed to enter into a formal memorandum of cooperation.

2. Nature of co-operation

- 2.1 This memorandum sets out the general framework for co-operation between Institute of Technology Carlow, Cork Institute of Technology, University College Cork National University of Ireland Cork, Institute of Technology Tralee, and Waterford Institute of Technology.
- 2.2 The institutions agree to collaborate in the planning, development and delivery of education and research in appropriate areas of expertise. In addition, they agree to support other developments through the exchange of information, and through the sharing of resources, expertise, facilities and services where appropriate.
- 2.3 As required, each area of collaboration established within this framework shall be the subject of a separate annex.

3. Publicity and marketing

- 3.1 The partners shall agree the appropriate way of expressing the nature of the relationship to be used by the Partner Institutions in publicity materials.

4. Intellectual property

- 4.1 All intellectual property owned by one of the participating institutions shall remain the exclusive property of that institution and shall not be used by another institution for its own benefit except as expressly permitted by the owning institution. Jointly owned intellectual property will be distributed between the Partners in accordance with arrangements set down in additional annexes to the memorandum.

5. Resolution of disputes

- 5.1 In the case of a dispute or difference between the participating institutions arising out of or in connection with this agreement, the institutions shall first endeavour to settle it amicably.
- 5.2 If the dispute cannot be resolved by mutual discussion, the parties shall refer the dispute to a single mediator to be appointed in accordance with the mediation procedures of the Centre for Effective Dispute Resolution or such other organisation that provides mediation

services as may be agreed in writing between the participating institutions from time to time. The cost of such mediator shall be borne equally by all parties to the dispute.

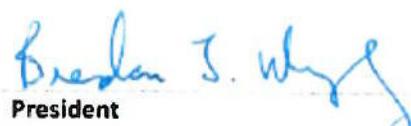
6. Termination of the agreement

- 6.1 The agreement will remain in force for an initial period of five years and it will be subject to review in the penultimate year.

Signed :


President
Institute of Technology Carlow

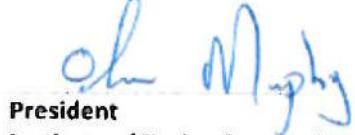
Date 9th June 2015


President
Cork Institute of Technology

Date 9 June 2015


President
University College Cork
National University of Ireland, Cork

Date 9th June, 2015


President
Institute of Technology Tralee

Date 9/6/2015


President
Waterford Institute of Technology

Date 9 Se 2015

Appendix 2 – Extract from IT Carlow submission to the Oireachtas Public Accounts Committee (PAC) in January 2015 detailing the SETU Project process from 2011-2014 (PAC-R-1657, Correspondence 3B, 15A, Meeting 148 22/01/15).

2. Executive Summary of the SETU Process 2011-2014

2.1. IT Carlow entered into the SETU process in early 2011 with WIT following an approach by the then Chair and President of WIT in January 2011, and in response to the Government's stated commitment in March 2011 to explore the establishment of a multi-campus Technical University in the South East (*Programme for Government 2011-2016*).

2.2. In tandem with the publication of the national *Process and Criteria for TU Designation* in February 2012, and following changes in the Governing Body Chairs and Presidents of WIT and IT Carlow, the SETU process gained momentum in early 2012. This resulted in a joint Stage 1 SETU submission to the HEA (under the national four-Stage process for TU designation) which was prepared and reviewed over a 16 month time period. Approval was forthcoming from the Minister for Education and Skills in mid-2013 to progress to the next stage of the TU process i.e. the preparation of a Stage 2 SETU Business Plan. During this time period, financial and governance difficulties became apparent in WIT regarding the funding of a number of projects. These difficulties gave rise to a statutory inspection and Public Accounts Committee hearings, which effectively stalled the SETU project for approximately nine months.

2.3. Senior political support for the SETU project resulted in the appointment of a facilitator by both institutions and the establishment of a new steering group in mid-2013 to deliver the Stage 2 SETU Business Plan in accordance with Government policy. During the life of this group (until mid-2014), various issues emerged that were inconsistent with the vision for the SETU and key principles underpinning the partnership with IT Carlow. These issues ran contrary to the agreement reached by the two Governing Bodies in the *IT Carlow / WIT MOU* (July 2012) and diverged from the joint Stage 1 SETU submission underpinning the 2013 Ministerial decision for the project to progress to Stage 2 of the national TU designation process.

2.4. It had been agreed in the Stage 1 SETU submission that due diligence would be carried out by the respective institutions on each other in order to inform the Stage 2 SETU Business Plan. IT Carlow commissioned a firm, through public competition, and had agreed Terms of Reference with WIT. This standard due diligence process on behalf of the IT Carlow Governing Body met with resistance from WIT throughout 2013 and 2014 and remains incomplete.

2.5. In addition to conventional due diligence on IT Carlow, WIT proposed in February 2014 to commission a unilateral feasibility study '*to consider the desirability and practicality of establishing a new TU by the merger of IT Carlow and WIT*'. IT Carlow queried the timing of, and rationale for, the WIT feasibility study on the SETU project. This was based on the following:

- (i) The joint Stage 1 SETU submission had been approved by the Minister for Education and Skills to proceed to Stage 2 of the national TU process in mid-2013 following a 16 month planning, review and approval process, involving significant national and international expert input on behalf of both Institutes and the HEA;
- (ii) Any further future analysis of the feasibility and desirability of the SETU project should be based on the SETU Business Plan required under Stage 2 of the national process for TU

designation.

However, in order to progress the due diligence process and Stage 2 SETU Business Plan, IT Carlow acceded to the request.

2.6.The steering group established in mid-2013 could not overcome the difficulties encountered in (i) agreeing the nature and organisation of the new proposed entity and (ii) completion of due diligence on behalf of the IT Carlow Governing Body. This steering group was disbanded in mid-2014 and a group comprised of both Presidents and both Governing Body Chairs undertook to agree a governance, management and organisation structure for the SETU, while simultaneously completing the due diligence which had commenced in WIT. These discussions were externally facilitated, agreement was reached and an MOA was signed by both Chairs and Presidents in September 2014 that was to be recommended to the respective Governing Bodies on the 13th October 2014.

2.7.Simultaneously, a document emanated from WIT indicating that the WIT-commissioned feasibility study questioned the timescales for achieving TU criteria for a merged institution. On the 14th October the author of the draft document in circulation met IT Carlow representatives where he acknowledged that the document was seriously flawed on a number of levels, that it should not have been distributed and that he wished to withdraw it unreservedly. The author formally withdrew his report in a communication to the Presidents of WIT and IT Carlow the following day (15th October 2014).

2.8.WIT decided to withdraw from the SETU project on the 21st October 2014. This was communicated to IT Carlow through the following statement:

"The Governing Body of Waterford Institute of Technology met today (October 21st) to discuss concerns about the process of delivering a Technological University in the South East. The members agreed to seek an urgent meeting with the Higher Education Authority and the Department of Education and Skills to discuss and address their concerns and they further agreed to suspend all activities related to merger. WIT remains committed to a Technological University in the South East which will have a significant economic and social impact."

No further contact has been received by IT Carlow from WIT regarding the SETU project since this date.

2.9.On the 4th of November 2014 the Minister for Education and Skills appointed Mr Michael Kelly to lead a new process of consultation with the governing bodies, staff and students in IT Carlow and WIT in order to develop a shared vision for a Technological University in the South East. IT Carlow has since engaged with Mr Kelly.

Appendix 3 - The South East IoTs Successful Stage 1 SETU Submission July 2012 and Progress Toward Agreed 2017 Targets

IT Carlow is the 4th largest of the 14 Institutes of Technology with almost 7,000 total students in the current academic year (2014/2015), 700 staff and more than 40,000 graduates who are pursuing fulfilling and successful careers in all walks of life, nationally and internationally.

An Institute with extensive collaborative provision and strong international links across Europe, China, Korea, USA, Malaysia, Saudi Arabia, Oman, Brazil and India, IT Carlow currently provides access to high quality higher education opportunities from Level 6 to Level 10 of the National Framework of Qualifications, in Carlow, Wexford, Wicklow, Kildare, Dublin and Shannon.

IT Carlow has a published vision to be '*Ireland's leading Technological University by 2030*'. Combining the strengths of two or more institutions is an important element of the national TU process and one that IT Carlow has subscribed to in the context of a multi-campus SETU. There is an expectation that the successful amalgamation of two or more Institutes will create a new integrated entity that will broaden and deepen the academic, research and engagement activities across the new unified institution, while ensuring an enhanced platform on which to build an internationally-recognised and nationally-relevant Irish TU, that meets and exceeds a high level of performance across at least 40 nationally-established TU criteria.

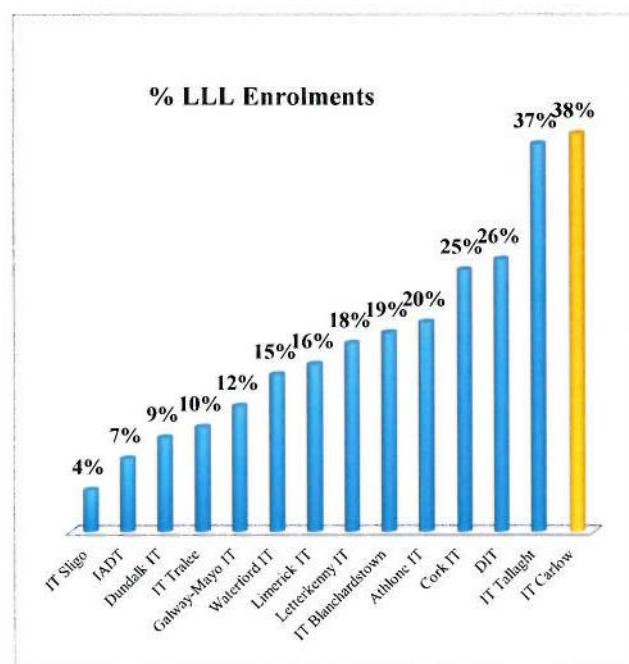
These criteria fall under the following eight general categories: Mission; Institutional Profile; Student Profile; Staff Profile; Teaching, Learning and Curriculum Development; Research; International Profile; Leadership, Management and Governance.

From the commencement of the TU process, IT Carlow has achieved 2017 targets agreed in mid-2012 with WIT. These targets were detailed in the Stage-1 joint submission of IT Carlow / WIT in July 2012 to the HEA, which was assessed by an international panel and approved to proceed to Stage-2 of the national process in May 2013 by the Minister for Education and Skills. The considerable progress in all areas are presented in the following sections.

1.1. Flexible Provision

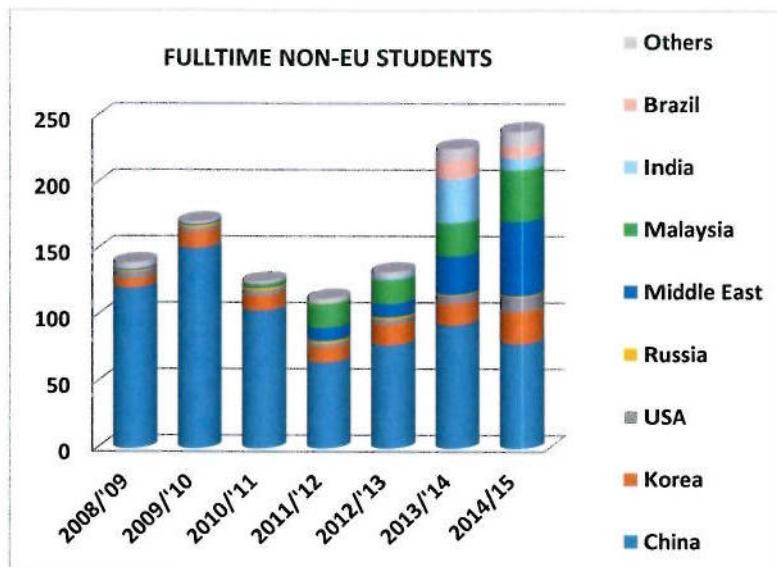
An international review panel has commended IT Carlow for its entrepreneurial spirit and culture in broadening opportunities for learners through a range of flexible higher education provision models, while also developing non-exchequer income streams. Evidence of this is the fact that IT Carlow is the sectoral leader in flexible higher education provision with 38% LLL students in 2013/2014; already exceeding published TU criteria of 30%.

The same metric for the combined SETU was 24% in 2013/2014 (Table 2). This compares to 22% and 27% for the MTU and TU4Dublin Consortia, respectively. This strong performance in the flexible provision of higher education opportunities has contributed to the 31% overall increase in total students since 2010/2011 in IT Carlow in 2013/2014. Graduates have increased by 56% over the same time period (2,100 graduates with major awards in November 2014).



1.2. International Students

The Institute has increased non-EU International fee paying enrolments by 52% in the past three years. In line with the Government's International Education Strategy 2010-2015, IT Carlow has worked with state agencies to diversify their student intake with a particular emphasis on BRIC countries and on the emerging Middle-East scholarship market. Together with a vibrant EU / Erasmus student body the Institute now has a high quality multicultural environment meeting all of the requirements for the soon to be launched International Education Quality Mark.



1.3. Postgraduate Research

The new IT Carlow Dargan Centre for Research and Innovation was opened in 2014 and provides an integrated and high quality physical environment for the Institutes targeted high priority areas for postgraduate studies, knowledge creation and exchange activities in:

- Bioenvironmental Technologies,
- Product Design,
- Computer Gaming,
- Advanced Security and Protection Technologies
- Microelectronics Circuits Design
- Applied Social Policy.



96 higher degrees by research have been awarded to-date across these research areas, with 40% at doctoral level. The impact of the research is high, as indicated by high weighted-citation impact results for research publications in peer-reviewed international journals.

For example, the comparative data presented in Table 1 exemplifies the quality of the research currently conducted at IT Carlow. This metric was compiled using the SciVal research metrics tool from Elsevier and covers a broad range of international science, computing and engineering publications from 2009 to 2013. This shows that IT Carlow scores well above the IoTs combined and are up or above 'University level'. This provides a clear indicator of quality and now the Institute is in the process of scaling these areas up to meet and exceed TU criteria by 2017. IT Carlow has achieved a 66% increase in postgraduate researchers in the past two years, while achieving a number of knowledge exchange targets that continue to deliver jobs and add value to the economy. Of the current postgraduate researchers cohort 40% are on the doctoral pathway.

TABLE 1.
 Field-Weighted Citation Impacts

Institution	Field – Weighted Citation Impact *
Massachusetts Institute of Technology	2.45
California Institute of Technology	2.42
<i>Institute of Technology Carlow</i>	1.82
Trinity College Dublin	1.71
University College Cork	1.42
University of Ulster	1.38
NUI Maynooth	1.30
University of Strathclyde	1.26
Dublin City University	1.23
Institutes of Technology Ireland (combined)	1.10
Waterford Institute of Technology	1.07
Cork Institute of Technology	1.06

*A Field-Weighted Citation Impact of exactly 1 means that the output performs just as expected for the global average; more than 1 means that the output is more cited than expected according to the global average; less than 1 means that the output is cited less than expected according to the global average.

These metrics apply to a time period which pre-dates / or runs concurrently with a significant number of additional capacity-building measures which have been put in place over the past three-year period. The additional measures include:

- MOUs with national and international partners in Europe and China;
- Recruitment, staff development and mentoring programmes to increase research active academics;
- New innovative practice-led structured research programmes which will be launched in 2015;
- Provision of internal research funding;
- A dedicated **Research and Commercialisation Support Centre**;
- A dedicated **Postgraduate Studies Support Office**;
- Adjunct faculty policy for key collaborative partners;
- An institute-wide curriculum development strategy to ensure an integrated approach to research activity at all levels of the national framework of qualifications.

Research funding is not a specified KPI for TU designation. Since 2012, IT Carlow has invested €8 million in research infrastructure and supports. In addition IT Carlow Research CORES (Centres of Research and Enterprise) have attracted a further €8 million in external funding from Framework Programmes, Enterprise Ireland and Research Council programmes. These and other initiatives will ensure that IT Carlow will achieve and exceed the agreed target by 2017.

IT Carlow has full Delegated Awarding Authority for NFQ Level 9 and Level 10 Research Programmes in Biotechnology and Molecular Environmental Science. A comprehensive set of detailed research reviews were completed in 2013-2014 by IT Carlow which involved an evaluation of the research environment at IT Carlow across all disciplines (including supervisory quality and capacity; research graduate attributes; collaborative research partnerships; research strategy and leadership; quality assurance and enhancement policies/procedures for postgraduate researchers; information and physical research infrastructure; research outputs etc.) and objective third-party reviews involving national and international experts.

The outcome of these reviews resulted in the continued approval for all areas and levels sought by IT Carlow from HETAC / QQI including:

- Computing, Research Levels 9 and 10
- Engineering, Research Levels 9 and 10
- Sport and Health Sciences, Research Level 9
- Business and Humanities, Research Level 9
- Industrial Design, Research Level 9

Under the recently published QQI/IoTI Sectoral Protocol for the delegation of awarding authority for research degrees to NFQ level 9, IT Carlow is in the process of applying for full delegated awarding authority for all of the above areas in April 2015. Additionally, the Institute will seek early approval to build on its strong research capability to extend provision at Level 10 in the areas of Industrial Design and Health Sciences once the national QQI protocols are finalised.

The Institute has an agreed 2017 target of 3.4% of FTE enrolments at research level 9 and 10 to meet TU criteria as part of a merged institution. In the 2013/2014 academic year IT Carlow was at 2.0%. The same metric for the combined SETU was 2.5% in 2013/2014 (Table 2). This compares to 3% and 2.6% for the MTU and TU4Dublin Consortia, respectively.

Feedback to the latter two Consortia from the Stage 3 International Expert Panel December 2014 on progress towards this metric stated “.....*the target for 4% of postgraduate research students at Level 9 and 10 has not yet been reached but the plans in place to fill the gap are entirely plausible*”.

1.4. Staff Qualifications

Staff development is a strategic priority for the Institute. The published criteria for TU designation requires Institutes to have a minimum of 90% of full time academic staff to hold a level 9 qualification and 45% of staff to hold a doctoral qualification or terminal degree appropriate to their profession.

In the current academic year, 96% of fulltime academic staff at IT Carlow holds a Masters or Doctoral qualification.

Since 2011, there has been a doubling of academic staff with doctoral qualifications ensuring that 28% of staff held Level 10 qualifications in December 2014.

With the roll-out of additional targeted supports for staff development, there has also been a 3-fold increase in staff pursuing doctoral studies, translating into an additional 14% of staff pursuing Level 10 qualifications in December 2014. Collectively all of these developments place the Institute on a strong trajectory to achieve the criteria on staff qualifications within a two-to-three year time frame.

The same metric for the combined SETU is not available, but comparative metrics for the MTU and TU4Dublin Consortia, respectively, are 90% Level 9 & 29% Level 10 and 87% Level 9 & 37% Level 10 (Table 2). Feedback to the two Consortia from the Stage 3 International Expert Panel December 2014 on progress towards these metrics noted “.....*clear and plausible plans to increase these percentages*”.

TABLE 2
Key Comparators for Irish TU Consortia

	MTU	TU4Dublin	SETU
Size – Total Student Enrolments*	12,815 (22% ITTra & 78% CIT)	25,886 (13% ITB, 18% ITTD & 69% DIT)	14,758 (44% ITC & 56% WIT)
Lifelong Learning (% of student enrolments*)	22% (10% ITTra & 25% CIT)	27% 19% ITB, 37% ITTD & 26% DIT	24% (38% ITC & 15% WIT)
30% National TU Target			
Postgraduate researchers (% of total Level 8-10*)	3%**	2.6%**	2.5%*
4% FTE National TU Target			(2% ITC & 3% WIT)
Staff Profile / Qualifications	90% L9** 29% L10**	87% L9** 37% L10**	ITC 2013-2014 96% L9 & 28% L10* (+ 14% pursuing L10)
National TU Target 90% L9 (or equiv.) to include 45% L10 (or equiv.)			WIT 2012/13*** 89% L9*** & 28% L10****

*Data Source: HEA published and unpublished data 2013-2014; **Expert Panel Reports to the HEA on the TU4Dublin and MTU Applications, September 2014;

2013-2014 data not available (NA); *WIT Summary document February 2015.

MTU, Munster TU Consortium; TU4Dublin, Dublin TU Consortium; SETU, South East TU Consortium

1.5. Student Profile

In terms of the 2017 student profile, IT Carlow continues to meet or exceed the trajectories and targets agreed in July 2012 as part of the successful joint stage 1 submission for TU designation.

The SETU joint submission to the HEA in July 2012 contained assumptions having regard to the enrolment trajectories and overall student population growth.

TOTAL HIGHER EDUCATION STUDENTS						
Category	Metric	2010-2011		2013-2014		2017 Projections
		ITC	WIT	ITC	WIT	
Total Student Headcount (HC)	Total Head Count	4869	8074	6376	8350	5940
Whole Time Equivalents (WTE)	Total WTE	4519	7208	5672	6905	5551*
(Calculations for 2017 projections for WTE based on 2013-2014 ratios)						

The above data confirms the following:

- A 31% increase in total higher education students for IT Carlow since 2010/11
- A 3.4% increase in total higher education students for WIT since 2010/11
- An overall increase of 13.7% for IT Carlow / WIT since 2010/11

In terms of the student body profile, an agreed target of the July 2012 joint submission was that IT Carlow was to have 25% of its total students classified as LLL/Flexible Provision students by 2017. The data below demonstrates that IT Carlow has exceeded this target in 2013/2014 and indeed is on track to potentially compensate in a merged institution for the shortfall.

LLL HIGHER EDUCATION STUDENTS						
Category	Metric	2010-2011		2013-2014		2017 Projections
		ITC	WIT	ITC	WIT	
Whole Time Equivalents (WTE)	WTE LLL	1278	NA	1888	489	1231
	%WTE LLL	28.2%	NA	33%	7.0%	22%
						8.5%
Total Student Headcount (HC)	Headcount LLL	1503	1494	2284	1282	1478
	%Headcount LLL	30.8%	18.5%	36%	15.3%	24.8%
						19.6%

IT Carlow has achieved a diversified growth in its student enrolments across award levels. The largest increase has been registered at Levels 9 and 10, reflecting the increased emphasis on postgraduate activities in the institution, followed by Level 8, and a welcome strong growth of 18% at Level 6 and Level 7. The latter has been achieved against a backdrop of a consistent decline in CAO acceptances at Level 6 and across the country for the past 10 years. This ongoing commitment of the institution to offer a diversified range of programmes is in keeping with the nationally-described mission for a Technological University.

Metric	STUDENT PROFILE PER AWARD LEVEL OF NFQ					
	2010-2011		2013-2014		2017 Projections	
	ITC	WIT	ITC	WIT	ITC	WIT
Total Students 9 & 10 Taught	58	524	122	537	207	591
Total Students 9 & 10 Research	33	175	55	157	108	265
Total Students 8 HDip						
Total Students 8 (Hons Degrees)	51	92	217	252	84	100
Total Students 6 & 7	2474	4128	3199	4066	3340	4757
Total Other (occasional)	1916	2997	2260	2645	1766	3381
	337	158	523	693	435	198

1.6. Quality Assurance and Enhancement

A culture of rigorous quality assurance / enhancement, peer reviews and external validation is at the heart of all high quality higher education institutes and IT Carlow has embedded this culture in all of its activities. The Institute engages in regular robust self-evaluation and peer review as a key component of its quality enhancement culture. This philosophy has served the Institute well in maintaining a high standard of achievement in recent formal quality assurance / enhancement reviews.

In 2014 IT Carlow was awarded the *Sunday Times Institute of Technology of the Year*. The judges in making the award stated that the Institute was deserving of the award “*off the back of a strong academic performance, a high completion rate and a good record in the graduate jobs market*”.

As part of its proven commitment to a learner-centric experience, IT Carlow continually monitors student progression. This is a key measurement of quality demonstrating student achievement. In the four years 2010/11 to 2013/14, the overall rate of progression in the Institute has increased from 79% to 83%. This compares to the IoT national average of 77% in 2012/2013 (the latest available HEA figure).

Within this overall figure, progression rates on programmes in IT Carlow at NFQ Levels 6 and 7 have increased from 71% to 83% and 77% to 82%, respectively, in the same period.

This is significantly ahead of IoT national averages of 74% and 72% in 2012/2013 (the latest available HEA figure).

PROGRESSION RATES (%)				
IT Carlow				
	2010/11	2011/12	2012/13	2013/14
Level 8	87	81	82	82
Level 7	77	74	75	82
Level 6	71	76	75	83
All Levels	79	78	79	83
All Institutes of Technology				
	2010/11	2011/12	2012/13	2013/14
Level 8	83	83	83	NA
Level 7	72	71	72	NA
Level 6	69	70	74	NA
All Levels	76	76	77	NA
National Progression Rate (IoTs and Universities)				
	2010/11	2011/12	2012/13	2013/14
Level 8	89	89	88	NA
Level 7	72	71	72	NA
Level 6	69	70	74	NA
All Levels	84	84	84	NA

1.7. Graduate Employment

One of the primary missions of the TU is to provide graduates with the necessary attributes and skills to obtain meaningful employment and to contribute to the economic, social and environmental capital of the nation. IT Carlow's graduates have maintained an average employment level at 90% between 2009 and 2013. This is a reflection of the esteem in which the Institute and its graduates are held by employers. This achievement has been possible through the continuous development of a range of highly innovative and highly sought after postgraduate programmes, particularly in response to national economic trends.

1.8. Strategic Plan 2014-2018

IT Carlow finalised its Strategic Plan 2014-2018 in late 2013 following a broad inclusive consultative process with staff, learners, collaborative partners and external stakeholders. This plan has been designed to ensure that IT Carlow contributes maximally to the attainment of the joint Mission and Vision for the SETU articulated by the South East IoTs in their successful Stage 1 TU submission.

The goals and strategies presented in the plan go beyond the achievement of quantitative metrics in the published TU criteria / agreed 2017 projections, to address the key characteristics of a regionally-engaged Technological University in a more holistic manner. Work is well advanced on strategic and programmatic five-year reviews across all Schools, Centres and Campuses at IT Carlow to deliver on the various measures identified under the five key areas of:

- The Learner Experience and Graduate Attributes
- Knowledge Creation, Application and Exchange
- Strategic Collaborations and Partnerships
- Societal, Economic and Environmental Impact
- Reputation, Public Confidence and Sustainability