

**An Examination of the Implementation of Ireland's  
New Higher Education System Performance  
Framework in a Sample of Higher Education  
Institutions**

Author: Seamus O Shea, B.Sc., M.Eng.

Presented for the Award of  
Doctor of Education

Supervisor: Professor Joe O Hara

Dublin City University Institute of Education

September 2018

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Education is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

A handwritten signature in blue ink that reads "James O'Shea". The signature is written in a cursive style with a large initial 'J' and 'O'.

Signed:

(Candidate)

ID No.: 14211751

Date: 1/9/2018

## Dedication

To Carol, Déirdre, Laurie, Muireann and Donagh for all that you mean to me.

## Acknowledgements

I wish to express my sincere gratitude to the following people:

My supervisor, Professor Joe O Hara, for sharing his wisdom, for his positive encouragement and good humour, and his direction and support at all times;

The participants in the study for sharing their time and their views with me and without whom none of this would have been possible;

The staff of DCU for their interest in guiding our class along the way and to my class mates for their friendship, support and encouragement;

The Institute of Technology Tralee (my employer) for its support;

My work colleagues who participated in some pilot activities and those who took the time to inquire, encourage and support;

Margaret, Siobhán and Patricia for their great sense of humour and the interest and support provided to me on this journey;

Tadhg for acting as a sounding board for the statistical analysis;

My parents for their example and for always showing an interest in my education.

# Table of Contents

<b>Chapter 1 Introduction and Context</b> .....	<b>1</b>
1.1 Introduction.....	1
1.2 Research Question.....	2
1.3 Contextual Factors.....	2
1.3.1 New Public Management.....	2
1.3.2 EU Context.....	3
1.3.3 Ireland’s Higher Education Strategy.....	3
1.3.4 Ireland and EU Policy.....	5
1.4 Conclusion.....	7
1.5 Format of the Thesis.....	8
<b>Chapter 2 Literature Review</b> .....	<b>10</b>
2.1 Introduction.....	10
2.2 International Context & Developments in Higher Education.....	10
2.2.1 New Public Management & Higher Education.....	10
2.2.2 Higher Education in the Global Economy.....	12
2.2.3 World-Class Universities or World-Class Higher Education Systems.....	12
2.2.4 Widening Participation and Funding of Higher Education.....	14
2.3 European Context.....	16
2.3.1 Bologna Roadmap from Sorbonne to Yerevan.....	17
2.3.2 The Lisbon Strategy for Growth and Jobs & Education and Training 2010 Work Programme.....	19
2.3.3 Europe 2020 Strategy & Education and Training 2020 (ET 2020).....	21
2.4 Performance Management.....	22
2.4.1 Performance Management and Strategic Planning – Positive Experiences.....	25
2.4.2 Performance Management and Strategic Planning – Challenges.....	32
2.5 Ireland’s Policy Context.....	36
2.5.1 National Strategy for Higher Education.....	37
2.5.2 Systems Performance - Implementation Challenges.....	41
2.6 Oliver’s Strategic Response Theory.....	47
2.6.1 Theoretical Underpinning.....	49
2.6.2 Predictors of Strategic Responses.....	51
2.6.3 Adaptation of Oliver’s Strategic Response Theory.....	53
2.7 Conclusion.....	55
<b>Chapter 3 Research Design and Methodology</b> .....	<b>56</b>
3.1 Research Design.....	56
3.2 Research Methodology.....	60
3.3 Mapping Research Questions to Oliver’s Strategic Response Framework.....	62
3.4 Measures/Instruments.....	65
3.5 Sampling.....	66
3.6 Interviews.....	67
3.7 Method of Data Analysis.....	68
3.7.1 Qualitative Data Analysis.....	68
3.7.2 Quantitative Analysis of Baseline Questionnaire.....	71
3.8 Methodological Rigour.....	73
3.9 Clarification of Researcher Bias & Insider Research.....	74

3.10 Ethical Considerations.....	75
3.11 Conclusion .....	76
<b>Chapter 4 Findings from Interviews and Strategic Compacts .....</b>	<b>77</b>
4.1 Introduction.....	77
4.2 Findings & Analysis UCC Using the Strategic Response Framework .....	79
4.2.1 HEI Introduction - University College Cork (UCC).....	79
4.2.2 Cause: Legitimacy or Social Fitness (UCC) – Comply or Negotiate.....	79
4.2.3 Cause: Efficiency or Economic Fitness (UCC) – Comply or Negotiate .....	81
4.2.4 Constituents: Multiplicity of Constituent Demands (UCC) – Comply or Negotiate	82
4.2.5 Constituents: Dependence on Institutional Constituents (UCC) – Comply or Negotiate .....	84
4.2.6 Content: Consistency with Organisational Goals (UCC) – Comply or Negotiate....	84
4.2.7 Content: Discretionary Constraints Imposed on the Organisation (UCC) – Comply or Negotiate.....	87
4.2.8 Control: Legal Coercion or Enforcement (UCC) – Comply or Negotiate .....	88
4.2.9 Control: Voluntary Diffusion of Norms (UCC) – Comply or Negotiate.....	89
4.2.10 Summary (UCC) .....	90
4.3 Findings & Analysis CIT Using the Strategic Response Framework .....	92
4.3.1 HEI Introduction – Cork Institute of Technology (CIT).....	92
4.3.2 Cause: Legitimacy or Social Fitness (CIT) – Comply or Negotiate .....	92
4.3.3 Cause: Efficiency or Economic Fitness (CIT) – Comply or Negotiate.....	94
4.3.4 Constituents: Multiplicity of Constituent Demands (CIT) – Comply or Negotiate .	95
4.3.5 Constituents: Dependence on Institutional Constituents (CIT) – Comply or Negotiate .....	97
4.3.6 Content: Consistency with Organisational Goals (CIT) – Comply or Negotiate.....	97
4.3.7 Content: Discretionary Constraints Imposed on the Organisation (CIT) – Comply or Negotiate .....	99
4.3.8 Control: Legal Coercion or Enforcement (CIT) – Comply or Negotiate .....	99
4.3.9 Control: Voluntary Diffusion of Norms (CIT) – Comply or Negotiate .....	101
4.3.10 Summary (CIT).....	101
4.4 Findings & Analysis WIT Using the Strategic Response Framework .....	103
4.4.1 HEI Introduction – Waterford Institute of Technology (WIT) .....	103
4.4.2 Cause: Legitimacy or Social Fitness (WIT) – Comply or Negotiate.....	103
4.4.3 Cause: Efficiency or Economic Fitness (WIT) – Comply or Negotiate .....	105
4.4.4 Constituents: Multiplicity of Constituent Demands (WIT) – Comply or Negotiate .....	105
4.4.5 Constituents: Dependence on Institutional Constituents (WIT) – Comply or Negotiate .....	107
4.4.6 Content: Consistency with Organisational Goals (WIT) – Comply or Negotiate ..	107
4.4.7 Content: Discretionary Constraints Imposed on the Organisation (WIT) – Comply or Negotiate.....	110

4.4.8 Control: Legal Coercion or Enforcement (WIT) – Comply or Negotiate.....	110
4.4.9 Control: Voluntary Diffusion of Norms (WIT) – Comply or Negotiate.....	111
4.4.10 Summary (WIT) .....	111
4.5 Findings & Analysis IT Carlow Using the Strategic Response Framework.....	114
4.5.1 HEI Introduction – Institute of Technology, Carlow (ITC).....	114
4.5.2 Cause: Legitimacy or Social Fitness (ITC) – Comply or Negotiate .....	114
4.5.3 Cause: Efficiency or Economic Fitness (ITC) – Comply or Negotiate.....	116
4.5.4 Constituents: Multiplicity of Constituent Demands (ITC) – Comply or Negotiate	117
4.5.5 Constituents: Dependence on Institutional Constituents (ITC) – Comply or Negotiate .....	118
4.5.6 Content: Consistency with Organisational Goals (ITC) – Comply or Negotiate....	119
4.5.7 Content: Discretionary Constraints Imposed on the Organisation (ITC) – Comply or Negotiate .....	121
4.5.8 Control: Legal Coercion or Enforcement (ITC) – Comply or Negotiate .....	121
4.5.9 Control: Voluntary Diffusion of Norms (ITC) – Comply or Negotiate .....	122
4.5.10 Summary (ITC).....	122
4.6 Findings & Analysis ITT Using the Strategic Response Framework .....	124
4.6.1 HEI Introduction – Institute of Technology Tralee (ITT).....	124
4.6.2 Cause: Legitimacy or Social Fitness (ITT) – Comply or Negotiate .....	124
4.6.3 Cause: Efficiency or Economic Fitness (ITT) – Comply or Negotiate.....	125
4.6.4 Constituents: Multiplicity of Constituent Demands (ITT) – Comply or Negotiate	127
4.6.5 Constituents: Dependence on Institutional Constituents (ITT) – Comply or Negotiate .....	128
4.6.6 Content: Consistency with Organisational Goals (ITT) – Comply or Negotiate....	129
4.6.7 Content: Discretionary Constraints Imposed on the Organisation (ITT) – Comply or Negotiate .....	131
4.6.8 Control: Legal Coercion or Enforcement (ITT) – Comply or Negotiate .....	131
4.6.9 Control: Voluntary Diffusion of Norms (ITT) – Comply or Negotiate .....	132
4.6.10 Summary (ITT).....	132
4.7 Conclusion .....	134
<b>Chapter 5 Findings from Quantitative Analysis.....</b>	<b>135</b>
5.1 Description of the Sample .....	135
5.2 Visibility of the HESPF .....	135
5.3 Goals of the HESPF .....	137
5.4 Influence of the HESPF .....	138
5.5 Institutional Capacity and the HESPF .....	139
5.6 Usefulness of the KPIs and the HESPF.....	139
5.7 Factor Analysis Combining All Variables.....	140
5.8 Multiple Discriminant Analysis (MDA) on the Five Factors for All Variables for Staff Position.....	141
5.9 Summary .....	141
<b>Chapter 6 Discussion .....</b>	<b>143</b>
6.1 RQ1 HESPF – Aiding or Inhibiting Institutional Planning Towards the Related Policy Initiatives .....	143

6.1.1 RQ1 HESPF Aids to Planning – Constructive Relationship Building .....	143
6.1.2 RQ1 HESPF Aids to Planning – Self Reflection, Institutional Learning and Strategic Capacity Building.....	144
6.1.3 RQ1 HESPF Inhibitors to Planning – Strategic and Developmental Level .....	145
6.1.4 RQ1 HESPF Inhibitors to Planning – Structural Flaws.....	148
6.1.5 RQ1 HESPF Inhibitors to Planning – Lack of Incentives .....	150
6.1.6 RQ1 HESPF Inhibitors to Planning – Unintended Consequences .....	151
6.2 RQ2 HESPF – Goal Displacement and Steering .....	153
6.2.1 RQ2 HESPF Strategic Influence & Steering.....	153
6.2.2 RQ2 HESPF Reputation & Compliance .....	155
6.3 RQ3 HESPF Institutional Capacity.....	156
6.3.1 RQ3 HESPF Funding.....	156
6.3.2 RQ3 HESPF Human Resources_Industrial Relations (HR_IR) .....	158
6.3.3 RQ3 HESPF Institutional Research Capacity.....	159
6.4 RQ4 Behavioural Influence and Scale of Expectation .....	161
6.4.1 RQ4 HESPF Behavioural Influence.....	161
6.4.2 RQ4 HESPF Scale of Expectation.....	164
6.5 Summary .....	165
<b>Chapter 7 Conclusions and Recommendations.....</b>	<b>166</b>
7.1 Conclusions .....	166
7.1.1 HESPF Influence on Goals and Performance.....	166
7.1.2 Accountability, Steering and Diversity.....	168
7.1.3 Capacity Issues .....	169
7.1.4 Parity Between Process and Outcome.....	170
7.1.5 Influence of the National KPIs.....	171
7.1.6 Summary .....	172
7.2 Contribution to Knowledge .....	174
7.3 Recommendations .....	175
<b>References.....</b>	<b>179</b>
<b>Appendices.....</b>	<b>203</b>
Appendix A Recurrent Grant Funding Model .....	203
Appendix B Quality Assurance Instruments in Higher Education.....	203
Appendix C Funding Mechanisms for Higher Education .....	203
Appendix D Quantitative Analysis: Factor Data and Cross Tabulations .....	203
Appendix E Interview Schedule .....	203
Appendix F New Higher Education System Performance Framework Questionnaire ..	203
Appendix G Nodes List .....	203
Appendix H Word Frequency Query .....	203
Appendix I Qualitative Analysis Documentation Form Sample .....	203
Appendix J Plain Language Statement .....	203
Appendix K Informed Consent Form.....	203
Appendix L Framework Matrix Sample .....	203
Appendix M System KSOs/HLIs Addressed in HEIs’ Objectives/KPIs.....	203

## Table of Tables

Table 2.1 Evolution of public funding to higher education institutions between 2008 and 2014 .....	21
Table 2.2 Antecedents of Strategic Responses (Oliver 1991) .....	48
Table 2.3 Institutional Antecedents and Predicted Strategic Responses.....	52
Table 2.4 Institutional Antecedents and Predicted Strategic Responses (Adapted).....	54
Table 3.1 Strategic Response Framework for Deployment in this Study (Adapted from Oliver (1991, p.160)) .....	63
Table 3.2 Design Protocol (Yin 2014) and Action Taken.....	73

## Table of Figures

Figure 2.1 Overview of Public Funding Allocation Mechanisms .....	16
Figure 2.2 The Bologna Process: from Sorbonne to Yerevan, 1998-2015 .....	18
Figure 2.3 Model of Academic Quality (Van Damme 2004, p.133).....	30
Figure 2.4 Process for HEI Strategy Development and Performance Evaluation.....	39
Figure 3.1 Concurrent/Convergent Triangulation Design Strategy .....	61
Figure 3.2 Strategies for Addressing Interview Limitations.....	68
Figure 3.3 Components of Data Analysis: Interactive Model (Miles et al. 2014, p.14) .....	69
Figure 4.1 Examples of Alignment of UCC's Strategic Goals with KSOs .....	85
Figure 4.2 Examples of Alignment of CIT's Strategic Goals with KSOs .....	98
Figure 4.3 Examples of Alignment of WIT's Strategic Goals with KSOs.....	108
Figure 4.4 Examples of Alignment of IT Carlow's Strategic Goals with KSOs.....	120
Figure 4.5 Examples of Alignment of ITT's Strategic Goals with KSOs .....	130
Figure 5.1 Awareness Levels of Ireland's HESPF.....	135
Figure 5.2 Awareness Levels of KSOs in the HESPF .....	136
Figure 5.3 Awareness Levels of HEI's Strategic Compact with the HEA.....	137
Figure 7.1 Characteristics of Performance Agreements and Ireland's HESPF.....	173
Figure 7.2 Comparison between Ireland's HESPF and Common Aims of Performance Agreements.....	176

## Acronyms

ACE	Adult and Continuing Education
ANOVA	Analysis of Variance
CAPPA	Centre for Advanced Photonics and Process Analysis
CIT	Cork Institute of Technology
CORE	Centre of Research and Enterprise
DARE	Disability Access Route to Education
DCU	Dublin City University
ECF	Employment Control Framework
EHEA	European Higher Education Area
EI	Enterprise Ireland
ENQA	European Association for Quality Assurance in Higher Education
ET2010	Education and Training 2010
ET2020	Education and Training 2020
EU	European Union
EUA	European University Association
FETAC	Further Education and Training Awards Council
HE	Higher Education
HEA	Higher Education Authority
HEI	Higher Education Institution
HEIx0y	This is a code for an interviewee, where x and y are digits (e.g. HEI204)
HESPF	Higher Education System Performance Framework
HETAC	Higher Education and Training Awards Council
HLI	High Level Indicator
HSS	Health and Social Sciences
IHEQN	Irish Higher Education Quality Network
IBEC	Irish Business and Employers' Confederation
IDA	Industrial Development Authority
IOT	Institute of Technology
IOTI	Institutes of Technology Ireland
IR	Industrial Relations
ISSE	Irish Survey of Student Engagement
ITC	Institute of Technology Carlow
ITT	Institute of Technology Tralee
IUA	Irish Universities Association

IUQB	Irish Universities Quality Board
KPI	Key Performance Indicator
KSO	Key System Objective
LIT	Limerick Institute of Technology
MST	Maths, Science and Technology
NFQ	National Framework of Qualifications
NFTL	National Forum for Teaching & Learning
NMCI	National Maritime College of Ireland
NIMBUS	Centre for Research in Embedded Networked Systems
NPM	New Public Management
NQAI	National Qualifications Authority of Ireland
OECD	Organisation for Economic Cooperation and Development
PA	Performance Agreement
PPP	Public Private Partnership
QQI	Quality and Qualifications Ireland
REAP	Roadmap for Employment - Academic Partnerships
REC	Research Ethics Committee
RPL	Recognition of Prior Learning
SIF	Strategic Innovation Fund
SSTI	Strategy for Science, Technology and Innovation
STEM	Science, Technology, Engineering and Mathematics
TCD	Trinity College Dublin
TTSI	Technology Transfer Strengthening Initiative
TU	Technological University
UCC	University College Cork
UCD	University College Dublin
WTE	Whole Time Equivalent
WIT	Waterford Institute of Technology

## Abstract

An Examination of the Implementation of Ireland's New Higher Education System Performance Framework in a Sample of Higher Education Institutions. Seamus O Shea, B.Sc., M.Eng.

This research study seeks to examine the implementation of Ireland's new higher education system performance framework (HESPF), through its first 2014-2016 three-year strategic compact cycle, in a sample of higher education institutions (HEIs). In particular, the study explores the extent to which the framework aids or inhibits institutional planning; whether institutional goals are being aligned with the national agenda; if the national performance indicators for the higher education sector are incentivising behaviour; and institutional capacity to support the national policy objectives. An exploratory case study design frame is used to address the research question, with cases drawn from small, medium sized, and large institutions in the Southern regional cluster. A concurrent triangulation design strategy is deployed with qualitative data drawn from 24 key informants and strategic compacts, and quantitative data elicited from 92 questionnaires. Oliver's strategic response framework (Oliver 1991) was adapted for qualitative data analysis and factor analysis combined with ANOVA was utilised to investigate patterns and associations in quantitative data. The HESPF is generally considered a good concept that has resulted in improved accountability through a process of constructive dialogue between the HEA and HEIs. Strategic planning capacity building, self-reflection and institutional learning are regarded as strengths of the process. However, the process is regarded as not being conducted at a sufficiently strategic level, not enabled by funding, a bureaucratic overload, potentially open to deceptive tactics and there are mixed views on the extent to which it improves visibility on performance. The level of realism in the national KPIs was found to be questionable in the current funding environment and the KPIs are regarded as not impacting behaviour in any significant way. The results of this study shed light on key implementation issues in a strategic compact process that is generally aligned with the common characteristics of such performance agreements internationally (De Boer et al. 2015).

## Chapter 1 Introduction and Context

This chapter introduces the aims and research questions associated with this study and presents a brief outline of the broad contextual factors that impact on the study, particularly new public management philosophies (NPM), European Union (EU) policy, Ireland's higher education (HE) strategy and its related policy context. An outline of the format of the thesis is then presented which provides the reader with a roadmap for the project design.

### 1.1 Introduction

This research study seeks to examine the implementation of Ireland's new higher education system performance framework (HESPF) (HEA 2013a), through its first 2014-2016 three-year cycle, in a sample of higher education institutions (HEIs). The framework focuses on identifying national priority goals for higher education, and provides a context for the ongoing evaluation of performance of Ireland's higher education system and that of individual HEIs. These priorities have been identified as: "economic renewal and development; social cohesion, cultural development and equity; public sector reform towards greater effectiveness and efficiency; and restoration of Ireland's international reputation" (HEA 2014b, p.119). Integral to the framework are strategic compacts (i.e. contracts) that are negotiated between individual HEIs and the higher education authority (HEA), which specify how institutional strategies and related performance indicators contribute to national priorities, and that link funding to performance. The purposes of the framework are to: systematically "monitor performance" of the higher education (HE) system and "hold it accountable" for achievement of national priorities; "articulate the expectations" from government of the HE system; improve "visibility of performance" of the HE system to all stakeholders; inform "system and policy development"; facilitate HEIs in "identifying their strategic niche"; and to agree a strategic compact between individual HEIs and the HEA which forms the basis for performance evaluation (HEA 2013a, p.1).

As the implementation has completed its first three-year cycle it is timely that a review takes place to assess the impact of the performance framework on planning and behaviours at institutional level. In particular, the study explores the extent to which the framework aids or inhibits institutional planning and whether institutional goals are being aligned with the national agenda. It also explores if the national performance indicators for the higher education sector are incentivising behaviour along with capacity, resource and visibility issues. These performance indicators are aligned with the national priorities and relate to graduate profiles, access for underrepresented groups, teaching & learning, research & knowledge

exchange, international activity, restructuring in the sector, and accountability for public funding. The five HEIs (UCC, CIT, WIT, ITC, ITT) in the Southern cluster have been chosen as the sample for the study.

This research study represents a distinctive opportunity to examine the implementation of the new HESPF at the end of its first three-year cycle of implementation. It has the potential to inform subsequent incarnations of the framework and to add significantly to the literature in the area of performance management in higher education, with particular reference to performance contracts and the Irish context.

## **1.2 Research Question**

The overall objective (i.e. main research question) of this study is to examine the extent to which institutions of higher education are responding to state policies to develop strategic responses to support the policy goals envisaged in Ireland's new higher education system performance framework. There are four sub-questions arising from the main research question:

1. To what extent does the higher education policy/performance framework aid or inhibit institutional planning towards the related policy initiatives?
2. Have institutional goals been displaced towards the national agenda?
3. Is institutional capacity being developed to support the national policy objectives, including at sub-unit level?
4. How meaningful or useful are the key performance indicators (KPIs) set by the Irish government in terms of incentivising behaviour?

The environmental factors impacting on the higher education institutions are also considered within these questions.

## **1.3 Contextual Factors**

This section introduces the main contextual factors that impinge on the study topic – new public management, EU policy and policies relevant to Ireland's higher education sector.

### **1.3.1 New Public Management**

Many countries since the 1990s have introduced new public management approaches to the delivery and management of public services. These approaches seek to manage performance through the use of key performance indicators (KPIs), with increased attention to institutional governance, accountability, transparency and compliance, not least in higher education as it is seen as key to states' economic and social development and prosperity. HEIs play a key role in the research and innovation ecosystem and are seen as pivotal in supporting the human

capital requirements of the state in a socially cohesive fashion. Increasingly, national education systems are introducing performance measurement frameworks to measure progress of the higher education sector towards the achievement of such national policy goals and against international benchmarks with, in many instances, performance linked to financial rewards.

### 1.3.2 EU Context

In the European context, HEIs are regarded as pivotal to smart, sustainable, inclusive economic growth under *Europe 2020* (European Commission 2010a). A modernisation agenda for European higher education is being pursued, linking education to workforce needs to support the lifelong development of a skilled workforce and placing increased emphasis on research and innovation through a number of ambitious flagship initiatives. This has led to governance arrangements that emphasise increased institutional autonomy linked to accountability and quality improvements, a shift towards performance based funding and the emergence of frameworks that align individual HEI goals to state strategic priorities. Of particular interest to this study is the extent to which “global scripts” (Takayama 2012, p.506) in higher education, as implemented through the new HESPF, are being deciphered or construed within HEIs in Ireland.

### 1.3.3 Ireland’s Higher Education Strategy

Ireland’s National Strategy for Higher Education to 2030 (Department of Education & Skills 2011) envisions the HE sector as playing a central role in its social, cultural and economic development and is framed within the government’s policy on Building Ireland’s Smart Economy (Government of Ireland 2008). The strategy is also cognisant of the national access plans (HEA 2008a; HEA 2015k), the national science strategy *Innovation 2020 (SFI 2015)* and its predecessors, (Government of Ireland 2006; Government of Ireland 2010a), the national enterprise policy *Enterprise 2025: Innovative, Agile, Connected* (DJEI 2014a; DJEI 2015), Ireland’s *National Skills Strategy 2025* (DoE&S 2016), and the international education strategy *Irish Educated, Globally Connected: An International Education Strategy for Ireland, 2016-2020* (Department of Education & Skills 2016b; Government of Ireland 2010b). The range of KPIs in Ireland’s HESPF are also influenced by EU policy across the full spectrum of the seven key system objectives – supply of human capital, promoting access to HE for disadvantaged sectors, enhancing the quality of teaching and learning, research excellence and collaboration, internationalisation, system restructuring and increased accountability. The HESPF represents a distillation of these key policy initiatives and influences into forty KPIs that were created by

Government to provide practical guidance to the HE system in constructing their strategic compacts. Such developments are placing the Irish higher education performance within a globally competitive framework with an attendant focus on quality, accountability, transparency, and systems to support international comparison.

However, the national strategy was launched (in 2011) at a particularly difficult juncture. Since the commencement of the global financial crisis in 2008 Ireland's higher education system has experienced unprecedented challenges with a 32% reduction in funding from the exchequer in the period 2008-2015, staff cuts of circa 2,000, and 25,000 extra places alongside a projected 27% growth in demand to 2027 (HEA 2016d; O Sullivan 2014). "Ireland was effectively in receivership" (O Sullivan 2014, p.1) at this time and a sustainable funding model for HE has yet to emerge from Government to underpin its ambitious plans for HE and to address the deficits that have emerged during that period.

The national HE strategy envisages a consolidation, through mergers or incorporations, of smaller institutions to promote coherence, critical mass, and efficiencies and concentrating expertise through economies of scale. Policies to date had prioritised regional access ahead of "focussed centres of excellence" resulting in a "crowded and unstructured landscape" in programme provision with prioritised funding for research leading to "greater institutional research specialisation" (HEA 2012, p.3). A smaller number of multi-campus high quality HEIs are envisaged (through consolidation in the institute of technology sector) that may be designated as technological universities where they meet internationally benchmarked criteria relating to applied research and scholarship and are to be characterised by career-focused programme provision from levels 6 to 10 on the National Framework of Qualifications that includes a strong emphasis on lifelong learning.

Internationally, a technological university is a higher education institution that operates at the highest academic level in an environment that is specifically focused on technology and its application.

(Department of Education & Skills 2011, p.103)

The new strategy highlights the need for a differentiated system of HEIs operating within a clear framework aimed at developing a coherent set of higher education institutions (HEIs). This system performance framework (HEA 2013a) is at the heart of this research study.

### 1.3.4 Ireland and EU Policy

Overall, the range of KPIs in Ireland's HESPF show a clear relatedness to EU policy, while also clearly reflecting national priorities. International benchmarks identify with position relative to EU/OECD countries (HEA 2014b). This is not unique in the European context (de Boer and File 2009).

When comparing the various national reports, and when analysing the survey data, one is struck by how national policies are increasingly influenced and framed by a European dimension – concerning both higher education and research - without denying the importance of domestic agendas.

(Stensaker et al. 2007, p.14)

Ireland has set ambitious targets (as set out below) which in most cases exceed those included as the benchmarks for Europe 2020, but it faces significant challenges in achieving most of these with the attendant impact on the HE system and social and economic development as envisaged under the new HESPF (HEA 2013a).

#### *1.3.4.1 Higher Education Attainment and Lifelong Learning*

Ireland has set a target of 60% of the population aged 30-34 with tertiary education attainment (20% above the EU target and an 11% increase on its 2009 benchmark) – the progress to 2017 shows an undulating trend to 53.5%, suggesting that this target is extremely challenging (Eurostat 2018). It has set an accompanying target of “producing the highest % of graduates from MST in the EU”, having ranked third in 2007 (European Commission 2011; HEA 2014b, p.121) and second in 2014 (HEA 2016d, p.21), but faces challenges in gender imbalance and STEM graduates relative to the EU-28 average (HEA 2017b, p.31). However, Ireland faces significant challenges in adult participation in lifelong learning if it is to reach the EU 2020 target of 15% from its relatively low base of 7% in 2010 and 6.5% in 2015 (Eurostat 2017, p.70) and is “currently heading in the wrong direction (6.4% in 2016/17)...and is less than half the benchmark set in ET2020” (HEA 2017b, p.35), compared to an average of 10.8% for the EU (Smidt 2018).

#### *1.3.4.2 Widening Participation*

Ireland has set targets in its National Access Plan (HEA 2015k) for socio-economic groups and other groups under-represented in higher education, and is ranked in the EU top five countries in 2014 for measures to support the participation of disadvantaged students (European Commission/EACEA/Eurydice 2015, p.121). However, progress on socio-economic, mature and disability entrants are in most instances projecting decreases, according to the latest

HESPF reports (HEA 2016d, p.1) with some stabilisation reported in 2017 (HEA 2017b), rather than growing towards the national access targets (HEA 2015k, pp.35-36).

#### *1.3.4.3 Student Mobility*

The EU 2020 target of 20% for graduate mobility features among Ireland's targets alongside an equally ambitious national target of 15% for the proportion of international students in the overall student body (HEA 2014b, p.125). This is a particularly difficult target based on growth from 4.6%<sup>1</sup> in 2000 to 8.8%<sup>1</sup> in 2008 (European Commission 2011, p.37), 9% of WTE full-time students in 2014/15 (HEA 2016d, p.1), and 11.6% of full-time students in 2016/17 (HEA 2017b, p.68), and the strong track record of competitor English speaking nations, such as the US, Australia, the UK, not least related to the positioning of their top universities in international rankings. Ireland accounts for less than 1% (n=5,942) of the incoming non-EHEA students to the European Higher Education Area (EHEA) space and its leading colleges have been slipping on commercial international rankings until recently – “four countries, namely the United Kingdom, France, Germany and Russia, attract 71.3 % of all non-EHEA mobile students enrolled in the EHEA” (European Commission/EACEA/Eurydice 2015, pp.229-230) and also account for 53% of doctoral students in the EHEA (European Commission/EACEA/Eurydice 2015, p.31). In addition, “most students choose a geographically proximate institution of higher education” both in the US and in Europe (Dill 2003, p.140). This has serious implications for funding of the higher education sector in Ireland, as highlighted by Minister Jan O Sullivan in January 2016.

Increasing the number of foreign students who choose to study here would bring an extra €720 million into the economy, Ms O'Sullivan said...currently, the percentage of international students in higher education is 8.8%. The target is to increase it to 15% by 2020.

(Loughlin 2016)

#### *1.3.4.4 Research & Development*

Ireland's international benchmark for R&D under the HESPF is related to its position in OECD (HEA 2014b, p.124). Eurostat data shows that Ireland's R&D investment target is 2% of GDP compared to an EU target of 3% - it grew to 1.61% of GDP in 2009 but has steadily declined to a mid-table position of 1.51% in 2014 (Eurostat 2018; OECD 2017b).

Spending on R&D in Ireland as a whole remains below average EU levels, and well below that of innovation leaders.

(HEA 2017b, p.54)

Ireland is one of 36 countries in the EHEA where doctoral students account for less than 5% of enrolments (European Commission/EACEA/Eurydice 2015, p.31; HEA 2016e), which

significantly impacts on the capacity for research and innovation across Europe's knowledge-based economies. Post-graduate researcher numbers are also struggling to recover to the highs (2009/10) achieved in the last decade (HEA 2017b, p.57). Despite the relatively modest investment in research, Ireland is "ranked 9<sup>th</sup> in the world overall in global scientific rankings", is "first in Europe in knowledge transfer performance of public research organisations", has received "32 prestigious ERC grants under Horizon 2020" (HEA 2016d, p.1) and in 2017 was meeting the Government's target for Horizon 2020 funding which paradoxically, due to cross-subsidisation, eats into the budget available for "education of students" (HEA 2017b, pp.60-61). Ireland is classed as an Innovation Follower (level 2 performance group) on the Innovation Union Scorecard 2015, 13% above the EU average in 2014 (European Commission 2015, p.51) and (on a per capita basis) its HE system is the fifth most innovative in Europe in 2018, according to Reuters (Ewalt 2018).

#### *1.3.4.5 Teaching & Learning*

The Bologna objective of alignment of QA procedures with international best practice is overseen by Quality and Qualifications Ireland (QQI) which was established in 2012, absorbing the functions previously performed by FETAC, HETAC, NQAI and the IUQB. The HESPF includes a range of "essential deliverables" associated with "excellence in teaching in learning" (HEA 2014b, p.123) and has established a National Forum for the Enhancement of Teaching and Learning to give effect to these (HEA 2016d, p.39). However, the staff:student ratio, a commonly used proxy for quality of T&L, has deteriorated from 1:15.6 to 1:20.6 in the period 2007/08 to 2016/17 (HEA 2016d, p.1), lagging behind the OECD average of 1:16 (OECD 2017a, p.358).

## **1.4 Conclusion**

Ireland's new HESPF is firmly rooted in NPM principles as the state seeks to leverage its academic capital to deliver on its national priorities - economic development, social cohesion, restoration of Ireland's international reputation and a more effective and efficient public sector. This approach reflects global trends in higher education and state relationships relating to deployment of performance management frameworks to steer higher education systems, improve visibility of performance and hold the system (and individual HEIs) accountable for delivering on national priorities. Ireland's approach is consistent with the European modernisation agenda for HE which is aligned with the Europe 2020 strategy for smart, sustainable and inclusive growth (European Commission 2010a). The Irish government has distilled key national policies into a set of forty KPIs to guide HEIs in the development of

---

<sup>1</sup> Percentage of all tertiary students

their strategic compacts with the HEA. These KPIs are strongly influenced by EU priorities while also recognising national imperatives. However, the new system has been introduced during a period of austerity as government funding to the sector declined by 32% in the seven-year period to 2015. The system has consequently been severely challenged to meet the expectations articulated for it under the HESPF 2014-2016.

This research study has the potential to shed light on how these challenges are impacting on institutional planning/behaviours and co-operation with the new HESPF in the prevailing environmental context. It offers an opportunity to contribute to the literature on performance management in higher education and to the evidence base relating to the appropriate design and implementation of strategic compacts. In an Irish context, the findings from this study can inform the design and implementation of the second and subsequent iterations of the HESPF.

### **1.5 Format of the Thesis**

Chapter 2 situates the study within the literature and discusses in greater detail the impact of NPM on higher education along with both positive experiences and challenges associated with performance management in a higher education context. It also traces the development of higher education policy in the EU from the Bologna declaration to the current projects associated with Europe 2020 and which have been accorded higher political status due to their significance to European performance and competitiveness. The penultimate sections discuss Ireland's HE policy context and the challenges faced in the implementation of the new HESPF. The final section of the chapter presents Oliver's Strategy Response Theory and its adaptation which is being used to explore the strategic responses of HEIs to the HESPF.

Chapter 3 presents the research design (exploratory case study) and methodology (mixed methods research) and focuses in particular on the strategic response framework that has been adapted from Oliver (1991) for deployment in this study. Data collection instruments are described along with the data analysis methods used.

Chapter 4 presents the findings from interviews and strategic compacts for each of the five cases that are used as data sources for the study – University College Cork (UCC), Cork Institute of Technology (CIT), Waterford Institute of Technology (WIT), Institute of Technology Carlow (ITC), Institute of Technology Tralee (ITT).

Chapter 5 considers findings from analysis of questionnaires and uses the statistical analysis techniques factor analysis, analysis of variance, and multiple discriminant analysis to assist in this regard.

Chapter 6 uses the strategic response framework to discuss the findings in the context of the research questions, combining results from all data collection instruments. The HESPF as an aid or inhibitor to planning is first discussed followed by its impact on goal displacement and steering of HEIs. Matters relating to institutional capacity are then considered and the chapter is drawn to a conclusion by examining behavioural influences and the scale of expectation associated with the new HESPF.

Chapter 7 brings the thesis to a conclusion and discusses the findings in the context of the literature. It also relates the HESPF to common characteristics of performance agreements (i.e. strategic compacts). Recommendations are then presented in the context of Ireland's HESPF and the common aims of performance agreements internationally.

## Chapter 2 Literature Review

### 2.1 Introduction

This literature review sets out the background and context for the study of the implementation of Ireland's new higher education system performance framework. It is broken down into four main sections. The first section sets the international stage and examines the impact of new public management philosophies on higher education globally. It proceeds to examine the tension between establishing world-class universities as opposed to world-class systems of higher education as nation states seek to harness the resources of their higher education institutions and align them with the nation's vision for its economy and society at large. This is followed by a discussion on other key issues facing higher education on a global scale – internationalisation, widening participation and funding sustainability.

Section two focuses on developments in Europe as they impact directly on policy development in HE within the member states. It begins by tracing the journey of the Bologna process - to establish the European Higher Education Area (EHEA) - from its inception in 1998 (Sorbonne Declaration) to the latest review in Yerevan in 2015. The targets for the Education and Training 2010 (ET 2010) programme are considered along with the findings from the stocktake at the 10th anniversary of the process, in the context of the Lisbon Strategy for Growth and Jobs (2000). The follow-on strategy to Lisbon, Europe 2020, is then considered along with its impact on the development of the Education and Training 2020 (ET 2020) programme.

The third section then considers performance management systems in higher education and their influences – both positive and negative – on planning and behaviours at institution level. The penultimate section considers the policy context within Ireland, its national strategy for higher education and challenges faced in implementing the new HESPF. The literature review concludes with a presentation of Oliver's Strategic Response Theory which is the framework being deployed to examine the strategic responses of HEIs to the HESPF.

### 2.2 International Context & Developments in Higher Education

#### 2.2.1 New Public Management & Higher Education

Many countries since the 1990s have introduced a transformational agenda for the reorganisation and management of public services, prompted by slowing economic activity and a greater emphasis on accountability, efficiency, and effectiveness in public service delivery (Karlsson 2003, p.432). The new approach to the reorganisation of public services

imports “business concepts, techniques and values” and “market-type mechanisms” Pollitt (2007, p.110) which have been classed as the New Public Management doctrine. Characteristics of NPM include: performance management through the use of key performance indicators, benchmarks and targets to evaluate effectiveness and value-for-money; clustering and creating centres of excellence; competitive tendering; an increasing emphasis on risk management and quality enhancements (Dill 2003; Pollitt 2007; Pollitt and Dan 2011; Slaughter and Cantwell 2012). NPM concepts travelled extensively and were adopted or adapted under modernisation agendas with varying results including “worsening of performance” (Pollitt and Dan 2011, p.2). In the higher education context, these were accompanied by an attendant focus on structures for system and institutional governance and regulatory frameworks to support autonomy, monitor compliance and improve accountability and transparency (Fielden 2007; Reale and Primeri 2015; Rumbley et al. 2015; Schulze-Cleven and Olson 2017; Scott 2016; van Vught and De Boer 2015).

Castro and Ion (2011) emphasise that new managerialism represents a shift in the perception of the role of universities, a rebalancing of their mission, and new governance arrangements to align HE policy with social and economic aims in a process of globalisation, amongst others (Fagerlind and Strömqvist 2004; Jessop 2017; Tirronen and Nokkala 2009; Välimaa 2011). Altbach (2004, p.5) defines globalisation as the “broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable”, emphasising that “academic systems and institutions may accommodate these developments in different ways, but they cannot ignore them.” Neave (2012, p.29) argues that NPM rules are setting in place the conditions of self-management and institutional self-governance through “self-exertion to meet public expectations – but to do so as a result of their own efforts” and this being reflected in increased emphasis on diversification of funding sources. Seeber et al. (2015) found that the level and pace of adoption of NPM principles were differentiating structures and practices across European HEIs and Kauko and Diogo (2012, p.119) contend that “OECD reviews have helped national actors to adapt to the global rules of the game”. Benneworth et al. (2016, p.731), in turn, emphasise the importance of local context over “importing third mission instruments” from elsewhere. “The principles of NPM have to large extent been introduced in HE in Europe and beyond, be it quite often partially” (Broucker et al. 2015, p.5), fuelled, not least, by the dependence of states’ prosperity on knowledge based economies and interpreted through the lens of global rankings publications on higher education (Aghion et al. 2008).

### 2.2.2 Higher Education in the Global Economy

Tertiary education policy has become increasingly important on national agendas. Drawing on the findings of a major review of tertiary education policy in 24 countries worldwide (OECD 2008), the OECD reports that there is “widespread recognition that tertiary education is a major driver of economic competitiveness in an increasingly knowledge-driven global economy” (*ibid*, p.2). Countries are being challenged to generate human capital to sustain the new economy (European Commission/EACEA/Eurydice 2015; Salmi 2017; Tirronen and Nokkala 2009), to develop areas of research excellence that are internationally recognised (Dakka 2015; European Commission 2014a; Salmi 2009a; Shaffer and Wright 2010; Tirronen and Nokkala 2009), and to improve knowledge diffusion for the welfare of society at large (Escrigas et al. 2013; OECD 2008) in what Kerr (2001, p.5) refers to as the “multiversity”. In the modern era, higher education is seen as a key ingredient in the “empowerment of people and the development of nations”, where knowledge production and innovation at the frontiers of technology are seen as the “source of growth and prosperity” (Altbach and Salmi 2011, p.xiii).

Such developments are placing higher education performance within a globally competitive framework with an attendant focus on systems to support international comparison, such as global rankings of HEIs, which are directly influencing government policy and decision-making (Hazelkorn 2016).

### 2.2.3 World-Class Universities or World-Class Higher Education Systems

Most nations have been implementing strategies to refine or restructure their higher education systems and “their relationship to the rest of society” (Calhoun 2006, p.7). Some are aiming for “world-class universities” as opposed to “world-class systems” in response to the globalisation of HE (Hazelkorn et al. 2014, p.10). Reactions have ranged from behavioural changes at institutional level (Hazelkorn et al. 2014) to policy adjustments at the level of the state (Aagaard and de Boer 2016; Boudard and Westerheijden 2016; Cremonini et al. 2014; Shattock 2017), reflecting the tension between vertical stratification in response to international competitiveness and horizontal differentiation or brand identity to cater for diversified social and economic needs (Erhardt and von Kotzebue 2016; Hazelkorn 2012; Marginson 2016b; Marginson and van der Wende 2009; Naidoo 2018). Marginson (2016a, p.1) argues that co-operation and collaboration within systems has been weakened by the primacy of the ambition of HEIs in a global rankings game which magnifies research and reputation at the expense of teaching and learning.

The main strategies used to support the establishment of world-class universities are “upgrading a small number of existing universities that have the potential of excelling; encourage a number of existing institutions to merge....to achieve the type of synergies corresponding to a world-class institution;....create new world-class universities from scratch” (Salmi 2009a, pp.7-9). Pruvot et al. (2015b, p.8) have developed a framework for profiling “different types of mergers and concentration processes” in European HE systems based on relative size and homogeneity of institutions, depth of the integration proposed and relatedness to system wide restructuring initiatives. Pruvot et al. (2015a) found a significant dispersion and increase in HEI mergers in the period 2000 to 2015 and excellence initiatives have been introduced in a range of European countries (Aagaard and de Boer 2016; Boudard and Westerheijden 2016; Government of Finland 2015; Myklebust and Dobson 2016; Pruvot et al. 2015a; Salmi 2016; Usher 2016), following what Boudard and Westerheijden (2016, p.5) term the “Shanghai shock”.

The merger [in Finland] that has excited the most interest has the unashamed aim of creating a world-class university.

(Aarrevaara et al. 2009, p.10)

Yet, many European universities lost ground in THE rankings 2016 - including in Germany, the Netherlands, Finland, Denmark, and Ireland - although they achieved “similar or higher scores than they did last year, but they did not improve as rapidly as institutions in Asia” (Bothwell 2016, p.1).

A number of authors caution that in such hierarchical stratification, the totality of the higher education system is sacrificed with limited benefits to the lower echelons (Cremonini et al. 2014; Klumpp et al. 2014; Marginson and van der Wende 2009; Naidoo 2016). Such high-class institutions account for less than 3% of higher education institutions world-wide (Altbach and Salmi 2011, p.11) and tradition has a powerful influence in these upper echelons – all of the top ten universities in the 2015 AWRU rankings were founded prior to the 20<sup>th</sup> century.

Developments in Europe suggest that there is a greater level of sensitivity towards diversification and classification of the higher education system (van Vught et al. 2010) supported by a recently sponsored EU classification and profiling system, U-Map/U-Multirank, a user-driven, peer group comparable, multidimensional, multilevel and context based framework (Ziegele 2013). Its purposes are to improve transparency on performance of HEIs through benchmarking (within the EU and globally), facilitate profiling of HEIs within the EHEA

and inform stakeholders on the various dimensions of activity. These dimensions relate to teaching & learning, research & innovation, knowledge exchange, international activities and regional engagement. Data can be compared on a whole-of-institution basis or using field-based categories. However, a review by the EUA (Loukkola and Morais 2015, p.8) found that “increasing their visibility and improving their profile abroad was the main motivation for participating in UMultirank”. Many countries, including Ireland, recognise the strengths of a “connected system” (p.1) that promotes diversity in an environment that is both collaborative and competitive, is both research and education oriented, and supported by appropriate governance and accountability structures (Prendergast 2014). An analysis by Huisman et al. (2015, pp.376-377) found that patterns emerged that defined European countries by levels of diversity across most aspects of their activities, “corresponding to the divide between Northern and Western European countries on the one hand, and Mediterranean and Eastern European countries on the other hand”.

#### **2.2.4 Widening Participation and Funding of Higher Education**

Over recent decades, enrolment in higher education institutions across the globe has grown dramatically, facilitated through policies of institutional diversification to meet economic, educational, and societal needs (Guri-Rosenblit et al. 2007; Marginson 2016b; Santiago et al. 2008a). Graduation rates from university level programmes have almost doubled in the period 1995 to 2012 (OECD 2014) and “it is estimated that 57% of young adults in OECD countries will enter tertiary education at least once during their lifetime” (OECD 2015, p.340).

Enrolment levels around the world are projected to “more than double to 262 million by 2025, with international students expected to rise from current annual figures of 4.3 million to 7.2 million by 2025” (Altbach and Salmi 2011; Hazelkorn et al. 2014, p.14). This mirrors the exceptional development of the Irish higher education system which has moved from social elite to widespread participation through a doubling of capacity over the previous two decades, with close to a further doubling expected for the next two decades (Department of Education & Skills 2011). This places major strain on the finances of governments and higher education institutions and is the subject of ongoing debate, with increased emphasis on global competition and positioning, diversification of funding bases, and the public or common good versus private good in higher education (Hazelkorn 2017a; Hazelkorn 2017b; Martin 2018) – who benefits and who pays (Calhoun 2006; Martin 2018)?

The OECD reports an increase in spending per tertiary student in a majority of countries (including OECD and EU22 averages) between 2008 and 2014, with a significant decrease in

Ireland (OECD 2017a, p.179). Between 2008 and 2014 both public and private spending increased for the OECD and EU22, with public spending decreasing for Ireland while private funding increased strongly (OECD 2017a, p.200). The European modernisation agenda highlighted the need to increase the share of private funding towards higher education (European Commission 2006; Eurydice 2011), with Aghion et al. (2008, p.2) recommending growing the funding by 1% of EU GDP over a ten year period.

While Ireland's %GDP spend on tertiary education (from private and public sources) matched the OECD and EU averages in 2008 (OECD 2015, p.233), the latest data (2014) shows that it lags behind the OECD and EU22 averages (OECD 2017a, p.187). In Ireland, "state grant income to the HE sector has dropped by 25% in the five years to 2011 with tuition fees now overtaking state grants as the highest source of income" (Grant Thornton 2014, p.2), with a further decline of 22% in the period to 2015 (Cassells 2016). In addition, the state's spending on capital infrastructure has declined from €184m in 2008 to €87m in 2015 (p.68), approximately half of what is required to maintain existing stock (Cassells 2016).

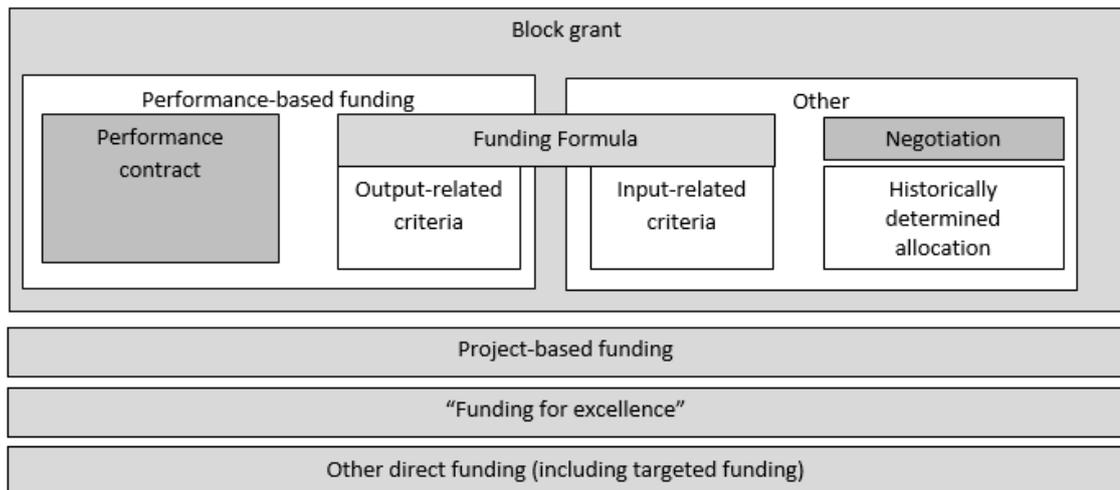
A capital programme of €5.5 billion is required over the next 15 year period.

(Cassells 2016, p.47)

Most countries, including Ireland, are trying to balance public expenditure with competing claims for various public services in an environment where resources are mostly stagnant or reducing (Pruvot et al. 2015a; Salmi 2007), placing further pressure on HEIs to diversify their funding base through a range of strategies that include endowments, competitive research funding, returns from research discoveries and patents, industry and public sector contracts, responding to market needs in workforce development, and generating income streams from student fees, particularly in the international arena. States are matching this move towards a market-led environment with increased autonomy for HEIs, enabled through regulatory frameworks and accountability mechanisms that sensitise their responsiveness to market needs while simultaneously protecting the public interest of the state (Benneworth et al. 2016; Fielden 2007).

Public funding of higher education typically provides support towards teaching, running costs, infrastructure, targeted projects, and research (Salmi and Hauptman 2006a). The variety of mechanisms used to provide such funding are illustrated in figure 2.1 (Pruvot et al. 2015a, p.26) with associated descriptions drawn from various sources provided in appendix C.

**Figure 2.1 Overview of Public Funding Allocation Mechanisms**



Source: (Pruvot et al. 2015a, p.26).

While the combination of funding options deployed in individual countries differ, they tend to converge around the models presented in figure 2.1. Jongbloed (2010, p.25) attributes some of the “increased prominence of performance contracts and the allocation of project funds” to the difficulty in achieving consensus on how to load particular indicators in funding formulae. Notwithstanding the particular combination of options used, there is sufficient evidence presented in the literature of attempts to link policy at state level with HEI’s strategic plans using funding instruments to incentivise behaviour. However, despite the emphasis placed on performance funding in almost twenty countries across Europe, “it comes out clearly that input-related factors are still very important in all countries” (Jongbloed 2010, p.21). The implications, advantages, and challenges presented by performance funding initiatives are explored in section 2.4.

### 2.3 European Context

In the European context, HEIs are regarded as pivotal to economic development, competitiveness, and social integration (Burquel and van Vught 2010; EUA 2015a; Jongbloed 2010). There has been a resultant change in the governance relationship between governments and their HEIs, characterised by an increase in institutional autonomy linked to accountability and quality improvements, a shift towards performance based funding linked to performance indicators, an infusion of market related instruments, the emergence of strategic compacts or contracts that align individual HEI missions to state strategic goals, and that form the basis for system co-ordination and steering (de Boer and File 2009; Fagerlind and Strömqvist 2004; Frølich et al. 2011; Gillard et al. 2016; Herbst 2007; Jongbloed 2010; Pruvot

et al. 2015a). Maassen et al. (2017, p.240) cautions that “the effects of these reforms have been promised more than evidenced”.

Nowhere today is higher education undergoing more substantial change than in Europe. As countries pursue policies designed to integrate their economies, political systems and social structures under a broader, more powerful Union, it is becoming increasingly clear that higher education, research and innovation are critical components to fully realising the potential gains stemming from the changes ahead.

(de Boer and File 2009, p.8)

Substantial policy initiatives at EU level underpin the changes in European higher education systems at national level. Notable among these are the impact of the Bologna Declaration (European Commission 1999) on convergence of qualification structures and quality assurance within a European Higher Education Area; the *Education and Training 2010 Work Programme (ET 2010)* (European Commission 2002); the *Modernisation Agenda for Universities: Education, Research and Innovation* (European Commission 2006); and the *Strategic Framework for European Cooperation in Education and Training (ET 2020)* (European Commission 2009b). These policy initiatives are seen as key to delivering on the *Lisbon Strategy for Growth and Jobs* (European Commission 2000) and its successor, the *Europe 2020 Strategy* (European Commission 2010a) for smart, sustainable and economic growth to 2020. The following sections provide more detailed discussion on these policy instruments, how they evolved over time, and challenges faced.

### 2.3.1 Bologna Roadmap from Sorbonne to Yerevan

The Bologna declaration (European Commission 1999) was the start of a process that has been central to radical higher education reforms within Europe. Its aim was to create a European Higher Education Area where there is a greater harmonisation of national higher education systems and its relevance has extended globally (Hartmann 2008). Figure 2.2 provides a roadmap that illustrates the key stocktakes and undertakings entered into at ministerial conferences from the Sorbonne in 1998 to Yerevan in 2015. The various conferences have reviewed, re-asserted and developed upon the key priorities that were established at the initial stages of the process. At the meeting held in Leuven/Louvain-la-Neuve in 2009, priorities were agreed for European higher education until 2020. Priority status was accorded to the “social dimension (equitable access and completion), lifelong learning and employability, research and innovation and mobility” (European Commission 2009a, pp.2-4).

**Figure 2.2 The Bologna Process: from Sorbonne to Yerevan, 1998-2015**

1998	1999	2001	2003	2005	2007	2009	2012	2015
Sorbonne Declaration	Bologna Declaration	Prague Communiqué	Berlin Communiqué	Bergen Communiqué	London Communiqué	Leuven/Louvain-la-Neuve Communiqué	Bucharest Communiqué	Yerevan Communiqué
Mobility of students and teachers	Mobility of students, teachers, researchers and administrative staff	Social dimension of mobility	Portability of loans and grants Improvement of mobility data	Attention to visa and work permits	Challenges of visa and work permits, pension systems and recognition	Benchmark of 20 % by 2020 for student mobility	Explore ways to achieve automatic recognition of academic qualifications	Automatic recognition of qualifications from EHEA countries, portability of grants
A common two-cycle degree system	Easily readable and comparable degrees	Fair recognition Development of recognised Joint degrees	Inclusion of doctoral level as third cycle	QF-EHEA adopted National Qualifications Frameworks launched	National Qualifications Frameworks by 2010	National Qualifications Frameworks by 2012	New roadmaps for countries that have not established a national qualifications framework	Include short cycle qualifications in overarching framework of qualifications for EHEA
		Social dimension	Equal access	Reinforcement of the social dimension	Commitment to produce national action plans with effective monitoring	National targets for the social dimension to be measured by 2020	Strengthen policies of widening access and raising completion rates	Implement EHEA social dimension strategy
		Lifelong learning (LLL)	Alignment of national LLL policies Recognition of Prior Learning (RPL)	Flexible learning paths in higher education	Role of higher education in LLL Partnerships to improve employability	LLL as a public responsibility requiring strong partnerships Call to work on employability	Enhance employability, lifelong learning and entrepreneurial skills through improved cooperation with employers	Frameworks to recognise prior learning, remove obstacles to recognition of prior learning (RPL)
Use of credits	A system of credits (ECTS)	ECTS and Diploma Supplement (DS)	ECTS for credit accumulation		Need for coherent use of tools and recognition practices	Continuing implementation of Bologna tools	Ensure that Bologna tools are based on learning outcomes	Revised ECTS guide adopted
	European cooperation in quality assurance	Cooperation between quality assurance and recognition professionals	Quality assurance at institutional, national and European level	European Standards and Guidelines for quality assurance adopted	Creation of the European Quality Assurance Register (EQAR)	Quality as an overarching focus for EHEA	Allow EQAR registered agencies to perform their activities across the EHEA	ESG Standards adopted, European approach for QA of joint programmes
Europe of Knowledge	European dimensions in higher education	Attractiveness of the European Higher Education Area	Links between higher education and research areas	International cooperation on the basis of values and sustainable development	Strategy to improve the global dimension of the Bologna process adopted	Enhance global policy dialogue through Bologna Policy Fora	Evaluate implementation of 2007 global dimension strategy with aim to provide guidelines for further developments	Review national legislations for compliance with Lisbon Recognition Convention

Source: (European Commission/EACEA/Eurydice 2015, p.25). The final column is the author's own work.

An assessment of the first ten years of the Bologna process found that “overall, higher education across the 46 EHEA countries looks substantially different from 10 years ago—perhaps with the exception of the social dimension. Most architectural elements of the EHEA have been implemented in most countries...[but at] different speeds of implementation and varying levels of commitment” (Westerheijden et al. 2010, pp.5-6). Challenges identified included large attrition rates, limited participation in some elements, pressures on quality

associated with rapidly increasing enrolments, and an absence of emphasis on the social dimension “in most Bologna Process countries” (Westerheijden et al. 2010, p.9).

The 2015 Stocktake found that the Bologna process and the development of the EHEA has been a catalyst for the transformation of quality assurance systems (European Commission/EACEA/Eurydice 2015, p.18). However, a later study by Vukasovic and Huisman (2017) found that European policy was not the primary influence but had a legitimising role in domestic policy implementation, and that legacy issues in the local context were of greater significance and that the Bologna process is somewhat diminishing in political importance (Vukasovic et al. 2017). Progress on the social dimension was again deemed to fall well short of the goal of equity of access to higher education (European Commission/EACEA/Eurydice 2015, p.19) and the report also highlights the lack of “evidence of major structural changes or national action” to support the “dramatic economic and social changes” in contemporary life (*ibid*, p.21). Student mobility continued to be an issue with less than 50% of EHEA countries having an internationalisation strategy and incoming students lagging at “4.4 % of total enrolments” (European Commission/EACEA/Eurydice 2015, p.23).

### **2.3.2 The Lisbon Strategy for Growth and Jobs & Education and Training 2010 Work Programme**

The EU’s Lisbon Strategy (2000) for growth and jobs was triggered by “persistently lower growth” in Europe relative to the United States and this was considered to be “closely linked to the state of innovation and higher education in Europe” (Aghion et al. 2008, p.3). This treaty committed the EU to “the ambitious objective of becoming the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” (European Commission 2010b, p.2), underpinned by world-class systems of education, research, and innovation. In 2001, ET2010 was launched “in accordance with the mandate given by the conclusions of the Lisbon European Council” held in March 2000 (European Commission 2001, p.1). Two of the five benchmarks to be achieved by 2010 relate directly to higher education – increase Maths, Science and Technology (MST) graduates by at least 15%, and have 12.5% of adults (25-64) in lifelong learning (European Commission 2011, p.10). However, “several years of lagging progress forced policymakers to essentially restart the process by refocusing on broader economic growth and innovation” (Stensaker et al. 2007, p.1).

At the European Union level, the Communication of 10 May 2006 (European Commission 2006) urged Member States to press on with the modernisation of Europe’s universities with the aim of increasing universities’ contribution to the Lisbon Agenda for more growth and for more and better jobs.

(Eurydice 2008, p.11)

The 2006 communiqué is critical, inter alia, of member states' tendency towards "preservation at national level", tight regulatory control and "micromanagement", leading to "uniformity" and "generally good average performance...rendering co-operation difficult at national, let alone European or international level and impose conditions which prevent universities from diversifying and from focusing on quality" (European Commission 2006, p.3). The "huge dual funding deficit" for both education and research featured alongside a differential of €10,000 per student between European and US HEIs for "both education and research activities", with an increasing emphasis being placed on the need to leverage private funding (*ibid*, p.4). The communiqué also strongly emphasises vertical stratification within the higher education system – "the emergence of an articulated system comprising world renowned research institutions, plus networks of excellent national and regional universities and colleges" (European Commission 2006, p.4).

Ambitious targets were set to "devote at least 2% of GDP (including both public and private funding) to a modernised higher education sector" and 3% of GDP to R&D by 2010 (European Commission 2006, p.7). However there was a "mismatch between aspirations and funding" (Jongbloed 2010, p.8) and these targets, while both laudable and desirable, proved unachievable due to competing demands on limited finances (Van Vught 2009, p.28).

In 2011 annual public expenditure on tertiary education for the EU as a whole was 1.2% of GDP, of which public investment accounted for 1.12% of GDP (European Commission 2011, p.62). Despite the recent increase [to 2.01% of GDP in 2013], the EU-28's R & D expenditure relative to GDP remained well below the corresponding ratios recorded in Japan (3.38 %, 2011 data) and the United States (2.81 %, 2012 data) (Eurostat 2016, pp.135-136).

Aghion et al. (2008, p.23) highlighted that European research performance, while good and a "solid second", "does not lead the world" and does not match its aspirations towards a "high-productivity (knowledge-based) economy which is second to none".

A final review (European Commission 2011) of progress towards achieving the five benchmarks set in ET2010 provides further evidence of the challenges faced. It found that the percentage of MST graduates was the only benchmark to have been achieved. Progress on lifelong learning was deemed to have "progressed reasonably well until 2005" but "stagnated" thereafter, reaching only 40% of the 2010 target (*ibid*, p.11). A greater proportion of students enrolled in EU-27 HEIs, in the period 2000 to 2008, were from outside Europe – "there was a

six-fold increase from India and China to 43,000 and 116,000 students respectively” (*ibid*, p.36).

### 2.3.3 Europe 2020 Strategy & Education and Training 2020 (ET 2020)

In May 2009, ‘*Europe 2020 A strategy for smart, sustainable and inclusive growth*’ (European Commission 2010a) was adopted and revised benchmarks, that largely provided continuity with ET2010, were agreed under ET2020 to support the delivery of this strategy. An economic health warning was attached to the benchmarks which subsequently saw investment in higher education fluctuating between -40% and +40% (table 2.1).

**Table 2.1 Evolution of public funding to higher education institutions between 2008 and 2014**

Evolution public funding 2008-2014	Country/system change adjusted for inflation (inflation calculated including provisional 2014 rate)
Between 20% and 40% increase	Germany, Norway, Sweden
Between 10% and 20% increase	Austria, Belgium (fr)
Between 5% and 10% increase	Poland
Between 1% and 5% increase	Belgium (nl) <sup>2</sup>
Between -1% and +1%	Iceland, Netherlands, Portugal
Between 1% and 5% decrease	
Between 5% and 10% decrease	Croatia, Slovenia
Between 10% and 20% decrease	Czech Republic, Serbia, Slovakia, Spain
Between 20% and 40% decrease	Ireland, Italy, Lithuania, England
Decrease superior to 40%	Greece, Hungary

Source: (Estermann 2014, p.8)

The Europe 2020 Strategy again highlighted the key role to be played by HEIs in the “EU knowledge triangle” (European Commission 2017) through further modernisation of European higher education systems to support the lifelong development of a skilled workforce, research and innovation. Europe 2020 is built around “three mutually reinforcing priorities” – smart, sustainable and inclusive growth – supported by five headline targets, for Employment (75%), R&D (3% of GDP), Climate/Energy (20/20/20), Tertiary Education (minimum 40%), Reducing Poverty by 20m (European Commission 2010a, p.5). The “main instrument” for delivering on the headline targets “would be the Europe 2020 programme and its flagship initiatives” (*ibid*, p.27) – “Innovation Union” and its underpinning “financial instrument” Horizon 2020 (European Commission 2014a, p.1), “Youth on the Move”, and an “Agenda for New Skills and Jobs” (European Commission 2010a, pp.5-6, 12-13). Within the five headline targets established to steer the process (European Commission 2010a, pp.10-11), higher education targets were accorded “higher political status” (European Commission 2011, p.7) as they “link

education and the labour market and have great importance for employability and jobs” (*ibid*, p.10). The higher education targets morphed into ET 2020 which included at least: 40% (30-34 year olds) with tertiary education attainment, 15% of adults (25-64) participating in lifelong learning (*ibid*, p.10), investment of 3% of GDP in R&D (*ibid*, p.59), 20% HE student mobility and 82% graduate employment (Eurostat 2016, p.60).

Closely aligned to these strategies are a target of 2% of GDP spend on higher education, with continued emphasis on raising MST graduates by a minimum of 15% over the 2000 level (European Commission 2011, p.59). EU R&D spend had increased from 1.85% of GDP in 2008 to 2.03% in 2015 with university associations calling for a doubling of the EU budget for research, innovation and education to €160bn for the period 2021-28 (Myklebust and O Malley 2018), while Tertiary educational attainment (as a % of population aged 30-34) increased from 31.2% to 38.7% in the same period (Eurostat 2018).

Overall, the range of KPIs in Ireland’s HESPF are influenced by EU policy (as detailed in section 1.3.4) across the full spectrum of the seven key system objectives – meeting human capital needs, access for under-represented groups, benchmarking QA against international best practice, research prioritisation and excellence, internationalisation, system restructuring and increased accountability (HEA 2014b). However, funding is impacting on quality and the capacity of the system to meet the requirements expected of it under the new framework and these issues are explored in section 2.5.

## 2.4 Performance Management

The increasing emphasis on competition, accountability, and internationalisation in the higher education environment has spawned the development of instruments such as rankings, performance measurement, and benchmarking exercises. Simultaneously, institutional leaders have come under pressure to develop strategies to improve and differentiate their organisational profile in the marketplace, and demonstrate their performance to a range of stakeholders. Levers, such as performance-based budgets, are increasingly being deployed as a mechanism to align and reward performance and behaviours that are consistent with state objectives, through attempts to maximise return for finite levels of investment (Aagaard and de Boer 2016; Agasisti 2011; Benneworth et al. 2016; Broucker et al. 2015; Eurydice 2008; Jongbloed 2010; Salmi and Hauptman 2006b).

The rationale of performance funding is that funds should flow to institutions where performance is manifest: ‘performing’ institutions should receive more income than lesser performing institutions, which

would provide performers with a competitive edge and would stimulate less-performing institutions to perform.

(Herbst 2007, p.90)

Increasingly, national education systems are introducing performance measurement frameworks to measure progress of the higher education sector towards the achievement of national policy goals and against international benchmarks (de Boer et al. 2015; Engwall 2007; Jongbloed 2010; Jongbloed and Vossensteyn 2001; Lewis et al. 2007; Van Vught 2008), in what Neave (1998, p.265), in the context of higher education, calls “the evaluative state”.

Taylor and Baines (2012, p.111) point out that “higher education now faces unprecedented levels of scrutiny from politicians and policy-makers.” However, McGuinness (2011, p.163) asserts that there is no legislative mechanism, in most instances, connecting a state’s strategic goals with budgetary policy. Notwithstanding this, new contractual relationships, commonly referred to as strategic compacts/contracts or performance agreements, are being established between higher education authorities and individual HEIs, as part of a wider strategic dialogue process that links funding to performance – “Australia has been an early mover” while Denmark, the Netherlands, Norway, France, Finland, Ireland, Colorado, Virginia (amongst others) have adopted similar approaches (Eurydice 2008; Hazelkorn 2012, p.853; Salmi and Hauptman 2006b).

The term performance agreements is usually associated to a system that rewards organisations on the basis of expected performance, instead of actual performance. Performance agreements – or performance contracts – look at future performance.

(de Boer et al. 2015, p.4)

Agasisti (2011, p.220) contends that the widespread adoption of these trends will “increase the overall performance of European HE”. However, de Boer and Jongbloed (2015, p.4) caution that “there is no compelling evidence on what works well under which conditions and context matters.” These contracts may vary from light touch regulation – “letters of intent” (de Boer and Jongbloed 2015, p.6) - to systems that link budgets directly with performance (Kaiser and Vossensteyn 2005; Kohtamäki 2011). Allocation of recurrent funding based on performance has been found to vary from 0.8% to 100% (de Boer et al. 2015, p.12). Through a process of engagement and dialogue with external stakeholders, institutional strategies and related performance indicators are defined and aligned with national priorities – which in the case of most European countries includes maintaining a diversified system of higher education and establishing particular identities (including niches) by HEIs, supported by profiling tools that are integrated into performance-based funding schemes (de Boer et al. 2015; Hazelkorn

2012; Jongbloed 2010; Jongbloed and Vossensteyn 2001). Accordingly, the contents of contracts vary significantly but are typically constructed from the following elements: strategic goals, objectives and KPIs which include niche/core areas, research, teaching and learning, engagement with industry and communities, internationalisation, enrolment trends and projections, input and output indicators (de Boer et al. 2015; Strehl et al. 2007).

State control is giving way to more institutional management in the name of efficiency and responsiveness to society's diverse needs, proven through new processes of accountability....The role of governments is evolving into sometimes elaborate systems of incentives and sanctions that allow governments to continue utilizing their higher education sectors by steering from a distance.

(de Boer and File 2009, p.9)

The introduction of performance indicators (PIs) in higher education in the United Kingdom and other European countries were primarily influenced by efficiency, quality, accountability and the desire to create competitive autonomous institutions that are more sensitised to economic and societal needs, and educational priorities, not least through the influence of the Bologna process and the Lisbon agenda (Breakwell and Tytherleigh 2010; Frølich 2008; Frølich et al. 2011; Jessop 2017; Liefner 2003; Stensaker et al. 2007).

Aghion et al. (2010, p.43) found that “autonomy and competition” positively impact university performance, and promote this as one of their lessons for Europe. Autonomy, in this instance, is particularly underscored by independence in setting budgets and complete control in staff recruitment and remuneration. However, Aghion et al. (2010, p.44) found that governance differs across European HEIs and that the “most high productivity European universities, such as those in the UK and Sweden, have substantial autonomy and competition on most dimensions.”

Marginson and van der Wende (2009, p.54) highlight the difficulty in “devising a coherent means of coordinating institutions with a sufficiently light touch so as to progress their autonomous global capacities while achieving the common strategic purpose” – especially when steering through networks of buffer agencies, “research councils and accreditation bodies” (Herbst 2007; Stensaker et al. 2007, p.12). However, Van Vught (2008, p.151) argues that “policies of less state control and more autonomy” do not necessarily result in more diversified higher education systems, a key goal in many systems (de Boer and Jongbloed 2015), with “uniformity of environmental conditions” and “academic norms and values” having a significant influence (Van Vught 2008, p.162).

Lewis et al. (2007, pp.213-214) link success of performance management with “an overall plan of higher education development” and “funding that operates at the margin [set-aside]”, but is significant enough (perhaps 5-10%) to attract attention and influence behaviour. Atkinson-Grosjean and Grosjean (2000, p.24) postulate that the issues and effects of performance models are contextually and culturally sensitive and can be broadly categorised into:

Overall system-level effects; technical performance issues; institutional effects and management issues; impacts on teaching and research; and impacts on faculty and academic departments.

(*ibid*, p.24)

Comparing the application of performance models in the United States, England, Australia, New Zealand, Sweden, and the Netherlands, Atkinson-Grosjean and Grosjean (2000, p.2) found that the “massification” of higher education combined with the emergence of the “evaluative state” resulted in concentration around a few dominant models, along seemingly contrary pathways. This was attributed to a strengthening of “state control”, from a position of autonomy, in the Anglo-Saxon countries to a loosening of state control in continental Europe and Scandinavia (*ibid*, p.2).

Research internationally has highlighted both strengths and weaknesses in the application and consequences of rankings/benchmarking and performance management systems, including impact on decision making and strategic planning within national systems and internationally. A review by de Boer et al. (2015, p.8) of “performance-based funding and/or performance agreements” across ten countries identified both “expected and unexpected” effects of its application. Anticipated consequences identified include profiling and diversity, goal alignment between HEI and state priorities, improved quality and addressing underperformance, improved efficiency, accountability and transparency (*ibid*, p.13). Unanticipated effects include declining standards and manipulation of results, compliance costs, mimicking behaviour, increasing prestige at the expense of co-operation (*ibid*, pp.137-138). Van Vught (2008, pp.168-172) adds “wealth inequalities among institutions”, accompanied by a “greater social stratification of students” to this list. The sections that follow highlight some of the research findings relating to these themes.

#### **2.4.1 Performance Management and Strategic Planning – Positive Experiences**

A number of studies point to potential positive influences of performance management systems when integrated into institutional strategic planning. These include alignment of

institutional strategic planning with performance management goals, constructive relationship building, behavioural influence, differentiation and impact on quality enhancement. Burquel and van Vught (2010, p.253), reporting on their European study, emphasise that the quality of reforms in higher education will depend on “institutional capacity to make effective use of benchmarking exercises and take into their own hands their strategic developments”. The CHINC study, *Changes in University Incomes and their Impact on University-Based Research and Innovation*, found that developments in the national funding environment were mirrored by developments inside the universities (Salerno et al. 2006). Constructive elements identified in the CHINC study include building profiles around key strategic areas including alliances and collaborations, aligning budgets to performance, strengthening institutional research capacity, strengthening of research, greater autonomy at sub-unit level, engagement with industry and communities, and improved visibility on performance to stakeholders. Lewis et al. (2007), reporting on the use of performance indicators in countries such as the United States, Australia, and New Zealand, also assert that “performance indicators can be powerful policy tools to inform higher education decision-making when the indicators are well integrated with other planning and funding policies” (p.208) - they emphasise the importance of providing a supporting framework to align data with organisational objectives and Frølich (2008) proposes a direct connection between funding and HEIs’ activities arising from a study of research in a European context.

However, Van Vught (2008) also emphasises that HEIs may use their autonomy to limit or prevent changes arising from initiatives or pressures in the external environment, referred to by Maassen et al. (2017, p.244) as the “living autonomy” of HEIs to interpret how reforms are to be absorbed internally. McGuinness (2011, p.140), commenting on the academy’s resistance to change, warns that it is a “long-term incremental process” and that and “the resultant public frustration with the academy’s inability to respond to major societal needs only intensifies the danger of blunt governmental intervention”, but also highlights the importance of building long-term constructive relationships between HEIs, the state, and other key stakeholders to their mutual benefit – a position strongly endorsed by university leaders (EUA 2015b). Building constructive dialogue is an acknowledged strength of the strategic compacts process across many countries (de Boer and Jongbloed 2015, p.7).

Liefner (2003, p.470), following a study of six prestigious research universities across Western Europe and the US, argues that changes in funding schemes or in methods of distribution will significantly influence the actions of universities and the related practices for budget

distribution, making them more responsive to emerging needs and opportunities, and stimulating activity in academic units because of the threat of “loss of funding, reputation, income, and prestige” (p.480). Strehl et al. (2007, p.13) also concludes that funding systems are “major influence factors on institutional strategies”. Kettunen (2016) found that use of output measures linked to performance funding influenced behaviour in the Finnish context but Kivistö et al. (2017) found that peer acknowledgement was a stronger factor among academics. Kuoppala (2005, p. 353) had earlier found that “the period of management by results has seen Finnish universities flourish”, but cautions against drawing conclusions linking improved results exclusively to this strategy. He highlights, in particular, the impact of its entrepreneurial culture and diversified funding base on performance improvements - key components of the entrepreneurial university (Clark 1998). Pruvot et al. (2015a) and Claeys-Kulik and Estermann (2015) also caution against drawing general inferences relating to the influence of performance-based funding given the varied funding contexts and attributes of higher education systems. Pruvot et al. (2015a) and Claeys-Kulik and Estermann (2015) emphasise that achievements have to be rewarded with additional funding for the process to be effective, which in turn presents significant challenges when operating within a closed budgetary envelope and can lead to a situation where the strong get richer and *vice-versa* (*ibid*, p.43).

There is much discussion in the literature in relation to the desirability of diversified systems of higher education (Benneworth et al. 2016; Dakka 2015; Guri-Rosenblit et al. 2007; Huisman et al. 2015; Huisman et al. 2007; Kehm and Stensaker 2009; Münch and Schäfer 2014; Reichert 2009; Van Vught 2008; Vukasovic and Huisman 2017). Jongbloed and Vossensteyn (2001, p.130) and de Boer and Jongbloed (2014), in turn, postulate that appropriately structured performance funding can impact on “common levels of mediocrity” that may be associated with formula based funding, and can lead to qualitative improvements, enable evolving demands and institutional differentiation. Huisman et al (2007), in a study of higher education systems (in Australia, Austria, Denmark, Finland, Flanders, France, Germany, the Netherlands, Sweden and the United Kingdom) found “indications that governmental regulation to some extent helps to preserve diversity in higher education” but that merger operations, such as in Australia and the Netherlands, may lead to mimetic behaviour as newer institutions seek to imitate their more distinguished counterparts (*ibid*, p.575). However, in a study of mission development within three different university systems in England, New York State and California, de Jager (2011, p.1) found that “although some emulation of research-intensive universities can be observed, there is a dominant drive to build a unique brand that cannot be

equated with the profile of a research-intensive institution.” This has a particular resonance in the Irish context as the restructuring agenda places a significant emphasis on mergers with Technological University designation as the carrot.

The National Strategy provides for the establishment of technological universities. Such an institution, must satisfy the requirements that there is a clear need for it and that it meets set criteria.

(HEA 2012, p.10)

Technological university criteria to be applied to merging HEIs, at the time of designation, include:

Institutional and student profile: programme provision at levels 6 to 10 on the national framework of qualifications (NFQ), enrolments at levels 9 to 10 to be a minimum of 4% of levels 8-10 enrolment with credible growth projections, and 30% lifelong learning provision;

Staff profile: a minimum of 45% of staff with a level 10 qualification or equivalent;

Research: research capacity to support doctoral training in at least three fields of study with a credible plan to extend this to a further two fields;

International Profile: to be specifically reflected in its mission and orientation.

(*ibid*, pp.14-17)

The influence of these criteria on HEIs in the study sample is explored in chapter 4.

Advantages highlighted by other studies include improved transparency, accountability, efficiency and performance (Frølich 2008; Jongbloed 2010; Jongbloed and Vossensteyn 2001; Leeuw 2009; Strehl et al. 2007); cooperation and competition driving performance (Salmi and Hauptman 2006b; Strehl et al. 2007); “strengthening academic reward systems (acknowledgement and reputation) and quality improvements through rewarding success” (Frølich 2008, pp.12-13).

The evaluative state rarely works through the cash nexus alone....central is the second nexus, focused on reputation and standing, that no university, save perhaps the most irretrievably despairing and despondent, can knowingly ignore it.

Neave (2012, p.192)

However, Salmi and Hauptman (2006b) raise a significant question over links between quality improvements and performance funding due to the struggle to incorporate measures of quality into funding formulae. The complexity of quality in a higher education environment is illustrated by the definition adopted by Vlăsceanu et al. (2004).

Quality is a multi-dimensional, multi-level, and dynamic concept that relates to the contextual settings of an educational model, to the institutional mission and objectives, as well as to specific standards within a given system, institution, programme, or discipline.

(Vlăsceanu et al. 2004, p.46)

This inherent complexity is further illustrated by a model of quality that Van Damme (2004, p.134) has developed for higher education, which he characterises as “perpetual oscillating movement between relative versus absolute, internal versus externally oriented, and basic versus more advanced and sophisticated notions of quality” (figure 2.3). Such measures of quality are dependent on, often conflicting, stakeholder perceptions and are influenced by what is measured, or indeed measurable. However, HEIs are continually challenged to position their organisations at the intersection of these potentially incompatible interpretations (Fagerlind and Strömquist 2004, p.22) further complicated by value systems and associated quality cultures within HEIs (Bendermacher et al. 2017; EUA 2006; Kottmann et al. 2016), which has led to an increased range of quality assurance instruments in higher education (appendix B).

University leaders are ultimately the guardians of the quality of the teaching and research activities of the university and of its internal balance. They strike the compromises necessary to support the ambitions of the faculties and departments....They manage internal expectations and external constraints.

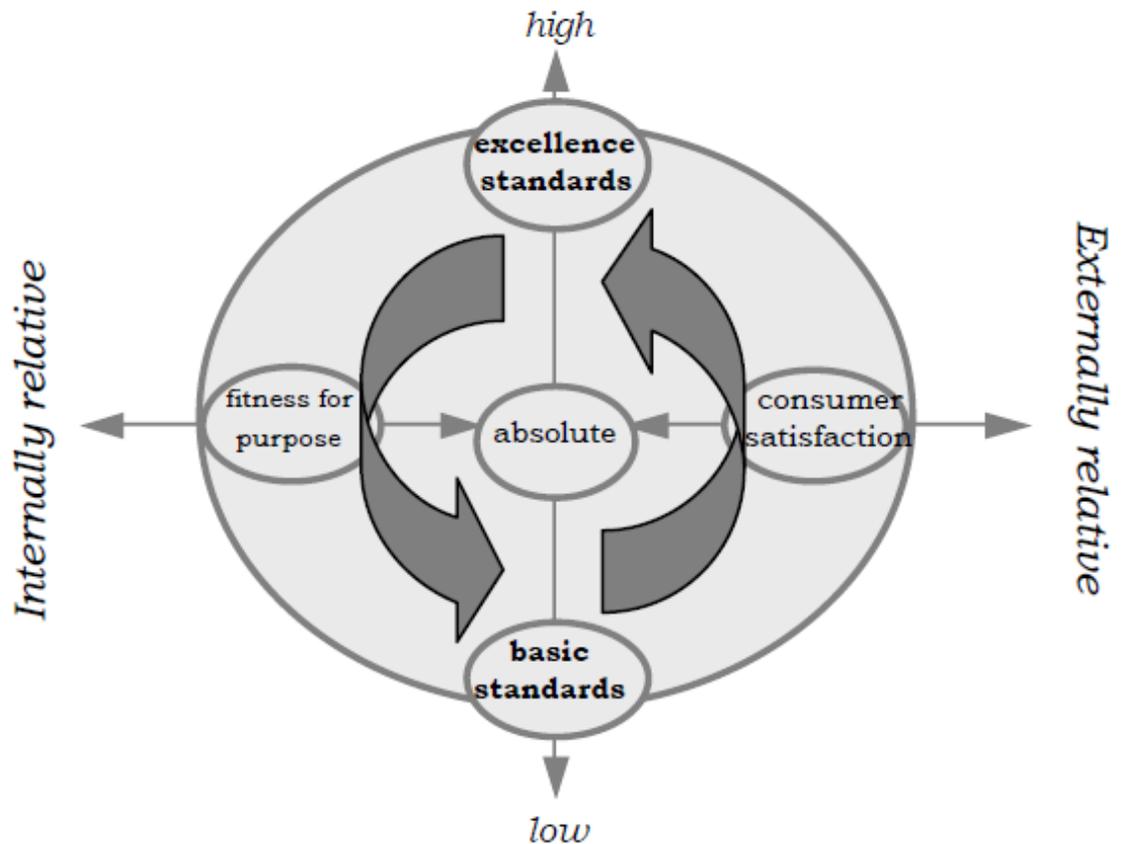
(EUA 2015b, p.3)

Quality assurance involves achieving a balance between alternative notions of quality, and the interpretation inevitably favours some stakeholders ahead of others which may be impacted on by weight of influence (Skolnik 2010, p.67).

Two very different actors with very different claims on our attention have been the primary sources of pressure to provide information about our operations.

(Bennett 2008, p.38)

Figure 2.3 Model of Academic Quality (Van Damme 2004, p.133)



“Traditional academic understandings of quality are under siege from market driven, corporate style criteria, measured and controlled by accounting and managerial techniques imported from the private sector” (Maingot and Zeghal 2008, p.270).

At national levels, governments are demanding institutional data to support policy, strategic developments, and the restructuring of higher education systems. Indicators are defined to measure performance and benchmarks set for higher education institutions to respond to.

(Burquel and van Vught 2010, p.244)

This is in contrast to the traditional forms of accountability and transparency in higher education, the most common forms of which have been cyclical peer-reviewed self-evaluations, audits, and research assessments (Reitz 2017; Salmi and Saroyan 2007). However, these accountability and performance instruments tend to generate reports that are complex and geared towards improvements at institutional level, and are not particularly user-friendly in terms of being easily understood outside of the higher education sector. In contrast, rankings of higher education institutions by governmental and commercial organisations tend to be short, easy to understand, and geared towards public consumption.

The term ranking has come to be treated as synonymous with measurement of higher education performance.

(Hazelkorn et al. 2014)

In a sense, this rebalances the “information asymmetry” between stakeholders and the public at large (Kivistö and Hölttä 2008, p.331; Maingot and Zeghal 2008; Pugh et al. 2005; Santiago et al. 2008b) in an “increasingly transparent and internationally-comparable environment” where matters relating to the quality and role of higher education receive greater attention (Santiago et al. 2008b, p.297). In this context, the emergence of global rankings of world universities has had a significant impact on institutional behaviour (Hazelkorn 2015) and the “geo-political positioning of HEIs and countries” (Hazelkorn 2014, p.14), and challenges the traditional notions of quality in higher education in an international context (Santiago et al. 2008b, p.297). However, developments such as U-Multirank which currently includes *circa* 1,600 HEIs of varying sizes globally have bridged the gap between the simplification of performance by commercial rankings organisations and the complexity of traditional forms of accountability and transparency. This is achieved through its design principle which is based on a model that is user-driven, peer group comparable, spans five dimensions of HE activity (teaching & learning, research & innovation, knowledge exchange, international emphasis, regional focus) and allows for field-based or whole-of-institution analysis (Ziegele 2013). In other words, HEIs have a choice in how and against whom they wish to benchmark their activities and users can selectively view the dimensions of activity that meet their needs, thereby improving transparency. Ireland’s new HESPF strongly embraces this design principle as HEIs are expected to define their own strategic priorities and benchmark their performance against comparable institutions nationally and internationally to demonstrate that appropriate levels of ambition are being set, that performance can be proven/verified, and opportunities for further improvement of processes and outcomes are identified. This concept has been embraced by the HEIs in the study sample. The HEA and other government agencies maintain detailed databases which are populated from various sources (including HEI returns) to assist in this regard and form the basis for annual system level reports as well informing individual compact developments. In addition, a number of HEIs in the sample have engaged with U-Multirank during the first 3-year cycle of the HESPF to demonstrate performance and identify opportunities for improvement. These opportunities for demonstrating areas of strength, and identifying possibilities for learning and improvement are having a positive influence on compact behaviour and are considered a strength of the new process. The compacts are regarded (positively) as improving transparency on HEIs’ activities and visibility on performance. The strategic compact process complements traditional multi-level models of

quality assurance – peer reviewed self-evaluations operating within national accreditation frameworks and supra-national agencies – providing opportunities to demonstrate performance to a wider audience (thereby improving transparency) and proving value for investment in areas of strategic importance to individual HEIs while contributing to the national agenda. The following section discusses further challenges arising from the implementation of performance management systems.

#### 2.4.2 Performance Management and Strategic Planning – Challenges

A number of studies point to mixed results, about-turns, gaming, populist approaches, institutional capacity, homogenisation, inconsistencies and information complexity as some of the contrary indicators of performance funding/management. In the United States, Feller (2002, p.449) reports that “performance measurement can be and has been a form of symbolic politics that provides political coverage for an organization with few significant impacts on the organizations.” He further highlights the drift in performance management from its initial role in austerity related decisions to its current influence on world rankings – “quantitative performance indicators increasingly have become techniques used to pursue enhanced international reputation and rankings” (Feller 2009, p.337). Cavanaugh and Garland (2012, p.35) highlight that mixed results from performance funding models in the United States arise from “failure to put enough funding at risk” and “their discontinuation during economic downturns.” McGuinness (2011, p.154) refers to the funding turbulence in the early 2000s and later from 2008, increasing enrolment pressures, and competition for public funds as “far outstripping the states’ fiscal capacity”. All of these have a particular resonance in the Irish context. Dougherty et al. (2013, p.1) describes “one of the mysteries of state performance funding for higher education... as despite great interest in it for over 30 years, only half of all [US] states have ever adopted it”, and that 50% of those states subsequently discarded it (Dougherty et al. 2012) - “It has been tried, found wanting, and with few exceptions abandoned” (NCHEMS 2011, p.1). Schmidt (2002) advises that few have returned the expected benefits.

So far, most of the systems have produced paperwork and controversy.

(Schmidt 2002, p.A20)

McGuinness (2011, p.155), in referring to the annual surveys of Burke and Minassians (2003), attributes the drop in support to the austerity measures of the 2000s and “an upswing in performance reporting to the reality that this form of accountability is both less costly and less controversial than the other two forms [performance funding and performance budgeting]”.

None of the three approaches exhibited the effect of improving performance, but performance funding was found to be more effective than budgeting or reporting (McGuinness 2011, p.156). Along a similar vein, Wellman and Harvey (2016, p.3) described the results of performance funding in the US as “tepid” while Burke and Minassians (2003, p.2) found that “Information arouses attention, but money levers action. Some statistics supported this conclusion.” Herbst (2007) also highlights the coercive power of performance funding while McGuinness (2014, p.32) emphasises that “finance policy is the most powerful tool to ensure progress toward strategic goals”. The challenge is to balance this with a “light touch by the state that, among operational advantages, signifies increasing rather than decreasing trust” (Clark 2004a, p.174). Impact on autonomy and responsiveness features among the concerns of many authors (Aghion et al. 2010; Atkinson-Grosjean and Grosjean 2000; Dougherty et al. 2012; Herbst 2007; Li 2014; Maassen 2017; Spence 2006).

Incentive misalignment, short-term alignment towards rewards, defensive behaviours, data manipulation, declining quality to improve scores are amongst the key concerns associated with KPIs (Boberg 2000; Coombe 2015; de Boer et al. 2015; Dill 2003; Frølich 2008; Herbst 2007; Lahr et al. 2014; NCHEMS 2011; Pruvot et al. 2015a; Strehl et al. 2007; Taylor 2003). A US study by Heinrich (2007, p.281) suggests that “high performance bonus systems are more likely to encourage misrepresentation of performance and other strategic behaviours than to recognise and motivate exceptional performance or performance improvements.” Engwall (2007, p.101) cautions against the risk of evaluating HEIs on “short-term performance particularly in the media and in other popular contexts” and warns of the role of the state in encouraging strategic institutional development and protecting them from limiting populist approaches. In contrast, Akkerman et al. (2015) found a positive association between KPIs and expectations for integrity in HE in a Dutch survey. Rabovsky (2014, p.260) also found, with reference to US public universities, concerns regarding the paucity of evidence linking policy expectations (including performance funding) to behavioural changes, a point raised earlier by Lewis et al. (2007, p.214) with respect to the US – “the jury is still out on considering the efficacy of performance funding in higher education.”

In the Australian context, Carrington et al. (2005, p.146) highlight the difficulty in establishing “comprehensive productivity indicators” within “systematic frameworks” and Neumann and Guthrie (2006, p.2) highlight the need for “different forms of performance measurement and reporting” to reflect various domains of activity. Burke (2005), in the US context, warns that

accountability initiatives have a tendency towards compliance than performance, especially when indicator load is high.

Too many detailed reports obscure critical results. Too many indicators mean no priorities. An accountability report with scores of goals and indicators suggests a document designed to demonstrate external compliance rather than institutional performance.

*(ibid, p.3)*

Salmi (2009b) highlights that negative stresses from the accountability agenda have been felt around the globe,

In Australia and the United Kingdom, for example, universities have complained of performance indicators overload, stressing that too much energy and time is spent on mining and reporting the data monitored by the government. In the United States, tertiary education institutions have expressed concern about the voluminous accountability information that they must produce.

*(ibid, p.118)*

Despite efforts in some jurisdictions to simplify funding formulae with a view to improving transparency, there has been a tendency for new governments to add to existing indicator-based systems to steer the system towards their particular vision (Government of Finland 2015) despite the “imperfect state of knowledge on what the measures should be” (Feller 2002, p.449), and challenges in reaching agreement on evidentiary sources, measurement and reporting requirements (de Boer et al. 2015). In a related discussion on the development of indicators for sustainable development goals, Hazelkorn (2016) cautions on the need to achieve a balance between overly complex and costly systems and worthless processes with few indicators. Studies of systems across the world also highlight unintended consequences and concerns around institutional capacity, cost/benefit and performance indicator overload (de Boer et al. 2015; Dougherty et al. 2012; Feller 2002; Lahr et al. 2014; Maingot and Zeghal 2008; Salmi 2009b; Salmi and Hauptman 2006a) and inappropriate or weak indicators (Dougherty 2011; Shin and Milton 2004). de Boer et al. (2015, p.15) also caution that the interaction between “different policy instruments” may bring them into direct conflict, for example, admissions policies versus students’ attainment.

Orr et al. (2007) highlight homogenisation as another unintended consequence of indicator-based funding models. Their research found that internalisation of components of these models in German HEIs lead to “the same tool box of standard indicators suggesting that they are usually not directly related to strategic goals” (p.18). Klumpp et al. (2014) found that despite institutional profiling being under development for fifteen years in Germany, by means of target agreements, it has “produced little results as most objectives are very similar for each institution” (p.162), and processes of peer review do not “encourage outliers” (p.169). Klumpp et al. (2014) made similar findings with respect to the Dutch system,

attributing isomorphic behaviour to imitating successful initiatives and the homogenising effect of government regulations and funding formulae. Nokkala et al. (2016) attributed the influence of emulative strategies to not achieving the profiling target for HEIs in Finland. In comparing the Dutch and German experience, Klumpp et al. (2014, p.170) also found that different policy contexts, timing and approaches tend to result in different or lagged outcomes while Neave (2012, p.31) also highlights shortcomings arising from non-uniform adoption of regulatory frameworks and disparate capacity for absorption, and Strehl et al. (2007, p.14) stress the rarity of “overall harmonised reform models” as a further stress on implementation, including interdependence between legal, financial and governance matters – all factors in the new Irish context. Respecting and promoting institutional diversity through equity/parity in indicator construction is regarded as critical by Claeys-Kulik and Estermann (2015). In the Irish context, there has been no separation in the national HLIs (i.e. KPIs) between the university, college and IOT sectors with each HEI free, to an extent, to propose its own KPIs and prioritise its activities within the HLIs of the HESPF, but not to the exclusion of other KPIs that fit within its strategic plan. Cullen et al. (2003) argue that key performance indicators on their own can be dysfunctional unless they evolve from the organisation’s strategy. To date, the HEA reports differentiation between sectors but less so within them (HEA 2014b; HEA 2016d).

Other studies highlight further unintended consequences and concerns around: organisational leadership capacity (Aghion et al. 2010); differentiation at sub-unit level and the related difficulties in mobilising an entire college (Burke 2003; Burke and Minassians 2003; Canhilal et al. 2016; Chan 2015; Dougherty 2011; Fagerlind and Strömqvist 2004; Lattuca et al. 2010; Locke 2014; Maassen 2017; Neumann and Guthrie 2006; Stensaker and Fumasoli 2017; Taylor 2006); management/academic tensions (Larsen et al. 2009; Maassen 2017); conflicting stakeholder needs (Lewis et al. 2007; Nisar 2015), “avoiding projects with uncertain outcome” Liefner (2003, p.480).

In summary, performance agreements and performance funding provide a potential opportunity for a mutually constructive relationship between HEIs and the state towards improving performance at individual HEI level and for the system as a whole (European Commission 2014b). However, this opportunity is contingent on grounding such systems in institutional activities and integrating them with existing HEI strategic planning processes. Significant challenges exist around striking a balance between incentive funding supports, integrity in the process, and appropriateness of indicators to reflect the desired diversity in the system and individual HEI missions.

## 2.5 Ireland's Policy Context

Ireland's HE sector is largely dependent on public investment (Hazelkorn and Massaro 2011; HEA 2016c). Since the onset of the global financial crisis in 2008 Ireland's higher education system, along with health and many other public services, has witnessed unprecedented challenges with a 32% reduction in funding from the exchequer in the period 2008-2015, staff cuts of *circa* 2,000, and 25,000 extra places alongside a projected 27% growth in demand to 2027 (HEA 2014b; HEA 2016d; O Sullivan 2014). In addition,

The HEA notes that since 2008 there has been virtually no State investment in capital infrastructure, including investment for maintenance. At the same time, the HEA notes that 40 percent of the system's infrastructure is now below par.

(Prendergast 2014, p.2)

Against this stark financial background, the *National Strategy for Higher Education to 2030* (Department of Education & Skills 2011) was launched in 2011 and was framed within the government's policy on *Building Ireland's Smart Economy (Government of Ireland 2008)*, and aimed at "supporting recommendations of the Innovation Task Force (Government of Ireland 2010a) in achieving that goal" (p.3). The strategy is also cognisant of the National Access Plans 2008-2013 and 2015-2019 to address under-representation in HE (HEA 2008a; HEA 2015k). The HE strategy also "fully endorses" (p.63) the *Strategy for Science, Technology and Innovation 2006-2013 (SSTI) (Government of Ireland 2006)* and the *Innovation Task Force Report* (Government of Ireland 2010a). The SSTI set out how "frontier research" in the STEM disciplines allied to Ireland's key manufacturing sectors, and related spin-off companies, could yield dividends for Ireland (p.83). The Innovation Task Force extended these goals towards the development of new enterprises that link research outputs to innovative products and services. Science Foundation Ireland (SFI) has been established as the national foundation for investment in scientific and engineering research and, along with its ally the *Programme for Research in Third Level Institutions (HEA 1998)*, has been key to Ireland's 9th position in global scientific ranking (HEA 2016d, p.1). In February 2012 the Government adopted "fourteen Priority Areas for future, competitively-awarded investment for economic objectives, in publicly-performed research" along with "six platform Science and Technologies necessary to underpin research in the Priority Areas", as recommended by the Research Prioritisation Steering Group (RPSG) (DJEI 2014b, p.6).

In December 2015, the government launched its new science strategy, *Innovation 2020 (SFI 2015)*, linked to the EU flagship project *Horizon 2020*, to build on the work of the previous

science strategy. A key ambition of the strategy is to extend its previous target investment in R&D to 2.5% of GNP, increasingly through private sector investment.

On current official projections, this would mean that over €5billion will be invested per year in R&D by the private and public sectors by 2020. This will represent almost doubling current levels of investment (€2.9billion in 2014).

(DJEI 2015)

This was followed in January 2016 by the launch of Ireland's National Skills Strategy 2025 (DoE&S 2016) which outlines the government's plans for continuous upskilling of its citizens to contribute to and benefit from development of the economy, and is also central to the National Strategy for Higher Education to 2030. The approach proposed in the national HE strategy was endorsed by McGuinness (2014), a co-author of the OECD (2004) review.

### 2.5.1 National Strategy for Higher Education

The National Strategy for Higher Education to 2030 (Department of Education & Skills 2011) envisages Ireland as a country recognised for innovation, competitive enterprise and continuing academic excellence, with higher education playing a central role - "focus around economic regeneration is the defining feature of the report...[reflecting] a firmly utilitarian policy" (Walsh and Loxley 2015, p.1142). It highlights the need for a diverse system to evolve within a clear framework aimed at developing a coherent set of higher education institutions (HEIs) through a social democratic model, which meet individual, enterprise and societal needs.

The Social-democratic model seeks to balance excellence and equity by supporting the development of a world-class system of higher education across a country. This is to be achieved by strengthening horizontal (mission or functional) differentiation across a diverse portfolio of high performing HEIs, some of which may be globally or regionally focused. Emphasis is on supporting 'excellence' wherever it occurs by encouraging HEIs to each specialize in specific disciplines or knowledge domain according to their expertise, competence, demand and/or mission.

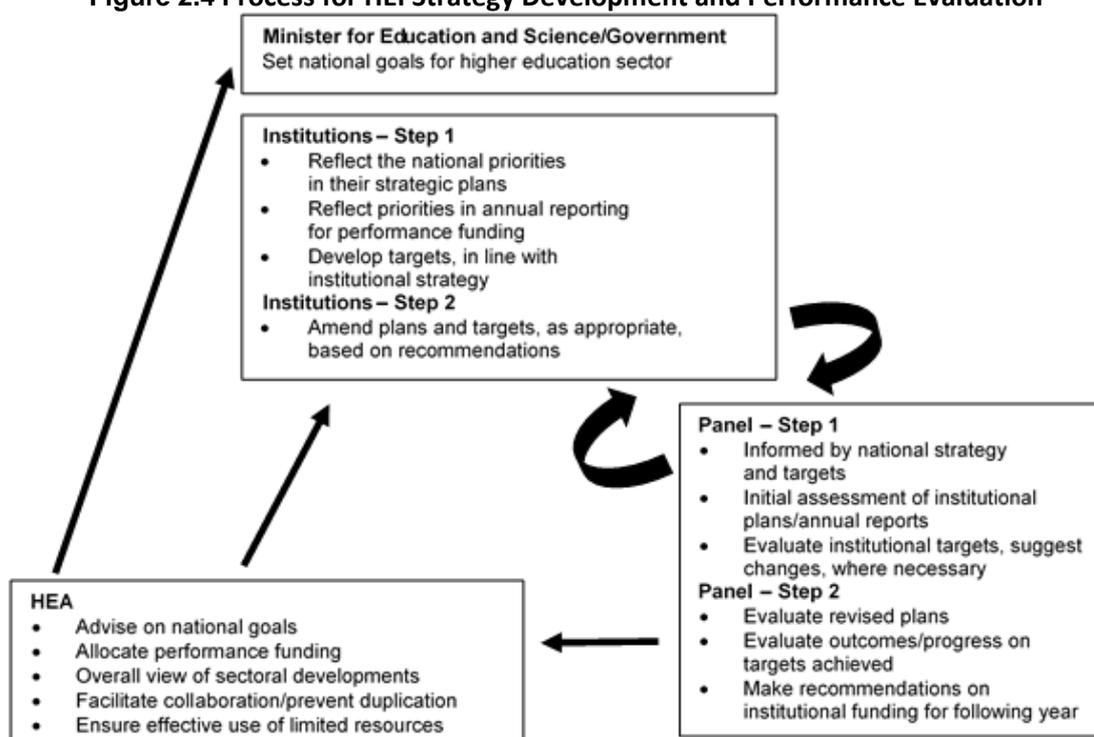
(Marope et al. 2013, p.86)

Stensaker et al. (2007, p.12) refer to such frameworks as a "new means of system oversight and performance-based steering of organizations" while "governments are not withdrawing from responsibility for higher education systems" as a whole. This framework is in line with an OECD (2004) recommendation and reflects what Takayama (2012, p.506) terms "soft power" and the "enactment of global cultural scripts in education". The national HE strategy envisages a consolidation, through mergers or incorporations, of smaller institutions to

promote coherence, critical mass, and efficiencies and concentrating expertise through economies of scale and programme rationalisation (Department of Education & Skills 2011), consistent with the European modernisation agenda for HE (European Commission 2006) and developments in many states across Europe (Aarrevaara et al. 2009; Benneworth and Velderman 2016; Drowley et al. 2013; Kyvik and Stensaker 2013; Nokkala et al. 2016; Tight 2013).

A systems performance framework (HEA 2013a) has been developed in Ireland to enable national priorities to be identified, and to facilitate ongoing evaluation of performance at system and institutional levels, as envisaged by Santiago et al. (2008a, p.19) and reviewed by de Boer et al. (2015). These priorities have been identified as: “economic renewal and development; social cohesion, cultural development and equity; public sector reform towards greater effectiveness and efficiency; and restoration of Ireland’s international reputation” (HEA 2014b, p.119). The national priorities are supported by seven key system objectives: meeting Ireland’s human capital needs; promoting access to higher education for non-traditional groups; developing excellence in teaching and learning; sustaining excellence in research and further develop research partnerships and knowledge exchange activities; maintain an international oriented world-class system of HEIs that can compete on the global stage; reform/restructure the higher education system towards a smaller number of high performing diverse HEIs; and, finally, increase accountability for public funding and delivering on national priorities (HEA 2014b). The performance evaluation framework is supported by annual strategic compacts with each HEI, and the HEA regards these compacts as critical to aligning institutional strategic plans with the national priority areas for development (HEA 2013d). Figure 2.4 illustrates how the process for HEI Strategy Development and Performance Evaluation is being implemented.

**Figure 2.4 Process for HEI Strategy Development and Performance Evaluation**



Source: (HEA 2008b, p.12)

Minister for Education and Skills, Jan O Sullivan, has emphasised the need to “leverage one another’s strengths” and “work as a system”, while respecting individual autonomy, to deliver on the “strategic imperatives” for Irish society and the economy:

At a regional basis through the establishment and implementation of regional clusters;  
 Nationally through alliances which deliver on key elements of public service reform and our access and equity agenda;  
 And internationally through the growth in global collaborations in research, the continuing internationalisation of our sector and through our ambitions for Ireland’s success in Horizon 2020.

(O Sullivan 2014, pp.2-3)

Such developments are placing Ireland’s higher education performance within a globally competitive framework with an attendant focus on quality, accountability, transparency, and systems to support international comparison. The range of policy initiatives outlined earlier signal a clear government strategy towards alignment of higher education, research and innovation with the needs of the economy and society at large, while seeking to broaden participation to the benefit of all citizens. Such developments rest on a solid relationship and reputation for excellence (Prendergast 2014). Reflecting on the issue of quality and the interdependency between the state and the university, Newman (1987) postulates that:

What becomes clear is that the real need is not simply for more autonomy but for a relationship between the university and the state that is constructive for both, built up over a long period of time by careful attention on the part of all parties.

(Newman 1987, p.xiii)

A new contractual relationship, the 'strategic compact', between individual HEIs and the Higher Education Authority (HEA) is agreed as part of the wider strategic dialogue process (steps 1 and 2), supported by an expert panel that draws on international experience. This is consistent with most countries in Europe, where strategic plans for HEIs are required to align with national policies and goals for higher education (Eurydice 2008). Through such processes, institutional strategies and related performance indicators are defined and aligned with national priorities. Clear stable goals are highlighted as an important element of effective performance funding (NCHEMS 2011; Wellman and Harvey 2016), along with "base" plus "bonus" funding components (Wellman and Harvey 2016, p.2).

If there is not a clear statement of goals that has broad bipartisan acceptance, there is almost no chance of creating a performance funding model that can last.... It is important that all institutions have an opportunity (not a guarantee) to benefit by excelling at their different missions.

(NCHEMS 2011, pp.1-2)

A new recurrent grant funding model (HEA 2014e) for Irish higher education was introduced in 2006 for universities and 2011 for institutes of technology (Appendix A), following a detailed consultation process and an OECD review (OECD 2004). The HEA describes its current funding allocation model as "comparing well to best practice models internationally", comprising three elements: an annual formula-based recurrent grant, a "new element" of performance related funding (up to 10% of the annual core recurrent grant), and a curtailed targeted/strategic fund arising from the economic crisis (HEA 2013c; HEA 2014b, p.92; HEA 2015d). The emphasis on performance funding has become an inherent element of national policy in Ireland.

The performance budgeting initiative provides a single, coherent organising principle for public service information funded by the Exchequer....This new design ensures that the information needed by decision-makers and those who scrutinise public policy is available 'at a glance'. This includes details of financial and human resources, outputs and public service activities, and context and impact indicators.

(Government of Ireland 2016b)

Mr Tom Boland, CEO of the HEA, in introducing *Towards a Performance Evaluation Framework: Profiling Irish Higher Education (HEA 2013d)*, emphasises that the report "is

intended to support higher education institutions in their strategic performance management.....is fundamental to the implementation of the national strategy, particularly in respect of the imperative to align institutional strategies and national priorities, and to foster and clarify mission-diversity and it does not reflect any desire to instigate a ranking system” (HEA 2013d, p.7). However, there is a large body of international literature that points to the significant influence of indicator based funding and ranking systems on institutional planning, as outlined earlier. Klumpp et al. (2014), while encouraging institutional profiling and an increasing emphasis on mission-based and performance funding, caution that:

Differences in policy context, timing and approach to institutional profiling are likely to affect the higher education institutions differently.

*(ibid, p.170)*

So, concepts and approaches that have worked favourably in one environment may not necessarily be imported seamlessly into another context or culture. Some of the key issues that are particular to the Irish context (autonomy and HESPF implementation, restructuring and diversity, funding, global competition) are explored in the following section.

### 2.5.2 Systems Performance - Implementation Challenges

One of the key challenges for HEIs is how to integrate and align their strategic planning to support a partnership approach with the HEA to ensure that the system as a whole advances the national priorities, while simultaneously respecting their autonomy, distinctive cultures and missions. The HEA is challenged with making progress across a broad range of ambitious initiatives through a coordination of the efforts at individual institutional level, while institutions are challenged to position their goals at the intersection of internal interests and external demands, which include the national goals.

A key challenge to the success of the proposed reform is to match it with the culture and history of the HEIs in a manner that respects each HEIs distinctive mission and seeks to avoid intransigent behaviours (Larsen et al. 2009, p.44) or acts of symbolic politics Feller (2002, p.449). Larsen et al also highlight the importance of “establishing schemes [for steering and decision-making] that will have legitimacy and trust also among the academics” (*ibid, p.55*). Likewise, Dougherty et al. (2013, p.2) highlight “the important role of higher education opposition and the presence of certain political structures and political values in frustrating the development of performance funding.” NCHEMS (2011, p.1), from a review of past experiments, suggests that “it’s not the idea that failed, but the design and implementation of

the strategies that derived from the idea”, a position supported by the focus on design and implementation issues by Snyder and Johnson (2015) and Salmi and Hauptman (2006b). In the Irish context, McGuinness (2014, p.30) emphasises that the mechanisms for executing the landscape and strategic dialogue processes will “determine their ultimate success or failure”, while Hazelkorn and Massaro (2011, p.97) warn that Ireland's compacts are “likely to be constrained by a political culture that has tended to micro-manage”. No additional funding has been provided for the first 3-year strategic compact cycle, the funding at risk is considered modest and no HEI has been penalised financially. While this addresses some of the political sensitivities identified by Salmi and Hauptman (2006a, pp.73-74), it could be argued that it equally blunts the new HESPF as a lever to improve performance. The challenge, as postulated by (Clark 1998; Clark 2004b), is to match and integrate governance and management approaches in a specific context in a manner that facilitates innovation and change. Clark (2004a) warns that,

The state-led pathway is clearly not one appropriate for change in complex universities in the fast-moving environments of the twenty-first century. System-wide changes are notoriously slow in formation and blunt in application.

*(ibid, p.182)*

The HEA has been given responsibility to support diversity in this process and to avoid circumstances that may lead to isomorphic behaviour and homogenisation of the system. Research has shown that the successful reform is contingent on institutional capacity to effectively benchmark its processes and outputs, similar in principle to that inherent in the HEA’s performance evaluation framework, and take control of developing their own strategic profile (Burquel and van Vught 2010). This represents a particular challenge in the Irish context as benchmarking is a relatively new phenomenon within the IOTI sector, the common TU criteria are a major influence on strategic planning, and state funding for HEIs is mostly through competition for students. Teichler (2006, p.458) cautions that “competition might reinforce imitation drifts rather than stimulating diversity”. HEIs have an opportunity to influence the development of the new performance evaluation system through proposing indicators that adequately reflect its strategic profile, allowing them some scope to “shape the issues” that are dealt with (Barnetson and Cutright 2000, p.280). This situation is further complicated by structural reforms that are contingent on the enactment of legislation that was not enshrined during the period of the initial compacts, 2014-2016, and has been subject to political interference (McQuinn 2016; WLR fm 2016) and industrial unrest relating to the TU legislation and merger processes.

The absence of a sustainable funding model for higher education is presenting enormous challenges with “at least five colleges in danger of failing to reach agreed targets on financial sustainability” (O Brien 2016a) and “Ireland was effectively in receivership” when the higher education reform programme was launched in 2011 (O Sullivan 2014, p.1).

HEA budget meetings with universities and colleges found that 11 of the 27 institutions presented deficit budgets for 2016.

(HEA 2017b, p.88)

An expert group, chaired by Mr Peter Cassells, was “charged with identifying and considering the issues relating to the long term sustainable funding of higher education in Ireland and to identify options for change” (O Sullivan 2014, p.3), a major gap identified as far back as the OECD (2004) report. In launching *Investing in National Ambition: A Strategy for Funding Higher Education* (Cassells 2016), Minister for Education and Skills, Deputy Richard Bruton, acknowledged that “third-level education is on the brink of a funding crisis” (Bruton 2016). The presidents of TCD and UCD, in what was termed “an unprecedented statement”, called for the Government to implement the Cassells report and spend an extra €600m per annum on higher education by 2021, increasing to €1bn by 2030 (Murray 2016b, p.1). The Government’s response has been to provide “an initial investment of €36.5million in the sector” (including FE) in 2017 and a promise of €160m over the following three years (Department of Education & Skills 2017). The system is on the cusp of a financial calamity and commentators have accused politicians of avoiding the issue due to the non-palatability of burden sharing with students and industry (O Brien and Prendergast 2016; Walshe 2016).

The programme for government does something for higher education that the last government was also very good at: delaying decisions about a sector that everyone from the CEO of the Higher Education Authority to a state body responsible for quality in education has said is in complete crisis.

(Editorial Board University News 2016)

However a report for the OECD (Mangeol 2014, p.34), while identifying the need for “more effective business [funding] models” that take into account the “value proposition” of HEIs, cautions about shortcomings of models that are highly dependent on burden sharing. Orr et al. (2014, p.13) highlights the challenge of developing coherent “cost-sharing strategies” that are effective for both HEIs and students.

At a symposium, *21st Century Universities: Performance and Sustainability*, held in Dublin on 29 September 2014, several international experts highlighted the funding crisis in higher education in Ireland and its impact on the global competitiveness of the sector (Fahey 2014;

Hauptman 2014; McGuinness 2014). The first report on the higher education system performance framework HEA (2014b) also flags the real and increasing level of risk, arising from under funding, of damaging quality of outcomes and thus curbing economic progress (p.13). Quality and Qualifications Ireland (QQI), the state agency with responsibility for reviewing the effectiveness of quality assurance in higher education providers, reported in 2016 that “some units have reached a tipping point where continued cuts/reductions may have serious and irretrievable implications for their future sustainability” (QQI 2016, p.8).

Estermann (2014, p.3) found that constraints on university autonomy, arising from “temporary economic policies” introduced in Ireland in 2009-2010, have been retained and have “effectively set the frame for a large part of universities’ activities over a longer period” in what Estermann describes as an “entrenchment phenomenon” (p.7). This is reinforced by the 2016 and 2017 updates which show a decline, if anything (EUA 2017; Pruvot et al. 2017). McGuinness (2014, p.33) had also warned of “a ratchet effect which could lead to an anachronistic regulatory regime being maintained after the crisis has passed”.

This creates a strong barrier to greater entrepreneurialism in universities, even though the state precisely encourages universities to adopt such behaviours and diversify income.

(Estermann 2014, p.5)

The European University Alliance (EUA) also warns that “further expansion of the top-slicing practice [currently 10%] would push Ireland into the third, medium-low cluster of the financial autonomy scorecard” (Estermann 2014, p.5).

The financial situation of the Irish university sector causes particular worry....This configuration [of funding cuts and increased enrolment] places Ireland at the “periphery” of Europe in terms of funding....In the meantime, countries that Ireland often compares itself to in the field of higher education and research have maintained or stepped up investment....This raises the question of the longer-term competitiveness of the Irish higher education system within the EHEA and internationally.

(Estermann 2014, p.7)

A further lesson for Ireland from the American experience concerns higher education opposition to the concept of retaining a portion of funding that required HEIs to improve performance in order to earn back the withheld proportion of funding (Dougherty et al. 2012; Li 2014). However, NCHEMS (2011, p.5) recommend that “institutions should not be held harmless from cuts to their allocations if they are not contributing to state goals.” Despite

this, it has been demonstrated that improvements may still lead to penalties, as has been demonstrated in the Pennsylvania State System of Higher Education (PASSHE).

The way in which the funding was allocated and awarded across the outcome categories made it possible for a university to improve year after year and still have its performance funding reduced.

(Cavanaugh and Garland 2012, p.36)

Ireland is currently challenged to find a sustainable funding model to support its ambitious plans for the contribution of the higher education sector to its social and economic development and to bridge the gaps that have emerged during the period of the economic crisis. However, the development and implementation of such a funding model has not kept pace with this ambition and potentially impacts on the global positioning and reputation of Ireland's higher education system.

If we do nothing [about the HE funding crisis in Ireland], we'll continue to slip down the rankings until we have no universities in the top 300, and we're no longer recognised globally for the quality of our education. Which means we won't attract international staff, students, or research collaborators. It means we will lose competitiveness – our society will be poorer, employers round the world will be less interested in hiring our graduates, and industry will be less interested in investing in our research.

(Prendergast 2014, p.7)

This point is strongly supported by Clark (2004b, p.179), who describes highly prestigious academic units that attract talent as a “stunning, self-sustaining phenomenon”, and Hauptman (2014, p.6), who emphasises that “sustainability must be a key goal in how HE systems are funded” while operating within a system that encourages “innovation and risk-taking”. But, there had been no reversal of fortune by 2016.

After the latest world rankings [QS 2016] showed the further decline for all Irish universities except NUI Galway, business organisation IBEC said Ireland's highly-skilled labour force is under serious threat as a critical asset if funding is not urgently addressed.

(Murray 2016a, p.1)

Despite the HEA's expressed desire to avoid rankings, ministerial and keynote speeches, research evaluation reports, media publications and institutions' websites proliferate with reference to rankings performance (Estermann 2014; European Commission 2015; HEA 2016d; HEA 2017b; IMD 2016; O Sullivan 2014; UCC 2016; University College Cork 2015), including the HEA's evaluation reports – “Third-level Colleges Face Penalties Over Poor Performance” (O'Brien 2016b) – and IDA itineraries – “The IDA is now being asked about the

university rankings in Ireland as they go about trying to secure foreign direct investment, so the need to address the issue is real” (Boland 2015, p.1). The literature points strongly to the influence of rankings on policy development, behaviours and decision making at institution and national level in relation to improving ranking position (and related reputation). As the performance evaluation framework develops, it faces the challenge of balancing the expressed desire to avoid rankings with the objective of building “a world-class system, internationally renowned for its excellence” (HEA 2013d, p.7). The perception of the quality of higher education systems and their constituent colleges are increasingly being linked to positioning in global rankings.

Being embedded in a globally competitive arena for status spurs a conception of internationalization as instrumental to prestige.

(Seeber et al. 2016, p.698)

In summary, Ireland’s *National Strategy for Higher Education to 2030* envisages the HE sector as playing a pivotal role in the social, cultural and economic development of the nation. The HESPF has been introduced as a means of prioritising and articulating the expectations of HE across these broad dimensions and to steer the system towards their delivery in a co-ordinated fashion through a series of strategic compacts, and to hold the system accountable in what Walsh and Loxley (2015, p.1130) refer to as a valorisation of the cultural autonomy within HE while “grappling with what is seen as a system-level steering problem.” However, the new system has been introduced at a time of financial crisis within HE and this is posing significant challenges, not least to the autonomy of HEIs, quality of provision and the international reputation of the system. Reforms around system restructuring and diversity have been delayed by failure to enact legislation, the criteria around technological university status are blurring the notion of diversity, and achieving an appropriate balance between co-ordination and competition, and local/national/global ambition represents a particular dilemma/predicament.

## 2.6 Oliver's Strategic Response Theory

Oliver's framework integrates the nature and context of the influences on an organisation into a set of antecedent factors and related predictive dimensions (table 2.2) that Oliver hypothesises will predict whether organisations are likely to resist or conform to them (Oliver 1991). The nature of the pressure (i.e. the cause factor) to comply with rules and expectations is considered to have two dimensions – 'legitimacy/social fitness' and 'efficiency/economic fitness'. Oliver's theory is that the level of compliance or resistance to such pressure (e.g. national policy goals) on an organisation is dependent on the extent to which they are considered to be socially legitimate or make economic sense. Similarly, the extent of compliance or resistance is dependent on consistency with organisational goals (the content factor) and stakeholders' expectations (constituents' factor), voluntary or coercive forces (the control factor) at play and the environmental context (the environmental factor) in which the HEI is operating.

The rightmost column in table 2.2 outlines the relevance of the antecedent factors and related predictive dimensions to the current study, supporting the deployment of the framework for this research study. The framework combines resource dependence and institutional theory to define five strategic responses – acquiesce, compromise, avoid, defy, manipulate - that can be undertaken by organisations in response to influences or pressures applied from an institution, state policy for higher education in this instance. Section 2.6.1 discusses the theory underpinning Oliver's framework while section 2.6.2 analyses the antecedent factors and related strategic response options inherent in this framework. The adaptation of the framework for the current study is presented in section 2.6.3.

**Table 2.2 Antecedents of Strategic Responses (Oliver 1991)**

<b>Institutional Antecedent Factor</b>	<b>Research Question</b>	<b>Predictive Dimensions</b>	<b>Relevance to the Current Study<sup>1</sup></b>
Cause	Why is the organisation being pressured to conform to institutional rules or expectations?	Legitimacy or social fitness. Efficiency or economic fitness.	National higher education policy (the cause) has both social and economic legitimacy as it seeks to develop Ireland's higher education system towards a number of high level objectives that are impacting significantly on the strategic choices and direction of individual HEIs.
Constituents	Who is exerting institutional pressures on the organisation?	Multiplicity of constituent demands. Dependence on institutional constituents.	HEIs serve a multiplicity of stakeholders and need to position their organisations at the intersection of these sometimes conflicting demands. Non-state income has become a critical element of sustainable funding models in HEIs.
Content	To what norms or requirements is the organisation being pressured to conform?	Consistency with organisational goals. Discretionary constraints imposed on the organisation.	Ireland's differentiated HE system is expected to invoke a variety of responses in relation to the national priority goals and related KPIs. Differentiation is also expected through prioritised strategic capacity and financial strengths.
Control	How or by what means are the institutional pressures being exerted?	Legal coercion or enforcement. Voluntary diffusion of norms.	Performance set-asides are in place to incentivise compliance (fail/pass/excellent categorisation) with national policy objectives. The new system performance framework seeks to articulate the expectations on the HE system, and identify, further develop and co-ordinate HEIs' strengths, strategic niches and missions towards its delivery. Voluntary diffusion of good practice and sharing of expertise is facilitated through peer reviews, partnerships, national fora and agencies, and is a long established practice in HE.
Context	What is the environmental context within which institutional pressures are being exerted?	Environmental uncertainty. Environmental interconnectedness.	Ireland is transitioning from a period of austerity to positive economic forecasts. However, sustainable funding for HE remains a critical and unresolved issue in Ireland. The new higher education system performance framework includes a high level objective to reform the HE landscape in Ireland through regional contours and consolidations. This complements the current high levels of interconnectedness within HE in Ireland, and internationally.

Source: (Oliver 1991), <sup>1</sup>This column represents the researcher's own work.

### 2.6.1 Theoretical Underpinning

The strategic response framework developed by Oliver (1991) draws on and integrates the convergent insights from institutional theory and resource dependence theory in developing a conceptual framework to assist our understanding of “the strategic behaviours that organisations employ in direct response to the institutional processes that affect them” (*ibid*, p.145). These behaviours are considered to vary across a spectrum from “passive acquiescence” (p.151) to active intransigence, reflecting the “potential for variation in the degree of choice, awareness, proactiveness, influence, and self-interest that organisations exhibit in response to institutional pressures” (Oliver 1991, p.146).

Resource dependence theory (RDT) emphasises the shared influence between organisations and their environments. “Organisations are viewed as being embedded in networks of interdependencies and social relationships” in which resource needs potentially make organisations dependent on external entities in what are often reciprocal arrangements (Pfeffer and Salancik 2003, p.xi). RDT postulates the nature of the inter-dependency determines the relative differences in power in the inter-organisational relationship, not least their capacity to gain more control over resource dependence, strategic capabilities and ability to adapt to external pressures, and their level of influence over important environmental factors. Hillman et al. (2009, p.1404) argue that “managers can act to reduce environmental uncertainty and dependence”, and can seek to influence government regulations that are more sympathetic to its situation. However, Pfeffer and Salancik (2003, p.xiii) highlight, in particular, the power of government, through resource dependence, to “force numerous policies and decisions on organisations such as education”, while Casciaro and Piskorski (2005, p.167) also emphasises the impact of “power imbalance” on the ability of dependent organisation to “absorb constraints”, and Davis and Cobb (2010, p.4) describe RDT’s “imagery of power and conflict [as a] fit with the tenor of the times”. In addition, Drees and Heugens (2013, p.1666) found that “RDT can also explain organisational actions that have societal acceptance rather than economic performance as an ulterior motive”.

Institutional theory, in contrast to RDT, emphasises social rules, expectations, norms and values in what Huisman and van der Wende (2005, p.13) describe as “humanly devised constraints that shape interaction” and Meyer and Rowan (1977, p.340) describe as “myths” which institutions embrace to enhance legitimacy and acquire resources. It also embraces the concept of organisations contesting what is perceived as legitimate and normative as those in power seek to resist change by institutionalising their control over the organisation, in what Burch (2007, p.84) refers to as “renewed attention to concepts of agency and strategy in institutional environments”. Legitimacy is perceived as a condition reflected in actions that

are considered “appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Scott 2008, p.59), operating within what Scott refers to as the regulative, normative and culturally-cognitive pillars of institutions. The basis of legitimacy is seen to vary across the three pillars. In the case of higher education, the regulative pillar includes legislative and regulative instruments, steering models and funding arrangements; the normative pillar refers to social duties, moral/ethical governance and accreditation; and legitimacy in the culturally-cognitive pillar surrounds shared interpretations and cultural values (*ibid*, p.51). Huisman and van der Wende (2005) argue that the manner in which these pillars are constituted is an important determinant of the pace at which change can be brought about in higher education institutions. Barrett (2010) highlights that the normative pillar acts as a mediating influence on the other two pillars, and is itself influenced by professional bodies and accreditation agencies – “normative isomorphism” as referred to by DiMaggio and Powell (1983, p.150). Scott argues that institutions are transmitted mainly through symbols, governance and operating protocols across these three pillars, through similarities in rules/laws, values/expectations, and typifications arising from mimetic behaviours and structural isomorphism (Scott 2008, p.79), which emphasise how organisations adapt to their environment in order to survive or to “emulate elite institutions” (Huisman et al. 2015, p.369). This is particularly so in the field of higher education, as legitimacy is conferred through conformance to particular structural, regulative and normative characteristics, even in cases of competitive profiling and related benchmarking exercises (Lepori et al. 2014), in what DiMaggio and Powell (1983) refer to as institutional isomorphism - the European Higher Education Area, as established through the Bologna process, is a particularly good example of an isomorphic process in action (European Commission/EACEA/Eurydice 2015; Eurydice 2008). The Bologna process tends to reflect a combination of what DiMaggio and Powell refer to as “coercive isomorphism that stems from political influence and the problem of legitimacy”, and “mimetic isomorphism resulting from standard responses to uncertainty” (p.150), “modern management ideas” (Engwall 2007, p.87) or legitimacy “rub-off” (Drees and Heugens 2013, p.1672). Of particular interest to this study is the extent to which “global isomorphism in education policy”, as implemented through the new HESPF, is being contextualised and interpreted within HEIs in Ireland (Takayama 2012, p.505).

In developing her strategic response framework, Oliver (1991) draws together what she terms the convergent assumptions of resource dependence theory and institutional theory to demonstrate how the RDT implications for strategy can complement the more traditional range of responses inherent in institutional theory (p.146). These convergent assumptions

relate to limitations imposed by external forces, interconnectedness of environments, sensitivity to and dependence on sometimes incompatible external impositions and assumptions, and the need for legitimacy, stability and predictability (p.147). The “divergent foci” (p.147) of the two theories underpin the diversity in the degree of “choice, awareness, proactiveness, influence, and self-interest” that Oliver (1991, p.146) incorporates into her strategic response framework. Conformity to social rules, expectations, norms and values is prompted by institutional theory while RDT emphasises a proactive approach to managing environmental uncertainty, interdependencies and resource flows. This is reflected in Oliver’s framework through a variation in the level of acceptance or resistance and the degree of political manipulation in response to external expectations and constraints, as organisations attempt to buffer their autonomy and maintain flexibility over strategic choices to respond to emerging situations.

### 2.6.2 Predictors of Strategic Responses

Oliver’s theory is that the level of compliance or resistance to “institutional rules” (*ibid*, p.162), state policy on higher education in this instance, is largely determined by the capacity and inclination of individual organisations. The theory postulates that the level of compliance with or resistance to organisational pressures or policy objectives is delimited by: their social legitimacy or efficiency; congruence with organisational objectives; impact on autonomy or self-control; organisational capacity or resources to accommodate the policy expectations; conflicting stakeholder requirements; and gaps in the understanding of what is required of the organisation. These delimiting factors are considered to drive what Oliver classes as the five institutional antecedent factors in her model – “cause, constituents, content, control, and context” - which along with the two dimensions corresponding to each of these factors are hypothesised to determine the choice of strategy (‘acquiesce’, ‘compromise’, ‘avoid’, ‘defy’, ‘manipulate’) deployed by the organisation (Oliver 1991, pp.159-160), as depicted in table 2.3.

For example, if legitimacy and/or efficiency are high then the predicted strategic response under the ‘cause’ factor is that of ‘acquiesce’, but a level of resistance ranging from ‘compromise’ to ‘manipulate’ can be expected if legitimacy or efficiency are low, as illustrated in the first (non-header) row of table 2.3. Where there are a multiplicity (i.e. ‘high’) of constituent (sometimes conflicting) expectations to be satisfied then organisations are predicted to seek to ‘compromise’, ‘avoid’, ‘defy’ or ‘manipulate’ in order to maintain/satisfy their stakeholders.

**Table 2.3 Institutional Antecedents and Predicted Strategic Responses**

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
<b>Cause</b>					
Legitimacy	High	Low	Low	Low	Low
Efficiency	High	Low	Low	Low	Low
<b>Constituents</b>					
Multiplicity	Low	High	High	High	High
Dependence	High	High	Moderate	Low	Low
<b>Content</b>					
Consistency	High	Moderate	Moderate	Low	Low
Constraint	Low	Moderate	High	High	High
<b>Control</b>					
Coercion	High	Moderate	Moderate	Low	Low
Diffusion	High	High	Moderate	Low	Low
<b>Context</b>					
Uncertainty	High	High	High	Low	Low
Interconnectedness	High	High	Moderate	Low	Low

Source: (Oliver 1991)

However, if there is a 'high' to 'moderate' dependency on the source of the pressure then the tendency is likely to be more towards 'acquiesce' or 'compromise', or perhaps 'avoid' or partially conform to the external pressure where there is only a moderate dependency for survival. Where external policy objectives are consistent with organisational goals (i.e. content factor) then an acquiescent response can be expected, with some compromise where consistency is moderate and non co-operation where consistency is low. However, if external policy objectives are placing constraints on an organisation then significant levels of resistance can be expected. Organisations can be expected to 'acquiesce' when legal/regulatory 'coercion' is 'high' because of the potential consequences, with some 'compromise' or even 'avoidance' when coercion (including potential sanctions) is 'moderate' and similarly for voluntary 'diffusion' of norms. When either of these is 'low' then higher levels of resistance can be expected. Finally, in times of 'uncertainty' (i.e. 'high'/'moderate') there is a stronger likelihood of an 'acquiescent' or 'compromise' response as organisations favour predictability in their operating environment and prefer to be in tune with their organisational field, particularly if interorganisational relations are strong. Higher levels of resistance can be expected where the organisational environment is stable or inter-organisational relations are weak. Adaptations have been made to Oliver's framework for this research study and the tailored framework is presented in the following section.

### 2.6.3 Adaptation of Oliver's Strategic Response Theory

The researcher has adapted the framework of Oliver's strategic response theory (Oliver 1991) to explore the strategic responses exhibited by HEIs in response to the policy goals envisaged in Ireland's new HESPF. This section outlines how it has been adapted and sensitised to the Irish context to reflect the practice of stakeholder consultation processes and the partnership approach to policy development and implementation in the higher education arena in Ireland. The adapted framework (table 2.4) is considered sufficiently flexible to capture the typology of strategic responses from the range of participating higher education institutions, arising from the antecedent factors at play in each of the national priority goal domains.

As discussed in section 2.6.2, Oliver's framework defines five strategic responses – acquiesce, compromise, avoid, defy, manipulate (table 2.3) - that can be undertaken by organisations in response to influences applied from an institution, state policy for higher education in this instance. For the purpose of the current study these five strategic responses are being reduced to three (comply, negotiate, resist), as depicted in table 2.4. These are deemed to more appropriately represent the level of strategic choice, and consultative and partnership approaches to policy development and implementation in the higher education sector in Ireland. Oliver describes 'compliance' as an active, conscious, and strategic approach for choosing to "comply with institutional pressures in anticipation of specific self-serving benefits that may range from social support to resources to predictability" (p.153), and this description is regarded as a good fit for this study. The strategic choice 'compromise' is being replaced by the term 'negotiate' to reflect the manner in which strategic contracts between individual HEIs and the HEA are brought about by discussion, and to reflect the stakeholder engagement processes within HEIs in Ireland. It also aligns with Oliver's description of negotiation as, "bargaining tactics" in an effort to "exact some concessions from an external constituent in its demands or expectations" (p.154). The three levels of resistance that Oliver terms "avoid, defy, manipulate" are not considered appropriate for this study as they include tactics, such as, concealment, ignoring norms and values, attack, and dominating or co-opting constituents which have strong negative connotations (p.152). Instead, tactics such as "buffering (loosening institutional attachments), escape (changing goals), and influence (seeking to change rules and criteria)" (*ibid*, p.152), which Oliver also includes under the strategies "avoid, defy, manipulate", are considered more reflective of the constructive engagements between HEIs and the HEA and are considered under the heading 'resist' in the adapted framework for this study.

**Table 2.4 Institutional Antecedents and Predicted Strategic Responses (Adapted)**

Predictive Factor	Strategic Responses		
	Comply	Negotiate	Resist
<b>Cause</b>			
Legitimacy	High	Low	Low
Efficiency	High	Low	Low
<b>Constituents</b>			
Multiplicity	Low	High	High
Dependence	High	High	Moderate to Low
<b>Content</b>			
Consistency	High	Moderate	Low
Constraint	Low	Moderate	High
<b>Control</b>			
Coercion	High	Moderate	Low
Diffusion	High	High	Moderate to Low
<b>Context</b>			
Uncertainty	High	High	Low
Interconnectedness	High	High	Moderate to Low

Source: Adapted from Oliver (1991, p.160)

Table 2.4 should be interpreted as follows. The first row of table 2.4 (i.e. factor 1 – ‘Cause’) indicates that organisations are more likely to comply where the level of legitimacy or efficiency attached to compliance are high, but are more likely to negotiate or resist the pressure or policy instrument (i.e. cause) where legitimacy or efficiency are regarded as low. Factor two (‘Constituents’) suggests that a greater degree of constituent multiplicity (i.e. varied stakeholder interests) lends itself to a higher level of resistance due to difficulties in reconciling conflicting stakeholder expectations. Likewise, a higher level of ‘dependency’ (e.g. for resources and other supports) on external constituents lends itself more towards compliance and negotiation rather than resistance. Factor three (‘Content’) predicts higher levels of compliance where institutional requirements are more ‘consistent’ with organisational goals and lower levels of compliance where there is a potential ‘constraint’ on substantial organisational decision making capability (e.g. staffing, resource allocation or determination of academic and research policy in HEIs). In terms of the ‘control’ factor, it is postulated that coercion through legal instruments or government directives lead to high levels of compliance as non-adherence may have severe repercussions. It is also predicted that compliance will be high where the policies being imposed on the organisation are already broadly ‘diffused’ in peer organisations and are regarded as having social legitimacy. The fifth factor in the framework relates to ‘context’, where high levels of uncertainty are predicted to result in high compliance rates as decision makers are considered to prefer “stability and predictability” (*ibid*, p.170) in their environment. Higher levels of ‘interconnectedness’ are

also considered to improve compliance through networks or associations that provide channels for greater levels of agreement around policy diffusion (particularly in unstable environments) that tends to lead towards “institutional isomorphism” (*ibid*, p.171). Negotiated responses are relevant in this context as well because “interdependence among organisations requires inter-organisational coordination and negotiation on the extent and conditions of exchange” (Oliver 1991, p.171). Environments that are disconnected are regarded as barriers to uniform policy absorption. The mapping of the research questions to this framework is presented in section 3.3.

## 2.7 Conclusion

This chapter has contextualised the study within the literature on NPM and performance management in HE and presented the theory underpinning the Strategic Response Framework and its relevance (including adaptation) for deployment in this study. Leveraging the intellectual capacity of HEIs to the benefit of states’ economies and the betterment of its citizens is now a firmly rooted phenomenon in the global HE landscape. Issues surrounding hierarchical stratification and horizontal differentiation in support of this high level goal were considered. Toolkits, including performance management frameworks and strategic contracts, that give effect to the related strategies were examined for both positive and negative implications arising from their deployment internationally. Finally, the impact of both the EU and Ireland’s policy contexts and their interrelationship on KPIs set by the Irish Government for HE were discussed alongside the challenges faced in the implementation of the new HESPF.

This research study represents a unique opportunity to explore the implementation of the new HESPF in a sample of the higher education institutions. It has the potential to add significantly to the literature in the field of performance management in higher education, a field in which there is a paucity of empirical studies in the Irish context. de Boer and Jongbloed (2014, p.3) highlight that information on what these “new instruments from Governments’ toolkits....look like and how they work out is fragmented and rather thin”. A recent study on performance-based funding and performance contracts across ten countries by de Boer et al. (2015, p.5) concluded that performance contracts are subject to change in successive generations and there is a gap in the “evidence on the effects of the systems and that our understanding of the proper design and implementation of performance agreements is still incomplete”. It also found that “the effects of PBF and PA’s inside the institutions is largely unknown” (*ibid*, p.162). This study provides an opportunity to add to this evidence base.

## Chapter 3 Research Design and Methodology

The opening section of this chapter sets out the world view and related “philosophical assumptions”, referred to by Mertens (2015, p.8) as the “paradigms”, that guide and underpin this research study. This is followed by a discussion on the methodology deployed to support the chosen research design frame and a mapping of the research questions onto the strategic response framework adapted for use in this study (Oliver 1991). Data collection instruments, sampling methods and data analysis techniques are then presented. The chapter concludes with consideration of methodological rigour and ethical matters.

### 3.1 Research Design

The study combines elements of three of the four major research paradigms – post-positivism, constructivism and pragmatism. The ontological position (i.e. nature of reality) of post-positivism holds that there is a singular reality that can be asserted within certain probability levels, constructivism is based on multiple realities informed through the experiences of participants and pragmatism is a pluralistic approach with a focus on the primacy of the question over the methods used (Creswell and Plano Clark 2007; Mertens 2015). These paradigms also differ in the nature of knowledge and how we know what we know (the epistemological position) with post-positivism emphasising objectivity, constructivism accentuating proximity and interactivity between researcher and participants, and pragmatism embracing whatever works to address the research question.

Researchers have emphasised that the nature of the research question should “determine the modes of inquiry” (Denscombe 2008, p.14) used to establish the true findings for that question (Cohen et al. 2011; Ercikan and Roth 2006; Mertens 2015). The central question (i.e. main aim) of this research study is to examine the extent to which HEIs are responding to the policy goals envisaged in Ireland’s new higher education system performance framework. There are both singular and multiple realities (ontological perspectives) associated with this research question. A post-positivist approach would seek to deploy quantitative research methods to establish the extent to which the strategic compacts between HEIs and the HEA are aligned with the national priority goals, to assess the visibility and influence of the new system performance framework, to gauge institutional capacity to respond to the new policy goals and related performance framework, and to assess the usefulness of the KPIs established by the Irish government in incentivising behaviour. A constructivist approach would seek to gain detailed individual insights and perspectives, establish patterns, and build a theory that derives its meaning from the realities of participants in the new HESPF process, based on their social/professional interactions with their colleagues and stakeholders (inter-

subjective) and their lived experience of working within the cultural and political context of the organisation and the stakeholders with whom they interact (generic-subjective (Weick 1995)). Because of the significance of the single and multiple realities that apply in this context a worldview based on pragmatism will form the philosophical basis for this research study (Creswell and Plano Clark 2007; Mertens 2015; Patton 2015).

The epistemological position of the study combines constructivist and objectivist elements. The constructivist epistemological aspect relies on the participants' experience of the educational, political, cultural and policy context to provide a rich, thick, contextualised description (Bazeley 2013; Miles et al. 2014; Richards 2015) of the sensemaking processes (Weick 1995; Weick et al. 2005) underpinning the work of their institutions and the impact of the new HESPF. Their educational and strategic planning experience developed over many cycles of peer-reviewed self-evaluations, within a variety of policy and environmental contexts, facilitates the development of a theory as to the usefulness of the HESPF framework. Sense making also involves "placing stimuli into some kind of framework", e.g. a strategy framework, to enable people to interpret, analyse, hypothesise and make inferences (Weick 1995, p.4; Weick et al. 2005). The strategic response framework developed by Oliver (1991) has been adapted for deployment in this study and is discussed in section 2.6.3. Miles et al. (2014, p.7) stress that each study "calls for the researcher to bend the methodology to the uniqueness of the setting or case". This constructivist epistemology operates alongside an objectivist approach that involves deployment of a survey instrument and analysis of institutions' strategic compacts with the HEA. This survey instrument is administered to gather mainly quantitative data to explore the extent to which staff at various levels within the institutions are aware of: the national strategy and priorities for higher education; the new HESPF; their institution's performance compacts; key performance indicators for their institution and nationally; and their opinions on the goals of the HESPF, its influence on the behaviour and KPIs of their institution and its sub-units, and institutional capacity to respond to the HESPF. Analysis of strategic compacts provides insights into the extent of alignment of individual HEI's strategic plans with the national priority areas.

Adopting a case study approach as the design frame facilitates the 'pragmatism' of mixing the social constructivist and post-positivist paradigms, i.e. "ways of viewing the world" (Mertens 2015, p.6). Yin (2014, p.17) defines a case study enquiry as "coping with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulation fashion, and as another result benefits from the prior development of theoretical propositions to guide data collection and analysis." The research questions evolved from the

research aims and these, in turn, determined the boundaries of the case study and the appropriate sources of evidence (Yin 2014). This research study relies on collecting, analysing, and triangulating evidence from qualitative (interviews, strategic plans, strategic compacts, HESPF reports) and quantitative sources (questionnaire and strategic compacts). According to Hamilton and Corbett-Whitter (2013, p.10), “it is widely accepted that a case study can capture rich data giving an in-depth picture of a bounded unit or an aspect of that unit”, while Bazeley (2013) emphasises that cases of the same type can be viewed as part of the same phenomenon but can also include contrasting characteristics. Tashakkori and Teddlie (2010) also embrace pragmatism as the worldview or paradigm for mixed methods research. Creswell and Plano Clark (2007) stress that a mixed methods design, underpinned philosophically by pragmatism, enables a researcher to use a combination of quantitative and qualitative approaches to better understand a research problem than either approach on its own. Miles et al. (2014, p.12) advocate qualitative data as “the best strategy for discovery, for exploring a new area” and also consider it useful “when one needs to supplement, validate, or illuminate quantitative data gathered from the same setting.”

However, a mixed methods approach is not without its challenges, as combining both is regarded as “very difficult” and may not always result in a “superior hybrid” unless the researcher is competent and skilled in both (Bogdan and Biklen 2007, p.41). To mitigate this risk the researcher undertook advanced courses in qualitative and quantitative methods, with accompanying fieldwork, as part of his doctoral training. A detailed project plan was established at the outset (with quarterly reviews) to establish if (and ensure) that it was possible to address the volume of work associated with the mixed approach within the relevant timeframe, taking into account implementation/timing issues (Cohen et al. 2011). In addition, a structured research design and data analytic strategy was put in place prior to commencement of any fieldwork which adhered to the level of rigour associated with each approach for design, methodology, analytic framework, measures/instruments, sampling, field work, data analysis and interpretation (Mertens 2015, p.304), as discussed in the succeeding sections of this chapter. This mitigated the risk of any dilution of standards and an over emphasis on one approach at the expense of the other. Risk of non-representative samples was mitigated through the sampling methods and ensuring that the quantitative sample size was sufficiently powered up for statistical analysis and through utilisation of a spectrum of key informants and data saturation to inform the qualitative aspects of the design. Triangulation of the responses from the two approaches improved the validity and credibility of the findings through convergence of conclusions (Miles et al. 2014). This was facilitated through

integration of the design of the data collection instruments and linking each to the research questions, thereby mitigating the risk of divergence of data sources.

The possibility of deploying alternative research designs that focused on solely quantitative or qualitative data was also considered. Explanatory Correlational Research Design (Creswell 2012, p.356) and Survey Research Design (*ibid*, p.388) were examined as potential quantitative approaches. The Correlational Design approach uses statistical tests to determine the association between variables and the extent to which they “vary consistently” or “co-vary” (*ibid*, p.356). A Survey Research Design relies on survey data (mainly quantitative) of a sample of the population to determine attitudes, perspectives, behaviours and attributes. Such quantitative approaches may record facts, opinions and possibly establish some associations or trends in the data but without necessarily determining causality. Quantitative aspects are to the fore without automatically elucidating the data or potential underlying themes or engaging the inner experiences of individuals or groups in an exacting manner (Cohen et al. 2011). It also limits the opportunity for the researcher to bring his/her own experience to bear through exploring the interpretations presented.

Constructivist Grounded Theory was considered as a solely qualitative research design (Creswell 2012; Creswell and Plano Clark 2007; Thornberg 2012). Qualitative approaches recognise that reality is “multi-layered and complex” (Cohen et al. 2011, p.17) and allows us to capture the richness of multiple experiences and develop themes that may help us to understand shared/common experiences while simultaneously acknowledging negative or discrepant cases. However, interpretations can be impregnated by our assumptions, prejudices, biases and experiences and may thus become contaminated or inaccurate. Constructivist Grounded Theory is a “systematic, qualitative procedure used to generate a theory, at a broad conceptual level” (Creswell 2012, p.432) which “takes the advantage of pre-existing theories and research findings in the substantive field in a sensitive, creative, and flexible way” (Thornberg 2012, p.255). While such an approach offers strengths in terms of situating the study in the current knowledge base and the systematic collection and analysis of data for underlying themes, it was not proposed to develop a theory as the research is exploratory in nature and thus this design was not adopted.

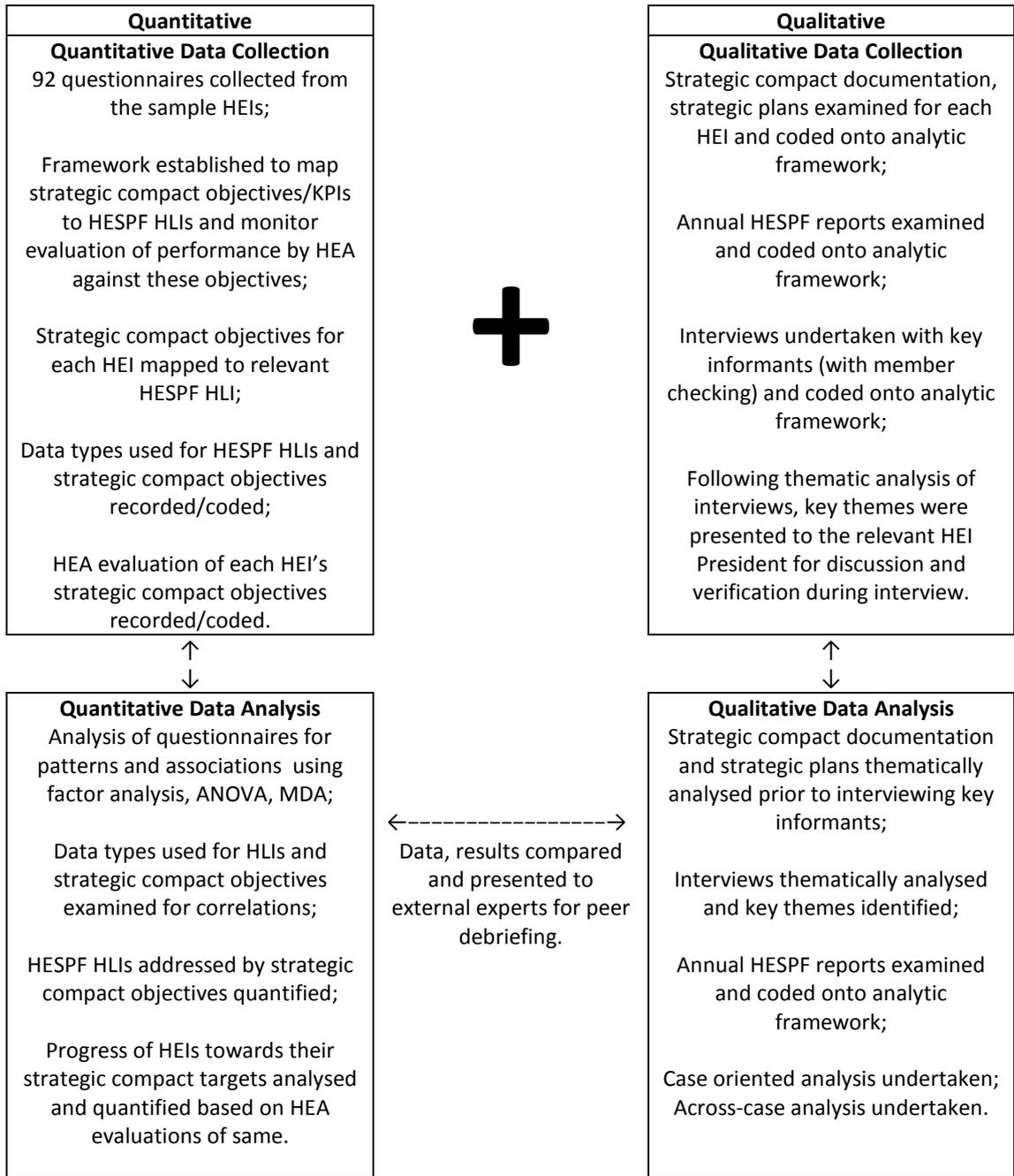
In summary, this study is located within a ‘pragmatist’ paradigm using a social constructivist orientation in parallel with a post-positivist empirical measurement orientation that deploys an exploratory case study design frame to address the research question. A multiple-case design (Yin 2014, p.50) is considered appropriate to evaluate the implementation of Ireland’s new HESPF (HEA 2013a). The cases are drawn from small, medium sized, and large

institutions and across the binary higher education institutions within Ireland, in particular, the five colleges in the Southern regional cluster (HEA 2013b, p.20). Stake (2005) emphasises that for collective case studies (i.e. multiple cases) balance and diversity are important along with preservation of the multiple realities, but that the opportunity to learn is critical.

### 3.2 Research Methodology

Operating within this design frame a mixed methods research approach is best positioned to answer the research question (Creswell and Plano Clark 2007). Whiteman (2015, p.888) argues for a pragmatic mixed methods stance in educational leadership inquiry “because it privileges methodology and epistemology in social inquiry rather than ontological theories of reality.” A concurrent/convergent triangulation design strategy (Creswell 2009; Creswell 2012) was deployed (figure 3.1). Qualitative and quantitative data were collected simultaneously, analysed separately and the results compared to assess for convergence or divergence (Creswell 2012). The themes emerging from the qualitative data analysis were compared to the quantitative analysis of the survey instrument and the strategic compacts with the HEA to examine the extent to which they were supported or refuted (Creswell 2012). This triangulation process was used to corroborate evidence from different sources and external experts were utilised for peer debriefing to enhance the accuracy of the findings from the study (Freeman et al. 2007; Patton 2015). This peer debriefing took place at the level of individual HEIs and for the overall research findings through engagement with national and international experts. Using different sources of evidence enables the deployment of multiple lines of inquiry (Yin 2014) and Kohlbacher (2006) argues in favour of qualitative content analysis as a data analysis strategy for case study research.

**Figure 3.1 Concurrent/Convergent Triangulation Design Strategy**



### 3.3 Mapping Research Questions to Oliver’s Strategic Response Framework

The research questions for this study have been mapped onto the adapted strategic response framework described in section 2.6.3. This mapping (illustrated in table 3.1) demonstrates how each research question is mapped onto an antecedent (i.e. predictive) factor which allows for strategic responses (i.e. comply, negotiate, resist) to be analysed against the two dimensions associated with each factor. Each row also includes a justification for alignment of each research question to the particular antecedent factor on the framework and a statement of the relevance of that particular factor to the current study. For example, row number one illustrates that the first research question (RQ1) explores the primary drivers (i.e. the ‘cause’ factor) underpinning Ireland’s HE system objectives along with the drivers and rationale (which include the predictive dimensions ‘social legitimacy’ and ‘efficiency’) behind HEIs’ responses to the national policy objectives. The extent to which the performance framework process aids or inhibits institutional planning is also considered under the ‘cause’ factor. The relevance of this factor to the current study relates to the social and economic legitimacy of national higher education policy (the cause), and its related high level objectives, to the strategic choices and direction of individual HEIs.

No *a priori* predictive strategic responses have been entered in table 3.1 as this is not considered appropriate given the exploratory nature of the research study. However, the framework is used for analysing HEIs’ responses which are mapped onto the framework for subsequent analysis against Oliver’s strategic response theory.

**Table 3.1 Strategic Response Framework for Deployment in this Study (Adapted from Oliver (1991, p.160))**

Institutional Antecedent Factor	Research Question	Predictive Dimensions		Strategic Response			Relevance to the Current Study
Cause	<p><b>RQ1: To what extent does the higher education policy/performance framework aid or inhibit institutional planning towards the related policy initiatives?</b></p> <p><b>Justification for alignment to framework:</b> This research question explores the primary drivers underpinning Ireland’s HE system objectives along with the drivers and rationale behind HEIs’ responses to the national policy objectives. These rationale include social legitimacy and efficiency. The HEIs’ responses, including any variations over the three implementation cycles (2014 to 2016), are analysed under three strategic categories – comply, negotiate, resist. The extent to which the performance framework process has aided or inhibited institutional planning is also considered.</p>	Legitimacy or social fitness	Efficiency or economic fitness	Comply	Negotiate	Resist	National higher education policy (the cause) has both social and economic legitimacy as it seeks to develop Ireland’s higher education system towards a number of high level objectives that are impacting significantly on the strategic choices and direction of individual HEIs.
Constituents	<p><b>RQ4: How meaningful or useful are the key performance indicators (KPIs) set by the Irish government in terms of incentivising behaviour?</b></p> <p><b>Justification for alignment to framework:</b> This research question explores the extent to which the KPIs established by the Irish government incentivise institutional behaviour, including stakeholder engagement. Integral to this question is how the range of stakeholder expectations (i.e. multiplicity of stakeholder demands) are being managed by the HEIs and how these are impacting on the goals of the organisation. The nature of the dependence on stakeholders (i.e. institutional constituents) is also explored along with their influence on the HEIs’ KPIs. Tensions between these interlocking factors are analysed to determine their significance to the level of compliance or resistance inherent in the HEIs’ strategic responses.</p>	Multiplicity of constituent demands	Dependence on institutional constituents	Comply	Negotiate	Resist	HEIs serve a multiplicity of stakeholders and need to position their organisations at the intersection of these sometimes conflicting demands. Non-state income has become a critical element of sustainable funding models in HEIs.
Content	<p><b>RQ2 Have institutional goals been displaced towards the national agenda?</b></p> <p><b>Justification for alignment to framework:</b> This research question explores the level of centrality or influence the new system performance framework has in determining the HEIs’ strategic plans. Consistency between national objectives and HEIs’ goals is a key component of this analysis. The impact of the new system performance framework on decision-making discretion and change processes is also considered in the analysis of the variety of strategic responses of HEIs across the spectrum comply-negotiate-resist.</p>	Consistency with organizational goals	Discretionary constraints imposed on the organization	Comply	Negotiate	Resist	Ireland’s differentiated HE system is expected to invoke a variety of responses in relation to the national priority goals and related KPIs. Differentiation is also expected through prioritised strategic capacity and financial strengths.

Table 3.1 (Continued) Strategic Response Framework for Deployment in this Study							
Institutional Antecedent Factor	Research Question	Predictive Dimensions		Strategic Response			Relevance to the Current Study
Control	<p><b>RQ3: Is institutional capacity being developed to support the national policy objectives, including at sub-unit level?</b></p> <p><b>Justification for alignment to framework:</b> This research question explores the extent to which the strategic dialogue process between HEIs and the HEA has facilitated differentiation and positioning of HEIs in the national and global market place for HE. It also explores how institutional capacity is being developed to support the national agenda and the impact of performance funding on this process. Diffusion of existing organisational reward practices are also considered in the analysis of institutional strategic responses.</p>	Legal coercion or enforcement	Voluntary diffusion of norms	Comply	Negotiate	Resist	Performance set-asides are in place to incentivise compliance (fail/pass/excellent categorisation) with national policy objectives. The new system performance framework seeks to articulate the expectations on the HE system, highlight structural and other deficits, and identify, further develop and co-ordinate HEIs' strengths, strategic niches and missions towards its delivery. Voluntary diffusion of good practice and sharing of expertise is facilitated through peer reviews, partnerships, national/international fora and agencies, and is a long established practice in HE.
Context	<p><b>What are the environmental factors impacting on the higher education institutions?</b></p> <p><b>Justification for alignment to framework:</b> This research element examines the current and projected environmental context within which HEIs are operating and its impact on planning, decision-making, and institutional autonomy. The context includes consideration of relation networks (i.e. interconnectedness) and their influence on HEIs' strategic responses to this context.</p>	Environmental uncertainty	Environmental inter-connectedness	Comply	Negotiate	Resist	Ireland is transitioning from a period of austerity to positive economic forecasts. However, sustainable funding for HE remains a critical and unresolved issue in Ireland. The new higher education system performance framework includes a high level objective to reform the HE landscape in Ireland through regional contours and consolidations. This complements the current high levels of interconnectedness within HE in Ireland, and internationally.

### 3.4 Measures/Instruments

The data collection instruments used to explore the extent to which HEIs are responding to the policy goals envisaged in Ireland's new HESPF include a combination of field interviews, questionnaires and document analysis. Interviews are used when the researcher believes it is important to achieve a deep understanding of people's thoughts, opinions and experiences. Cohen et al. (2011, p.411) highlight that the "interview may be used as the principal means of gathering information having direct bearing on the research objectives", making it possible to measure what a person knows, their values, preferences, attitudes and beliefs. Gubrium and Holstein (2002, p.17) describe the interview as "jointly constructed by interviewer and respondent" while Miles et al. (2014, p.38) describe it as a co-elaboration – "data are not being collected but rather co-authored". A semi-structured face-to-face interview was the preferred option for eliciting data from HEI executives (academic and administration) given their bird's eye view and familiarity with institutional planning processes and the historical, educational, political, cultural and policy contexts. The interview questions are derived from the main research questions and are mapped onto the adapted strategic response framework (Oliver 1991), as discussed in section 3.3 and presented in appendix E. The importance of constructing interview questions from the main research question and aligning data collection instruments to support this process is highlighted by many authors (Cohen et al. 2011; Creswell 2012; Miles et al. 2014; Yin 2014).

Document examination and analysis yielded further data sets that provided a combination of qualitative and quantitative data on system-wide and institutional strategic objectives and related key performance indicators (KPIs). These data were the primary sources and the official record of HEIs, the HEA, and national policy documents. This enabled the researcher access to information that was "thoughtful in that participants had given attention to compiling them" Creswell (2009, p.180). The documents included the Higher Education System Performance Framework 2014-2016 (HEA 2013a), the System Performance Reports (HEA 2014b; HEA 2016d; HEA 2017b), the Mission-Based Performance Compacts between HEIs and the HEA for the years 2014 to 2016 along with the self-evaluation reports and related HEA international panel review of these, and the Strategic Plans of the HEIs in the period of the compact.

A survey instrument (i.e. baseline questionnaire) was designed specifically for this study (appendix F) to gather mainly quantitative data to explore the extent to which staff at various levels within the institutions are aware of: the national strategy and priorities for higher education; the HESPF; their institution's performance compacts; key performance indicators for their institution and nationally; and their opinions on the goals of the HESPF, its influence

on the behaviour and KPIs of their institution and its sub-units, and institutional capacity to respond to the HESPF. Following a pilot of the questionnaire, a reliability analysis on the 45-item scale representing responses to the statements C1 to C13, D1 to D10, E1 to E11, and F1 to F11 proved satisfactory (Cronbach Alpha 0.921) (Norusis 2008a, p.432).

### 3.5 Sampling

A purposive sampling approach was considered appropriate for selecting interview participants for this research study from the institutions included as the sample (i.e. the Southern regional cluster). Participating institutions were requested to nominate four representatives (across academic and administrative roles) from amongst the team that led the development of their institution's compact with the HEA, and participated in the HEA's international panel review of the compact and its related self-evaluation. This resulted in 24 interviewees. Cohen et al. (2011, p.156) state that "in purposive sampling, often a feature of qualitative research, researchers hand-pick the cases to be included in the sample on the basis of their judgement of their typicality or possession of the particular characteristics being sought....in this way, they build up a sample that is satisfactory to their specific needs", in what Mertens (2015) refers to as groups or locations where the activities being studied are most likely to occur. All participants had a lived experience of the new HESPF and are thus suitable for interpreting and elaborating their institutional context and strategic approach, and implications of the new framework for their organisations (Patton 2015). Warren (2002, p.87) also supports the principle of selecting "particular respondents....to act as key informants" with a minimum of twenty interviews for qualitative studies, while Adler and Adler (2012, p.8) recommend that a small number of interviewees (between six and twelve) may be "extremely valuable and represent adequate numbers for a research project", especially for small populations such as senior executives which can be hard to access. Guest et al. (2006) also found that saturation occurred within the first twelve interviews of their study, with basic themes emerging as early as six interviews. Patton (2015, p.52) argues that more significant cases increase the likelihood of adding to both the research literature and practice. Despite the disadvantages that arise from potential non-representativeness of this approach, Cohen et al. (2011, p.155) state that it is acceptable where researchers do not intend to generalise the research findings and conclusions beyond the sample. The number of interviewees was guided by the established principle surrounding data saturation and finding a spectrum of responses (Baker and Edwards 2012, p.3), supported by a credible analytical approach built on a foundation of "richness, complexity and detail" (Mason 2012, p.29). Back (2012, p.12) also emphasises that the number of interviews required can only be determined by the extent to which "the interview data connects with the analytical framework of the project and the truth

telling status we confer on the interviews”. This analytical process was facilitated through deployment of the Data Analysis: Interactive Model developed by Miles et al. (2014, p.14), underpinned by the NVivo software platform, and described in section 3.7. Other factors that influenced sample size related to the mixed methods approach, underpinned philosophically by pragmatism, which enabled the use of a combination of quantitative and qualitative data (interviews and document analysis) to address the research question. Provision was made in the research design to include additional interviewees if the need arose but this proved unnecessary.

A required sample size of 92 questionnaire respondents was deemed appropriate, based on the following input parameters: a power level of 0.8, an effect size of 0.33 (moderate to strong),  $\alpha = 0.05$  (significance level) for 3 groups using ANOVA (Faul et al. 2007; O Shea 2013). A snowball sampling approach was used to select members of staff from across the HEIs to complete the questionnaire (Cohen et al. 2011; Mertens 2015) and this resulted in 92 responses (43% response rate). Snowball sampling was implemented through a process where interview informants and other network contacts were asked to seek five respondents to the questionnaire from across a range of staff roles in the institution (i.e. academic and administrative management, lecturing, research staff), thereby enhancing the representative nature of the responses. There is, nonetheless, potential for a sampling bias from such an approach arising from differences in those who choose to respond to the questionnaire and those who do not. Awareness levels of respondents regarding the HESPF was factored into the analysis in order to ameliorate this potential bias.

### **3.6 Interviews**

The importance of constructing interview questions from the main research question and aligning data collection instruments to support this process is highlighted by many authors (Cohen et al. 2011; Creswell 2012; Miles et al. 2014; Yin 2014). To facilitate this process, the research question was broken down into four main sub-questions that translated into themes that were explored through a baseline survey, document analysis, and interviews. An interview schedule was prepared in advance (appendix E) and piloted to test participant understanding and interpretation of each question. Johnson and Weller (2002, p.493) highlight the importance of this elicitation technique “in order for researchers to combine responses across individuals and make meaningful comparisons between groups” and to facilitate a common interpretation of all questions. Bazeley (2013), Creswell (2009, p.179), Cohen et al. (2011, p.204), amongst others, highlight potential limitations of interviewing arising from information filtering, non-familiar settings, researcher’s presence and interviewer

bias, the notion of power, and articulation abilities of participants. These limitations were addressed as outlined in figure 3.2 (Mercer 2006; Nolen and Vander Putten 2007).

**Figure 3.2 Strategies for Addressing Interview Limitations**

Risk	Strategy
1. Information filtering through the views or interpretations of interviewees or the interviewer	The interviewee participants undertake similar roles in HEIs in Ireland that operate within a similar national environmental context, albeit on a scale that varies from a small regional institution to a large internationally renowned university. This enabled common themes to be explored across five independent data sets along with highlighting any outlying data for which explanations might be present for a specific context (e.g. size or culture of a specific institution). Interview data was triangulated with findings from document analysis and the baseline questionnaire to build a coherent justification for themes that cut across these multiple data sources.
2. Potential bias arising from non-familiar settings	Interviews took place in the natural setting of the interviewees' institution to ameliorate this potential bias.
3. Potential bias arising from researcher's presence, power relations, and interviewer bias	Reviewing the implementation of Ireland's new HESPF, following its first three-year cycle of implementation, is consistent with existing practices within HEIs where critical, self-reflective, peer evaluated reviews are embedded practices within quality assurance procedures, and indeed form an integral part of the new HESPF. The interviewer has broad experience in this regard and holds no positional power over any of the interviewees thereby eliminating coercion as a potential source of bias (Nolen and Vander Putten 2007). The research questions facilitate an open discourse that allow both positive and negative aspects of the HESPF to be explored. In addition, the interviewer sought not to contaminate the interview by broadcasting his own viewpoint Mercer (2006, p.13).
4. Articulation abilities of participants	This does not present significant problems in a higher education environment as staff in HEIs are generally regarded as articulate and reflective practitioners.

Each interview was recorded and field notes kept to cross-check for data accuracy. Transcripts were generally produced within five days of each session and were checked for transcription errors. Member checking was applied to enable participants to confirm if the data was an accurate representation of their views - member checking helps to establish trustworthiness and credibility within a study (Lincoln and Guba 1985; Teddlie and Tashakkori 2009). Rich thick descriptions were used to convey findings and peer debriefing was employed to enhance the accuracy of these accounts. To ensure reliability of the data, codes introduced during data analysis were defined and consistently compared with the data to avoid drift in their meaning (Bazeley 2013; Gibbs 2007; Richards 2015).

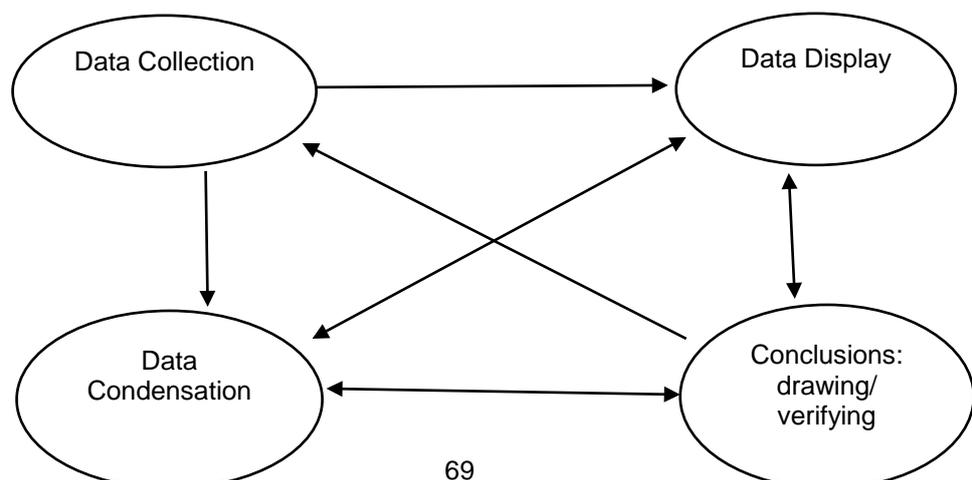
### 3.7 Method of Data Analysis

#### 3.7.1 Qualitative Data Analysis

A database management system was designed, as recommended by Richards (2015), prior to collecting interview data or document analysis and which included the data to be recorded, classification and attributes of sources, an initial coding design that mapped to the strategic response framework being deployed, and a data analysis strategy (Bazeley 2013; Richards 2015). The database design represents the second phase of the data reduction process as the

cases, data collection approaches/instruments, and research questions place limitations on the evidence that is considered from the outset. Major themes were set up as the parent/main nodes in an NVivo database and each was assigned a summative symbolic label with an associated description to facilitate consistency of interpretation during the subsequent coding phases of documents and interview transcripts (Gibbs 2007; Saldana 2009). Miles and Huberman’s ‘Data Analysis Interactive Model’ was chosen to support the data analysis as it accommodated an iterative recursive process that enabled the researcher to blend data collection with data condensation (i.e. reduction), display, and conclusion drawing (figure 3.3), an approach also endorsed by other authors (Charmaz 2006; Silverman 2014; Teddlie and Tashakkori 2009). This allowed patterns of responses (including discrepant cases or data elements) to evolve as the research progressed from case to case and informant to informant. Evolving assertions could be tested for both confirming/disconfirming evidence or discrepant cases/data in the field, saturation levels could be gauged, gaps in understanding could be addressed, and discrepant findings or data elements could be further explored, in a process that Richards (2015, p.194) refers to as “goading the data” and Silverman (2014, p.107) endorses as critical to validity of findings. This process allows emerging theories to be confirmed, broadened, revised, or indeed, abandoned (Lincoln and Guba 1985). This mainly inductive data analytic process (Gibbs 2007, p.4) enabled patterns and themes to be built from the qualitative data by condensing the data into increasingly more abstract units of information (Miles et al. 2014). The meaning of these themes and their interrelationships and differences could be interpreted incrementally, through analytic memos or journaling (Bazeley 2013; Richards 2015), and aligned with the research questions using Oliver’s strategic response framework (as adapted for this research study) as a “scaffold to explore the internal structure and dynamics of the concept”, without totally defining its limits (Guest et al. 2012, p.37). This positions the analytic approach as a combination of exploratory and explanatory analysis (*Ibid*, pp.35-40).

**Figure 3.3 Components of Data Analysis: Interactive Model (Miles et al. 2014, p.14)**



The initial coding design reflected the antecedent factors and predictive dimensions in the strategic response framework. This is consistent with the preferences by Miles et al. (2014) and other authors (Richards 2015) for the creation of an interim coding structure prior to fieldwork. These codes (parent/main codes) aligned with the adapted strategic response framework and research questions, as described in section 3.3. The researcher was at all times open to creating new emergent codes and was not restricted by potential limitations of *a priori* codes (Bazeley 2013), as detailed in appendix G.

These main codes were used for first cycle coding and were subdivided into sub-categories (or themes) around clusters of related data sets when “coding on” (Richards 2015, pp.115-116). Following on with Miles et al’s tactics for generating meaning, the next phase would compare and contrast themes for similarities and differences while also considering individual cases’ environmental context (Miles et al. 2014, pp.277-293), in what Richards (2015, p.112) refers to as analytic coding. Miles et al. refer to the process of determining relationships between themes or abstract entities as “factoring” (*ibid*, p.286), a technique more commonly associated with quantitative analysis for reducing a large number of variables to a smaller number of underlying constructs (Coakes et al. 2010; Sharma 1996). Subsequent analysis would lead to assertions and proposition development (p.10) that would link evidence, from interview informants and review of documents, to the research questions (thereby creating an audit trail and enhancing the validity of findings) in the final phase that Miles et al. (2014, p.292) refer to as making “conceptual or theoretical coherence”.

The process of data condensation helped to identify cross-cutting themes and discrepant data elements, through data display and analysis (Saldana 2009). Miles et al. (2014, p.12) describe data condensation as a “form of analysis that sharpens, sorts, focuses, discards, and organises data in such a way that final conclusions can be drawn and verified.” A combination of the “case-oriented approach (examines the case as a unit)” and “variable-oriented approach (themes that cut across cases)” was used to facilitate within-case and across-case comparisons for associations and differences that would form the basis for assertions and propositions (Miles et al. 2014, p.102). By classifying each of the interview transcripts and documents, data displays were enabled in a matrix format (appendix L) which permitted a systematic viewing of a full data set or a subset thereof.

Good displays are a major avenue to robust qualitative analysis.

(Miles et al. 2014, p.13)

This iterative analytic process of data condensation, display and analysis, honed the data into key themes in a manner that enabled conclusions to be drawn, while maintaining a chain of evidence to the original context that makes the findings verifiable and credible (Charmaz 2006; Miles et al. 2014). The NVivo software system was used to maintain this chain of evidence, linking the case study report and conclusions to themes (aligned with the research questions) in the case study database and citations from specific sources in this database, thereby completing the link from the research questions to the findings.

Repeating this data analytic interactive process (Miles et al. 2014) from the early stages of the research study is regarded as “good practice” by Gibbs (2007, p.3), and led to stability of the method deployed thereby improving the validity and reliability of the findings. The outcomes from this process of data analysis were presented for member checking in what Miles et al. (2014) describe as an exercise in internal and pragmatic validity. Having analysed coded references through multiple iterations of data condensation and display, a further process of “enumeration” (Cohen et al. 2011, p.558) examined word counts, the implication being that they provide an indication of their significance and can be used to test the robustness of propositions (Brooks et al. 2014). Consideration of the output from word frequencies, key-word-in-context (KWIC) analyses, tag clouds and clustering (appendix H) “informed thematic analysis” and “facilitated gap analysis” (Guest et al. 2012, p.107). A “Qualitative Analysis Documentation Form”, based on Miles et al. (2014, p.318), was used for tracking of data sets, procedural steps and analysis undertaken, decision rules, analysis operations, conclusions drawn, and research comments. This form is included in appendix I.

### **3.7.2 Quantitative Analysis of Baseline Questionnaire**

The SPSS software package was used to store and process the data from the baseline questionnaire. Factor analysis was used to reduce the number of variables in the questionnaire to a smaller number of underlying constructs (Coakes et al. 2010, p.133). Reliability analysis was performed on the construct using Cronbach’s alpha (0.921) and it proved acceptable (Norusis 2008a, p.432). Principal axis factoring using varimax rotation was used to determine the number of factors necessary (eigenvalue > 1) (Coakes et al. 2010). Trends and relationships among variables were explored using an explanatory correlational design where the focus is on examining the association or relation of one or more variables (Cohen et al. 2011; Creswell 2012). Analysis of variance (ANOVA) was used to evaluate mean differences between various groupings on these factors (Gravetter and Wallnau 2002; Norusis 2008b). The relationship between groupings and factors was examined through analysis of the variables that loaded on each factor. A Multiple Discriminant Analysis (MDA) was deployed to explore the differences between various groupings and in testing these

differences for statistical significance (Drew and Bishop 2007; Norusis 2008a; Sharma 1996). The existence of clusters was explored through hierarchical cluster analysis (Drew et al. 2007; Norusis 2008a).

The following underlying assumptions were tested, where appropriate, and proved satisfactory for the relevant statistical test:

Normality: was explored/assessed/tested using histogram, stem-and-leaf plot, boxplot, normal probability plot, Shapiro-Wilk statistic;

Spearman's rank-order correlation assumptions: random sampling, similar shape and variability across distributions, independence of observations;

ANOVA assumptions: independent samples, normality, homogeneity of variance.

(Coakes et al. 2010)

MDA assumptions: sample size, linearity, univariate and multivariate normality, homogeneity of variance-covariance matrices, and multicollinearity.

(Drew and Bishop 2007)

### 3.8 Methodological Rigour

The research design for this case study followed the design protocols established by (Yin 2014), as set out in table 3.3. This design strategy is consistent with the principles advanced by other authors, for example, “Steps for Design Alignment” (Patton 2015, p.265) and “Planning the Route: Setting up for Analysis” (Bazeley 2013, p.13).

**Table 3.2 Design Protocol (Yin 2014) and Action Taken**

Design Protocol	Action Taken
Project Overview ( <i>ibid</i> , p.27)	A clear purpose was established for the study underpinned by findings from a detailed review of relevant literature.
Develop theory, propositions, and issues underlying the anticipated study ( <i>ibid</i> , pp.37-44)	The research questions evolved from the research aim and the literature review determined the key issues to be addressed. The strategic response framework proposed by Oliver (1991) has been adapted for deployment in this study, with appropriate rationale presented regarding its suitability.
Define the unit of analysis and the likely cases to be studied ( <i>ibid</i> , pp.31-34)	The research question (level 2 question) determined the boundaries of the case study, the data sources, the key informants and likely sources of evidence, the key priorities for information gathering – these would subsequently influence the reliability and external validity of the data and the domains to which findings could be applied. The level 1 questions asked of the interviewees were derived from the level 2 question (Yin 2014, pp.89-90).
Identify the case study design ( <i>ibid</i> , p.50)	An exploratory case study design frame is deployed to address the research question. A multiple-case design (Yin 2014, p.50) is considered appropriate to evaluate the implementation of Ireland’s new higher education systems performance framework (HEA 2013a). The sample cases (HEIs from the Southern regional cluster) provide a test bed that operates within a similar national environmental context but on a scale that varies from a small regional institution to a large internationally renowned university. This allows common themes to be explored across five independent data sets along with shedding light on differentiated aspects related to their distinctive missions.
Define procedures to maintain case study quality ( <i>ibid</i> , p.45)	The data analysis strategy was planned during the design phase to ensure internal validity of the data – this included determining the main themes/criteria to be used for analysis and interpreting findings, and the framework (Oliver 1991) to be used for analysis. Triangulation of data sources, peer debriefing, member checking, negative case analysis and establishing chains of evidence were used to quality assure construct validity (Mertens 2015), along with weighting the evidence in favour of most trustworthy data (Miles et al. 2014). Thick descriptions and multiple case analysis were used to improve external validity and transferability of the findings (Lincoln and Guba 2003). Establishing chains of evidence make the data auditable and confirmable and address reliability concerns (Lincoln and Guba 1985; Yin 2014). “Progressive subjectivity” and potential for researcher bias was monitored through journaling/analytic memos and used during peer debriefing and the data analytic phase to trace how understandings may have changed (Mertens 2015, pp.270-271).
Define the outline format for the case study report	This was established at the outset and is represented in the layout of this report.

### 3.9 Clarification of Researcher Bias & Insider Research

The researcher is currently Head of School of Health and Social Sciences (HSS) at the Institute of Technology, Tralee (ITT) - one of the five institutions in the Southern regional cluster which form the sample for this research study - and a member of the institute's senior executive team. He has considerable experience in strategic planning in the HE sector stretching back to the year 2000, when he chaired the working group that developed the first strategic plan for ITT which was amongst the first HEIs in Ireland to produce such a plan. Arising from his experience in strategic planning and his role in the specification and evaluation of information systems for the IOTI sector he was invited onto the working group that developed the IOTI KPI Framework (IOTI 2012). He has also been a member of ITT's team that met with the HEA's international review panels for strategic compact discussions. Yin (2014, p.71) contends that a good case study investigator should have a "firm grasp of the issues being studied" and should use their own expertise to inform the research, while Mercer (2006, p.13) emphasises that "insider researchers have a stronger rapport and a deeper, more readily-available frame of shared reference with which to interpret the data they collect". Patton (2015p.xiv), in turn, points to the strengths of "direct experiential insight". However, Silverman (2014, p.39) cautions that "the facts we find in the field never speak for themselves but are impregnated by our assumptions." While it could be argued that the researcher's role and deep historical knowledge of his home institution and in developing the IOTI KPI framework could enhance the validity of the study (Edwards 2002), steps also need to be taken to address the potential for bias. These included: emphasising the potential for improving the effectiveness of the HESPF to the benefit of all informants as far outweighing any reluctance to unearth weaknesses, in an atmosphere that was free from coercion (Nolen and Vander Putten 2007); selecting executives (i.e. informants) with strong experience in HE, strategic planning, and peer reviews and who would thus feel empowered to offer constructive critical analysis (Patton 2015; Warren 2002; Yin 2014); familiarity with the framework (and related policy goals) under investigation provided the researcher with an objective lens through which informant interpretations could be assessed (Mercer 2006; Yin 2014); allowing the data to guide the analysis and employing data triangulation strategies and creating a chain of evidence from the case study questions to specific sources of evidence across multiple cases and informants to support the findings (Creswell 2012; Patton 2015; Yin 2014); monitoring potential for researcher bias through journaling/analytic memos and using peer debriefing to trace how understandings may have changed (Bazeley 2013; Mertens 2015) - Drake (2010, p.85) cautions that the "validity of insider research requires reflexive consideration of the researcher's position".

### 3.10 Ethical Considerations

The research study followed an ethics as process approach (Brooks et al. 2014; Frank 2004; Silverman 2014) that “rests on the principles of respect and duty of care” (IUA 2014, P.6) to participants. Ethical approval for the research study was obtained from the Dublin City University Research Ethics Committee (DCU REC) prior to commencement of any fieldwork. In line with DCU procedures (DCU 2014) and good practice guidelines (Cohen et al. 2011), a plain language statement (appendix J) was prepared for participants in the study that included the following: description of the research and why it was being conducted; requirements of the participant during the study; procedures to safeguard confidentiality, anonymity (including legal limitations) and data protection/encryption; limitations on use of the data and destruction of the data on completion of the study; potential impact of the study; any potential risks; details of how participants could withdraw from the study and the related destruction of relevant data; contact details for further information; and DCU REC contact details as an independent source to deal with any potential participant’s concerns. This statement, accompanied by the interview schedule (appendix E) and questionnaire (appendix F) was used to request gatekeeper access and following that to request participant involvement. In requesting gatekeeper access, the names of two senior executives of public sector organisations in Ireland were provided (with their consent) as a means of verifying the researcher’s credentials and integrity.

Prior to conducting the interview the researcher clarified with each interviewee that he/she understood the objectives of the research, the process to be used to verify contributions, conditions and limitations on data usage and storage, and each interviewee was provided with a checklist and a consent form (appendix K) that was signed prior to the commencement of the interview. An undertaking was given to make a summary of the findings available to all participants.

Of equal importance is the attention given in the design phase of the project on adherence to good practice protocols (Yin 2014), including presentation of research instruments to the DCU REC and care exercised on the appropriateness of research questions and related interview and survey instrument design. Insider research and potential researcher bias have been considered and are presented in section 3.9. The researcher was cognisant of not confusing his professional and researcher roles when researching in his home organisation (Floyd and Arthur 2012) and held no positional power over interview participants (Northouse 2013). “Honesty and transparency” were regarded as paramount during data analysis and presentation of findings (Brooks et al. 2014, p.117) and a rigorous data analytic process was adhered to (Miles et al. 2014).

### 3.11 Conclusion

This study is situated within a 'pragmatist' paradigm and deploys an exploratory case study design frame to address the research question. A multiple-case design is used with the cases comprising the five colleges in the Southern regional cluster (HEA 2013b, p.20). A mixed methods research approach based on a concurrent triangulation design strategy is deployed. Qualitative data is drawn from interviews with 24 key informants, strategic plans, strategic compact documentation and HESPF reports. Quantitative data is obtained through a survey instrument completed by 92 respondents and analysis of strategic compacts. Oliver's strategic response framework (Oliver 1991) has been adapted to explore the strategic responses exhibited by HEIs in response to the policy goals envisaged in Ireland's new HESPF. Miles and Huberman's 'Data Analysis Interactive Model' (Miles et al. 2014) was chosen to underpin the qualitative data analysis and various statistical techniques (factor analysis, discriminant analysis, ANOVA) are used to explore the quantitative data.

## Chapter 4 Findings from Interviews and Strategic Compacts

### 4.1 Introduction

The new HESPF arose from a recommendation of the *National Strategy for Higher Education to 2030* (Department of Education & Skills 2011, p.22) that such a framework should be introduced for system governance. The HEA has statutory responsibility for the “effective governance and regulation of higher education institutions and the higher education system” and its remit includes the creation a “coherent system of diverse institutions with distinct missions, which is responsive to the social, cultural and economic development of Ireland and its people” (HEA 2016a). One of the key objectives of the new HESPF is to hold the higher education system, and individual HEIs, accountable for their role in the delivery of national priorities – economic renewal, social cohesion, public sector reform, and restoration of Ireland’s international reputation (HEA 2014b, pp.118-119). In this regard, the design of the system is intended to “allow HEIs to identify their strategic niche and mission” and how this relates to the national priorities (*ibid*, p.118). This is achieved through a process of strategic dialogue, and agreement on a compact with the HEA, against which performance would be evaluated and funding allocated. The HEA is placing a significant emphasis on benchmarking as an accountability mechanism in the new framework, with a view towards assurance and verification of performance, and to identify areas for improvement. It also enables HEIs to define their profile and niche within the system (HEA 2013d; HEA 2015d; HEA 2016e), and acts as an evidence base for the HEA to monitor system diversity and inform policy development (HEA 2013d). The “framework for change” also envisaged a “smaller number of institutions and a greater level of collaboration across the system” (Department of Education & Skills 2011, p.97). This was to be incentivised through a funding model that would “encourage the development of regional clusters and institutional consolidation” (Department of Education & Skills 2011, p.97). Seven high level objectives were defined, for the period 2014-16, to reflect government policy on higher education and the HEA was tasked with developing high level system indicators and to steer the system towards their achievement. Apart from the agenda for restructuring the system (institutional consolidation and regional clusters), each of the other six system objectives is consistent with sound governance principles and the well-established triple mission of higher education – Teaching and Learning, Research and Innovation, and Engagement (Boyer 1990; Clark 1998; de Jager 2011; Denman 2005) – and the interaction between these, in what the EU refers to as the Knowledge Triangle. One would therefore expect this design principle to facilitate alignment of institutional strategic compacts with the new framework, with funding matters and restructuring of the system generating the greatest potential for negative discourse.

However, while the new HESPF allows HEIs to propose their own objectives, the HEA retains the right “to steer the institution closer to its agreed mission and profile” (UCC 2014a, p.5), and to “use the full performance funding scale (withholding up to 10%) as a means to drive performance and accountability across the system” (HEA 2016h, p.4). This gives the HEA a strong negotiating position with respect to the strategic dialogue process, as is evidenced from the minutes of the strategic dialogue meetings with the HEA.

Institutions are expected to have regard to [HEA] feedback and to demonstrate that they have incorporated it into their processes for next year’s cycle.

(HEA 2015l, p.2)

It could be argued that such feedback provides clarity in relation to the expectations on individual HEIs or that it impinges on their autonomy while the threat of a financial penalty adds to the funding instability within the system, with a knock-on effect on capacity to plan strategically and reach performance targets. In cycle 2 (2015), the HEA considered a “2% performance funding adjustment” appropriate, but, going forward it plans to “use the full performance funding scale (withholding up to 10%) as a means to drive performance and accountability across the system” (HEA 2016h, p.4). These tensions will be explored under the antecedent factors ‘Control’ and ‘Context’ for each HEI.

The strategic dialogue process is also subject to a compliance process that covers “statutory quality assurance processes”, “code of governance”, “financial outturns”, “employment control framework”, and “data returns to the HEA” (UCC 2014a, p.47). While these are all valid components of an accountability framework they signal a process of strict oversight and regulation that are now strongly linked with the strategic compact negotiations, and thus could be expected to have a strong influence on compliance.

The sections that follow explore the typology of strategic responses to the high level system objectives using Oliver’s strategic response framework, as adapted for this study (Oliver 1991). Each HEI will be considered in turn in sections 4.2 through 4.6. The level of compliance with or negotiated responses to the national policy objectives is considered in the context of their social legitimacy or efficiency (Cause factor); congruence with organisational objectives and impact on autonomy or self-control (Content factor); organisational capacity or resources to meet the policy expectations (Control factor); varied stakeholder requirements and level of dependency (Constituents factor); and the level of uncertainty in the operating environment and its impact on the organisation (Context factor) which is woven through discussion of the other factors. No evidence of outright resistance was encountered when mapping the data onto the strategic response framework, hence its non-inclusion in the discussion that follows.

## 4.2 Findings & Analysis UCC Using the Strategic Response Framework

### 4.2.1 HEI Introduction - University College Cork (UCC)

UCC was established as the University of Munster in 1845 and it describes itself as the “comprehensive globally-oriented research-led university of the south of Ireland” with an “outstanding record of internationally recognised research” (UCC 2013b, p.5). It offers programmes across the Arts, Humanities, Social Sciences, Business, Law, Engineering, Architecture, Science, Food Science, Medicine, Dentistry, Pharmacy, Nursing and Clinical Therapies and has a full-time student enrolment of circa 18,000 students, of which 22% are postgraduate and 12% are international (*ibid*, p.7, p.9). Over the period of its strategic plan, 2013-2017 (UCC 2013b), its main projections for growth in enrolment are in postgraduate studies (+20%) and international students (+30%). Its strategic responses to the new HESPF are considered in the sections that follow using Oliver’s strategic response framework, as adapted for this study (Oliver 1991).

### 4.2.2 Cause: Legitimacy or Social Fitness (UCC) – Comply or Negotiate

In its strategic plan, *Sustaining Excellence 2013-2017* (UCC 2013b, p.3), UCC “fully” commits itself “to playing its role in leading and shaping” the agenda in the National Strategy for Higher Education (Department of Education & Skills 2011), working with government and all stakeholders, but stresses that its success is contingent on a sustainable funding model (*ibid*, p.3). UCC identifies several national and international policy instruments in research, education, jobs, internationalisation and access (Department of Education & Skills 2011; DJEI 2014b; European Commission 2012; European Commission 2014a; Government of Ireland 2010b; Government of Ireland 2012; Government of Ireland 2016a; HEA 2015k) which were amongst those that shaped its strategic plan and inform the new HESPF, and which are consistent with its vision to be “a world-class university connecting our region to the globe” (UCC 2013b, p.13). Each of these in its own way emphasises the centrality of HEIs to the national strategic direction, the level of interconnectedness of UCC with its environment, and its legitimacy as a high quality HEI as evidenced by its five Sunday Times University of the Year awards (UCC 2015b; UCC 2016).

Key to success for me [President Michael Murphy] is the uniqueness of our teaching development programme to ensure the highest teaching quality standards among academic staff. This is matched by a strong research ethos.

(UCC 2016)

The “huge consistency” (HEI101) between UCC’s strategic goals and the KSOs was attributed by interviewees to the “global expectations of higher education institutions” and the new HESPF was characterised as “just codifying them and not actually requiring any dramatic changes in institutional behaviours” (HEI105). It is, therefore, not surprising that the HEA and UCC agreed, through the strategic compact, on the appropriateness of the “mission, planned profile and targets....to the place of UCC within the system” (HEA 2015m, p.1). As a process, the new HESPF was described in UCC as aligning relatively seamlessly with the strategic planning, performance monitoring and KPI process that has existed for many years at the university (HEI101, HEI103, HEI104) – “it was totally consistent, it was easy, and we welcomed it” (HEI101). The “ongoing alignment of strategic dialogue and institutional strategic planning” was welcomed by the HEA (HEA 2016h, p.2).

Despite the level of harmonisation between UCC and the state on policy and process, UCC questioned the apparent lack of prioritisation of “resources, capital and revenue” in the strategic dialogue negotiations (HEA 2015m, p.1), an omission also strongly criticised throughout the interview process.

While the government’s system objectives are relevant they are lacking in realism in the absence of a funding solution.

(HEI105)

UCC acknowledged, through key interview informants and directly to the HEA, “the value of strategic dialogue and the validity of oversight and governance process” (HEA 2015m, p.1) but it requested a broadening of the strategic dialogue to include funding, governance and management, and relations between the HE sector and Government (HEA 2015m, p.1).

Two-way strategic dialogue is an important component of such a process but it would be best served by providing direct access to a higher education unit situated within the ministry rather than through a buffer agency.

(HEI105)

#### 4.2.3 Cause: Efficiency or Economic Fitness (UCC) – Comply or Negotiate

Since the onset of the financial crisis in 2008 there has been an increase of 25,000 places in higher education with a 20% reduction in funding per student and a 10% decrease in staffing (HEA 2014b, p.14). In a similar period, UCC experienced a decline of 1.7 in its staff: student ratio (HEA 2016e; UCC 2014b) and a “32% reduction in Government funding” while simultaneously eliminating recurrent deficits and bringing its capital deficit to “manageable levels” (UCC 2013b, p.10). Despite this financial hardship UCC’s co-operation with the national objectives for HE is evidenced through its many achievements during the period of its previous strategic plan, 2009-2012 (*ibid*, pp.7-10) and progress against the objectives in its strategic compact (HEA 2015i; HEA 2016h; HEA 2017i; HEA 2017j).

Notwithstanding reductions in exchequer funding, there is a significant degree of bartering evident by the HEA with UCC on “the degree of challenge and of realism inherent in the targets proposed” (UCC 2014a, p.5) in early cycles. UCC argued that its “targets are ambitious” (HEA 2015m, p.4) and that it was at maximum bandwidth given the resources at its disposal, pointing to the supporting evidence in its benchmarking processes (HEA 2015m). Despite these exchanges, the HEA’s ‘formal outcome’ commended UCC’s performance, but continued to press UCC on the “need to continually improve their offer” in the context of “maintaining their international standing”, and setting “higher risk” targets (HEA 2016h, p.4). This tension was not evident in the final cycle (HEA 2017i; HEA 2017j).

There was general agreement among interview informants that there is no financial incentive to support delivery of the key system objectives or to assist the university in stretching its targets (HEI101, HEI102, HEI103, HEI104, HEI105).

Lack of funding is limiting capacity to expand targets and is impacting on quality and international reputation.

(HEI105)

There was a strong consensus that performance funding should be incremental to what UCC are already getting, and that higher performing institutions should receive more funding (HEI101, HEI102, HEI103, HEI104, HEI105). Compliance and reputation are considered to drive co-operation with the new HESPF far more so than the funding element/penalty associated with it (HEI101, HEI102, HEI103, HEI104, HEI105). The lack of an appropriate HR toolkit was also identified as a key issue for the university (HEI101, HEI102, HEI103, HEI104, HEI105), as flagged in compact discussions with the HEA (HEA 2014b, pp.78-79; HEA 2015m).

The overall evidence from the strategic compact discussions and the interview informants strongly suggests that UCC recognises the importance of having a policy framework and a process for translating that policy into practical guidance to HEIs (HEI105). The new HESPF is regarded as having value in that regard and in focusing attention on self-reflection and goal achievement but in need of being elevated to a more mature strategic level (HEI102, HEI103, HEI104, HEI105). It is also regarded as heavy on bureaucratic burden (HEI102, HEI103), light on qualitative elements, and feedback is regarded as too general (HEI103, HEI104, HEI105).

One gets the sense sometimes, and this might be over critical, that it is going through a bureaucratic process rather than a qualitative process.

(HEI103)

#### 4.2.4 Constituents: Multiplicity of Constituent Demands (UCC) – Comply or Negotiate

Collaboration is one of the core values underpinning UCC’s strategic planning process and “the level of inter-connectedness between UCC and peer institutions is quite strong” (HEI101).

Inter-organisational relations are important and impact on decision making regionally and globally.

(HEI103)

Collaboration is viewed as an enabler and enhancer of the “overall contribution that UCC makes in Ireland and internationally, to the mutual benefit of all partners”, including other HEIs within the system (UCC 2013b, p.13).

This [strategic] plan was developed by an inclusive University-wide process through extensive consultation with students, staff, alumni, external agencies and other key stakeholders.

(UCC 2013b, p.12)

UCC regards “active community and regional engagement” as “central to its role as an engaged university” (UCC 2013b, p.16) and has introduced a comprehensive benchmarking process for all of its strategic goals which suggests a strong commitment to excellence in meeting the needs of its constituent stakeholders.

We put our institution forward for the pilot of UMultirank initially and said, yeah, we are going to do it because of its different aspects....it is a broader, more holistic view of how a university performs across all the dimensions.

(HEI101)

This commitment has been recognised through the achievement of 21 'A' grades from 30 measures in UMultirank in 2014 (UCC 2015b) with a similarly impressive performance from 2015 to 2017 (UCC 2017a), along with a further endorsement from the HEA in 2016.

UCC demonstrates a clear commitment to the student cohort and to quality in programme provision, research, teaching and learning, internationalisation, and engagement with community and enterprise.

(HEA 2016h, p.2)

34 of the 40 system High Level Indicators (HLIs) (Appendix M) are addressed in the objectives/KPIs within UCC's strategic compact (HEA 2014b, pp.121-127). The gaps relate to HLIs that are totally in the domain of the HEA, e.g. system level progress towards international benchmarks. Of the HLIs addressed by the HEA during the compact discussions, UCC was deemed to have met or exceeded its KPIs relating to circa 100% of its targets. UCC had adjusted a small number of targets and the HEA requested that 3 targets be adjusted upwards in light of performance and noted that one target seemed over ambitious, during cycle 2.

Laudable, relevant, lacking in realism and not incentivised would most appropriately portray the overall responses of interview informants at UCC to the national KPIs.

The government's KPIs are very relevant, ambitions could not be argued with, motivated in the right way....in the absence of a funding solution one could say that maybe realism is not there to the full extent.

(HEI101)

Gaps in funding support to the university were identified for most of the key system objectives and this has required "a step change in how we bring in non-exchequer funding" (HEI101).

Over the last few years, the resources that have been available to us have been shrinking at such a rate that we actually haven't been able to make a strategic decision, anyway.

(HEI102)

The university was described as "wanting to align with national objectives....to be the best it can be for the country and for itself" (HEI104), but the state is regarded as not fulfilling its side of the bargain.

There is an onus on the state to deliver on a strategy where they have ownership of tasks in the HESPF, particularly a national funding solution.

(HEI105)

#### 4.2.5 Constituents: Dependence on Institutional Constituents (UCC) – Comply or Negotiate

From a resource dependence perspective, the Irish government would appear to be losing its dominant funding stakeholder influence at UCC. UCC's income from state grants and fees is projected to drop from 47% to 40% over the period 2010 to 2016 (UCC 2014b; UCC 2014c). However, this funding "will be increasingly based on performance and outcomes" (UCC 2013b, p.12).

The university's finance strategic plan, corresponding to the period of the first strategic compact, targets an increase in international student revenue from €18m to €36m, non-exchequer research income from €18m to €25m and overall from €79m to €90m (UCC 2013a; UCC 2013b; UCC 2015a), philanthropic donations of €39.6m and a cost savings target of €2.75m (HEI104). Diversification of income streams also includes on-line, CPD, and post-graduate education and is expected to reduce the leverage of the state in decision making (HEI101, HEI102, HEI104), but compliance with the various accountability instruments will remain.

It's important, it's a good discipline.

(HEI104)

#### 4.2.6 Content: Consistency with Organisational Goals (UCC) – Comply or Negotiate

UCC's strategic plan highlights that its "165-year history is hallmarked by the ethos of excellence" (UCC 2013b, p.6) and it differentiates itself "nationally as the comprehensive, research-intensive, international top tier university in the South of Ireland, and internationally by its regional connectedness together with a global orientation in all of its activities" (UCC 2014a, p.6). It offers a broad range of disciplines and hosts "several of Ireland's elite research centres" (UCC 2014a, p.7). The university community is described as "inspired and empowered by its ambition to deliver national leadership and global impact" (UCC 2013b, p.6). This suggests that UCC has been primed by its history of achievement and experience to adopt a leadership role in shaping and delivering on the national agenda for higher education in Ireland.

We would be doing this stuff anyway....our motivation and everything that we do...is to raise the standard and the ability of the Irish sector, as a whole, to compete internationally...that is where the competition is.

(HEI101)

The HESPF is generally regarded as not causing UCC to change behaviours fundamentally, in any way, and has not impacted UCC's goals (HEI101, HEI103, HEI104, HEI105), but is considered to increase focus on goal attainment.

The HESPF brings more sharpness and accountability for all of us, internally, to deliver on things (HEI103). The annual touch base really does encourage moving forward on the goals set out for that period of time. It focuses attention.

(HEI102)

There are many examples from UCC's strategic compact documentation (HEA 2015n; UCC 2014a; UCC 2014c; UCC 2017b; UMultirank 2015) that illustrate (figure 4.1) a congruence between its strategic direction and ambition and the key system objectives for higher education for the period 2014-2016.

#### **Figure 4.1 Examples of Alignment of UCC's Strategic Goals with KSOs**

In the period to 2017, UCC plans to grow its overall headcount (excluding ACE courses) from 17,846 to 18,975, mainly through post graduate (+20%) and international (+30%) student enrolments. In addition, ACE numbers are expected to grow to 15% of all enrolments (UCC 2014a, p.7). The HEA agreed on the appropriateness of the planned profile (UCC 2014c) of UCC's position within the higher education system and its alignment with the national objectives for the higher education sector (UCC 2014a, p.1).

In relation to system objective 'Participation, Equal Access and Lifelong Learning' (HEA 2015n, pp.4-5), the HEA notes that: progress on retention is notable and above the national university average; UCC has shown leadership on Further Education pathways; has exceeded its targets for access student intake; and commends progress on achieving targets for lifelong learning.

The University has included high quality research-led teaching within a quality student experience at the heart of its mission. This is to be facilitated through integration of research with teaching and learning, improving its technology enhanced learning infrastructure, growth in the number of staff with teaching qualifications, active participation in national fora for teaching and learning, improving the student experience, and embedding quality improvements within its activities. All of this is to be enhanced through feedback from stakeholders (UCC 2014a, pp.24-27).

**Figure 4.1 (continued) Examples of Alignment of UCC’s Strategic Goals with KSOs**

On the research side, “the University boasts several of Ireland’s elite research centres including the Tyndall National Research Institute, the Alimentary Pharmabiotic Centre (renamed APC Microbiome Institute in 2015), both recognised as global leaders, the Environmental Research Institute and the emerging Beaufort Laboratory (UCC 2014a, p.7; UCC 2017b). The cycle 2 evaluation commended UCC on exceeding its targets in terms of number of industry partner contracts, diversification of funding sources, sustainability of the research function in UCC, and on the leadership shown on peer review of its self-evaluation of its research activities against international best practice (HEA 2015n). UCC researchers in SFI Centres secured 21 Horizon 2020 awards with a financial drawdown of €7.33 million and an overall success rate of 18%. This success rate is significantly higher than the average across all EU countries (12-14%) (UCC 2017b, p.15). In addition, the U-Multirank international benchmarking results further endorse UCC’s achievements, with a double-A rating for citations, an A-rating for external research income and post-doctoral positions, and B ratings on other publication indices (UMultirank 2015), having achieved straight As in the 2014 ranking.

UCC is targeting an “international leadership position as an engaged university through engagement with employers and enterprise, community engagement and corporate social responsibility” (UCC 2014a, p.36). It plans to diffuse entrepreneurship education university-wide, contributing to job creation and strengthening its key role as a catalyst for attracting foreign direct investment to Ireland. Examples of initiatives/strategies include the UCC Innovation Platform, development of the Irish Maritime and Energy Resource Cluster, establishment of a single integrated Academic Healthcare Centre, development of the Ignite Graduate Business Innovation Centre, (UCC 2014a, pp.35-37). The HEA commended UCC for this dimension of its work, in many cases exceeding, or even extending, its targets (HEA 2015n).

The university plan to deliver on the key initiatives of its internationalisation strategy by strengthening the global UCC alumni network, exploiting further opportunities for the overseas delivery of its programmes and by increasing its international student cohort to 17%, a very ambitious target (UCC 2014a, p.9). New partnerships established via MoU with high calibre (985 or 211) Chinese institutions: Zhejiang University, Renmin University, Beijing University of Technology (BJUT), China University of Finance and Technology (BJTU), Ocean University (OU), South China Normal University (SCNU), Jinan University (JNU). South West University of Finance and Economics (SWUFE) (UCC 2017b, p.29).

However, it could be argued that the national agenda for rationalisation and collaboration has been cautiously received by UCC. While acknowledging the need for “rationalised provision of higher education programmes across the sector”, it argues that it has to be “on the basis of clear criteria and agreed standards” (UCC 2014a, p.45). It further emphasises that “UCC’s strategy, and the policy of the Governing Body of UCC, is to partner with universities of similar vision and to partner with other Irish HEIs where there are complementarities and synergies that can lead to enhanced strengths and efficiencies” (UCC 2014a, p.12). It highlights that

“alliances with international universities of similar vision will play as important a role in meeting Irish higher education needs as regional clusters”, and that such alliances are “also essential to the economic, social and cultural development of the region” (*ibid*, p.12). Global alliances were referred to by interviewees as occupying a far more central role in its conscientiousness (HEI101, HEI103, HEI105).

We are actually working on a global scale. So, what happens nationally in the debate is only part of our day-to-day activity....Our major partners are not the ones in the country.

(HEI102)

It further identifies risks associated with the priority of focus accorded to technological university designation by the IOTs within its cluster and its implications for NFQ levels 6 and 7 provision to meet industry needs in its region (UCC 2014a, p.12). Diversity was cited by interviewees as important in “bestowing stability” but it was highlighted that there is evidence of isomorphism in programme provision (HEI103). It was also argued that the rationalised model that the HEA aspires to through the regional cluster may not be what stakeholders view as important in the regional context – “making access to the university or higher education available to all” (HEI101). The cluster concept is generally considered not to be delivering on the programme rationalisation agenda (HEI104, HEI105) and was mostly viewed as adding no significant value beyond collaborations that pre-date the HESPF (HEI103, HEI105).

The HEA’s overall reflections on performance in cycles 2 and 3 were that UCC’s strategic aims were well aligned and progress towards achieving the targets agreed in the compact was strong across all domains, with many targets exceeded (HEA 2015n; HEA 2017j). The university’s strong performance was regarded by interviewees as fuelled by a very committed and innovative staff and a strongly held ambition to be Ireland’s leading university while retaining its position in the top 2% of universities worldwide.

What motivates most academics...it is a sense of pride, doing the best for their students, doing the best for their discipline, publications, public service, contribution to the old academy....if I could use that phrase.

(HEI103)

#### **4.2.7 Content: Discretionary Constraints Imposed on the Organisation (UCC) – Comply or Negotiate**

The only constraint encountered during the fieldwork relates to the concept of the cluster.

The difficulty for us is that there is a certain consumption of time associated with the cluster....with senior people....and there is a financial penalty for not adhering to central bureaucracy’s objectives.

(HEI105)

Yet, there is little support for the concept of the cluster despite the level of emphasis it is receiving from the HEA (HEI105). In addition, the governance arrangements agreed by the Southern cluster reserve the right of individual governing bodies to veto or approve cluster decisions that impact on its operation (UCC 2014a, p.13), creating the potential for disagreement on cluster objectives. One can also detect a significant concern from UCC on the dilution of the “distinctive identity and role” of a university arising from the possibility of adding two technological universities to its region (UCC 2013b, p.13). Despite the concerns around these matters UCC continues to co-operate with cluster objectives, though it could be argued, with significant reservations.

#### 4.2.8 Control: Legal Coercion or Enforcement (UCC) – Comply or Negotiate

Cycle 1 of the strategic dialogue process was acknowledged as a developmental phase by the HEA, but cycle 2 would “have regard to the agreed outcomes of the [cycle 1] dialogue process”, including any feedback from the HEA, in evaluating its performance in the following year (HEA 2014f, p.1). UCC was awarded full “performance funding” of €449,000 (UCC 2014a, p.48) and was placed in category 1 in 2015, 2016 and 2017 with all funding released (HEA 2016h).

The strategic dialogue process highlighted the capacities that UCC possesses to demonstrate “objective verification of performance” (UCC 2014a, p.52). These strengths were further highlighted during the interview process.

We have that supporting infrastructure in place.... we have been at strategic planning and performance monitoring and KPI targets and all that for some time (HEI101). Apart from funding issues, UCC has the capacity to deliver on the national objectives (HEI104).

This infrastructure supports a strategic plan that revolves around five key goals, eight leading actions and 22 key projects (UCC 2013b) and “represents a targeting in the context of resources available” (HEA 2015m, p.4) but it raised concerns around “the overall fragility of the present performance” due to “increased workload....and the continual reductions in public funding since 2009” (HEA 2017i, p.1).

We have been building, we have a good sense of what our priorities are.

(HEI101)

The university plan, in turn, is supported by ten strategic plans from its colleges and administrative units. In essence, the diffusion of the concept of performance management across the university predates the adoption of the new HESPF at national level. UCC’s commitment to self-reflection and integration of findings with its quality assurance processes

and strategic planning is evidenced throughout its strategic compact, for example Institutional Review 2013 (QQI 2013), integration of strategic planning and quality assurance (UCC 2014a, pp.21-22), self-evaluation of its research activities – “115 international experts across 15 panels were engaged” (HEA 2015m, p.2). The HEA has made provision for re-formulation of objectives, in light of such processes, “to incentivise continuous improvement” and to reflect significant environmental changes (HEA 2015l, p.2). However, any major shift in strategic direction is subject to negotiation with the HEA, under the terms of the compacts. While there was some adjustment of targets by UCC during the 3-year compact cycle, none of these could be regarded as a major shift in emphasis.

There was consensus among interviewees that compliance and reputational issues are considered far more important than the funding at risk in co-operating with the new HESPF, as reflected by one contribution, “we will do this, we will report, we think it’s important that we’re accountable, absolutely” (HEI103). Overall, the new HESPF is regarded as steering light though somewhat burdensome in terms of reporting requirements.

There is a bit of overkill, I would say, given the amount of funding we are getting....The oversight is a bit of a burden....we don’t mind doing it but it demonstrates a lack of trust.

(HEI104)

However, the process was regarded as carrying a significant risk of incomplete self-disclosure of performance related issues due to the potential penalties, financial and reputational, associated with the new process (HEI105). It was strongly emphasised, however, that this was not the practice in UCC.

Whether it is for the external reporting on the compact or internally reporting on our own performance annually on our strategic plan....we actually have to have the evidence that we have achieved what we set out to achieve, it has to be evidenced....otherwise we won’t be reporting performance, we have a mechanism around that.

(HEI101)

#### **4.2.9 Control: Voluntary Diffusion of Norms (UCC) – Comply or Negotiate**

The level of alignment between the key system objectives and the global expectations of HEIs, when taken alongside the mature performance management process at UCC, simplifies diffusion of the HESPF through the organisation. To a large extent, the new HESPF process is consistent with the strategic planning and performance management processes that are integral to the way that UCC conducts its business.

It's built into the way we do things for the last ten years....there was enthusiasm for getting things included in the strategic compact....the new system is multi-dimensional across the various headings and that is welcome.

(HEI101)

#### 4.2.10 Summary (UCC)

**Cause:** The key drivers for the higher education system in Ireland are articulated through the key system objectives encapsulated in the new HESPF. These drivers are consistent with global expectations of HEIs and are determined by international trends and public policy which are enunciated in different ways and confer a high level of social legitimacy on the system objectives. UCC's strategic plan is shaped by these policies and trends which are interpreted in a manner that give effect to its vision "to be a world-class university connecting its region to the globe" (UCC 2013b, p.13). UCC's self-portrait paints a picture of an engaged university with high levels of inter-connectivity with its environment (UCC 2013b, pp.9-10). Compliance and legitimacy at this level is offset somewhat by the absence of supporting funding for the process and the absence of a sustainable funding model for the system. It is argued by UCC that lack of funding is constraining development towards the national system objectives and that the process needs to be more developmentally oriented and raised to a more strategic level.

**Content:** There has been no displacement of UCC's goals arising from the new HESPF which is not unexpected given the congruence between its drivers and those of the system objectives enunciated under the new framework. However, it would appear that it is a reluctant participant in the Southern cluster and regards it as a constraint that is diverting resources from other potentially more productive endeavours. Global partnerships are regarded as having far greater impact on its activities to the benefit both of its region and nationally and this level of inter-connectedness is a key driving force behind the university's ambitions.

**Constituents:** UCC places a huge emphasis on the collaborative and inter-connected nature of its planning processes across a broad range of stakeholders, which has the student at its centre, and it has benchmarked its performance against national and international comparators to give a holistic view on university performance across all its dimensions. However, the national targets that form part of the benchmarking process in the new HESPF are regarded as laudable but lacking in realism in the absence of supporting funding. In order to support its own goals, and by extension the national agenda, UCC has set ambitious targets

for diversification of non-exchequer income sources thereby reducing its dependency on the state.

Control: While the HEA is attempting to drive the new HESPF through funding, otherwise regarded as the avoidance of a penalty by UCC, it is not the primary motivator of co-operation with the process at the university. Reputation and compliance issues are considered far more important and these, in a way, are cushioned by the level of alignment between the key system objectives and the global expectations of HEIs, facilitating their diffusion through the organisation.

Context: The absence of a sustainable funding model and supporting infrastructure are key concerns for the university as it faces the challenge of maintaining and enhancing quality in the face of a demographic bubble and increasing global competition for talent. The university is “inspired....to deliver national leadership” (UCC 2013b, p.6) but is critical of the lack of prioritisation of resources, capital and revenue in the strategic dialogue process.

### 4.3 Findings & Analysis CIT Using the Strategic Response Framework

#### 4.3.1 HEI Introduction – Cork Institute of Technology (CIT)

CIT describes itself as “a leading higher education institution based in Cork City” (CIT 2012, p.3). It offers programmes of study in full-time and part-time mode, up to NFQ level 10, in Business, Humanities, Engineering, Science, Information Technology and Art & Design (Crawford College), Music (Cork School of Music), Maritime Studies (National Maritime College of Ireland) (*ibid*, p.3). It enjoys a student population of *circa* 10,000, 93% at undergraduate and 7% at post-graduate level (HEA 2016e, p.79), and hosts a “number of vibrant and successful research, innovation, knowledge exchange and enterprise support centres” which include the Rubicon business incubation centre, Genesis enterprise support programme and the CIT Extended Campus (CIT 2012, p.3). It has established four Thematic Research Areas (TRAs) in Information and Communications Technologies; Life Sciences and Wellbeing; Photonics; and Maritime, Energy and Sustainable Environment (CIT 2014d, p.23).

One of CIT’s major goals, in the period of its strategic plan 2012-2016, is to “become a major campus of a newly designated Technological University” (CIT 2012, p.11). In this period, it also plans to grow research and innovation output by 20% (*ibid*, p.10), and achieve an increase of 15 - 20% in WTE student enrolments, including a 50% increase in lifelong learners (*ibid*, p.11) and a 100% increase in international students (*ibid*, p.12).

#### 4.3.2 Cause: Legitimacy or Social Fitness (CIT) – Comply or Negotiate

There was a consensus among interviewees at CIT that the KSOs under the HESPF significantly overlap with CIT’s strategic priorities for the period 2012-2016 as set out in its strategic plan (CIT 2012) and reflected in its 2013/14 annual report.

CIT’s strategic goals are aligned with broader national goals including those outlined in the National Strategy for Higher Education to 2030.

(CIT 2014a, p.7)

CIT highlights its “full commitment to the objective” of contributing to Ireland’s human capital needs, which it regards as “exactly in line with their mission as an institute” (HEA 2014a, p.1).

To provide student-centred, career-focused education and research for the personal, professional and intellectual development of the student and for the benefit of the broader society in the region and beyond.

(CIT 2012, p.4)

Each of its four TRAs are “focused on delivering research, innovation and solutions for enterprises that drive economic output and growth”, in line with government strategy (CIT 2014d, p.23), are regionally relevant, and reflect CIT’s traditional strengths in Engineering and

Science. CIT has sought to benchmark its development against HEIs that are connected to their regions and have an “innovative, career-focused and enterprise facing profile” with a strong commitment to teaching and learning that has an “international focus” (CIT 2015, pp.3-4). An independent benchmarking exercise by the Sunday Times resulted in the accolade of Institute of Technology of the Year in 2007 and 2010.

Despite significant funding challenges, CIT’s commitment to the national strategy is evident in its dialogue with the HEA (HEA 2015b, p.1), its projected growth in enrolments (CIT 2014b; CIT 2014c), and its ambition to maintain stretch targets despite missing some cycle 1 targets, mainly due to matters in the external environment. It is therefore not surprising that the HEA and CIT agreed that the “mission, planned profile and targets....are consistent with the objectives set for the higher education system and are appropriate to Institute” (CIT 2014d, p.40).

Interview informants at CIT were generally supportive of the new framework and described it as consistent with its efforts to promote a performance management system within the organisation (HEI201, HEI202, HEI203, HEI205).

The HESPF has aided planning, acting as an external stimulus to promote adoption of the new approach.

(HEI201)

In the initial stages of the new HESPF process there was a tendency, based on expectation and ambition, to push CIT’s profile towards the perimeter of the HEA sectoral profiles, through its compact targets (HEI202). However, resource constraints have necessitated a re-prioritisation with some targets being adjusted accordingly (HEI202, HEI203). In addition, delay in TU legislation was deemed to be impeding progress on this major goal despite enabling funding from the HEA (HEI201, HEI202, HEI203). Overall, it was suggested that absence of funding for KSOs other than the reform/restructuring agenda, research & innovation and human capital development signals a low priority nationally (HEI201, HEI202, HEI203, HEI204).

It was acknowledged that from the very outset, “the HEA was very adherent to the concept of strategic dialogue in the sense that they never tried to shove targets down our throat, they allowed us to set our own targets....while challenging them in some cases” (HEI201), and CIT doesn’t feel constrained to slavishly follow the national KSOs/HLIs (HEI201, HEI202). The process was also seen as positive in providing the HEA with “insight into the institutions that maybe heretofore they didn’t fully have” (HEI201), and in creating awareness around the KSOs despite a lack of direct impact (HEI202). Nonetheless, there was deemed to be “a disconnect between performance setting and capacity and planning” in the new HESPF (HEI202) and it

was described as providing little or no helpful feedback and not developmental in nature, with the main emphasis being on policing and compliance (HEI205).

#### 4.3.3 Cause: Efficiency or Economic Fitness (CIT) – Comply or Negotiate

Apart from the projected drop from 60% to 51% in state grants and fees between 2010 and 2016 (CIT 2014b; CIT 2014c), CIT highlights that it is saddled with legacy debt to the tune of €3.5m relating to contractual issues in its School of Music and national apprenticeship provision, which it cannot offload (HEA 2015b) and is critical of a lack of Government strategy in these areas (HEI202). This difficulty is acknowledged in a review of the financial health of the sector undertaken by the HEA.

The 'costliest' areas of provision include music, engineering and wider apprenticeship training and these are major drivers of the overall deficit position.

(HEA 2016c, p.6)

It is also facing significant challenges, relating to funding and capacity, in growing its fee paying international student base (CIT 2017; HEA 2015c, p.1) which in turn impacts on its non-exchequer funding sources.

A lot of our emphasis is on income generation which boils down to student numbers, including international.

(HEI202)

The challenges presented by funding have resulted in KPI adjustments and have compromised its "ability to strategise for the future" (HEI203).

We were initially very ambitious....so we overestimated our capacity to deliver on our targets and there has certainly been a rationalisation of those targets, partly of course because of the economic environment.

(HEI202).

Despite the financial challenges, CIT's support for the new HESPF is reflected in category 1 designation by the HEA in cycles 2 and 3. Evidence from the interviews strongly suggests that CIT is supportive of the concept of performance based funding (HEI201, HEI202, HEI205) but, as currently constructed, the HESPF is regarded as not positively incentivised (HEI202, HEI204, HEI205).

I feel that the process has been implemented but without any real teeth....it is going to be important for us to align strategically to the national objectives....I think that there will be funding in the future for good performance.

(HEI202)

There was general consensus among interviewees that performance funding should be additional to what HEIs are already receiving and should be an integral part of the process. Compliance and reputation drive co-operation with the new HESPF more so than the funding associated with same (HEI201, HEI202, HEI203, HEI205). Financially penalising institutions that do not have the scope to manoeuvre is considered to be just penalising students (HEI203). Such a system was considered to carry a substantial risk of incomplete disclosures by HEIs (not necessarily in CIT) due to reputational risks and competition within the sector (HEI203).

We can't openly discuss the impact of lack of funding on quality because of reputational issues and the consequential impact when we have close competitors.

(HEI203)

#### 4.3.4 Constituents: Multiplicity of Constituent Demands (CIT) – Comply or Negotiate

CIT has established a dedicated unit, CIT Extended Campus (CIT 2016a), as a gateway “to develop and support engagement as an institute-wide commitment, embracing education, research, innovation and enterprise support” (CIT 2014d, p.29). Its partnerships span “regional enterprises, public bodies and community groups in the context of regional social and economic development” (CIT 2014d, p.29) and the national KSOs/HLIs have not required any significant change in stakeholder engagement (HEI201).

Engagement with enterprise and the extension of the campus into the workplace (and the wider community) is a key defining characteristic of CIT.

(CIT 2012, p.5)

The HEA has “acknowledged the leadership demonstrated by CIT over recent years in advancing the engagement mission of higher education at both institutional and national level” (HEA 2014a, p.2; HEA 2017e). CIT has extended its strategic compact to include an objective specifically dedicated to the role of enterprise and community groups in graduate formation (HEA 2015c, p.2) and its Research and Innovation Strategy (CIT 2016b) also emphasises the interconnectedness between CIT and its environment.

Research at CIT involves external stakeholders that include not only enterprises and academia but also local government, health services, state agencies and representative bodies.

(CIT 2016b, p.8)

The benchmarking process, introduced by CIT in cycle 2, found that CIT is “particularly strong” in undergraduate and part-time provision, “regional profile”, and “compares favourably” on engagement and technology transfer but “falls behind” somewhat on postgraduate and

research activity but with “evidence under a number of indicators that CIT is on the right trajectory” (CIT 2015, pp.4-5).

Overall, CIT’s self-evaluation reports for cycles 2 and 3 noted that it had “made substantial progress in respect of the broad range of targets under the seven priority headings”, suggesting that the KSOs/HLIs set by the Irish government were appropriate to its operations (CIT 2015, p.3; CIT 2017). It classified “over 50%” (CIT 2015, p.3) of the agreed targets as met or exceeded and expressed confidence in its capacity to achieve the remaining targets, notwithstanding external factors (funding, industrial relations) that had impeded progress during cycle 2. The HEA noted CIT’s “very robust self-evaluation” and the “significant slippage” against targets for progression rates, level 9 enrolments, research projects with industry, and international students but acknowledged the ambition of CIT to eventually reach the 2016 targets while simultaneously requesting a review of targets achieved ahead of schedule (HEA 2015c, p.1). CIT continued to experience challenges in relation to mature student and some international targets in cycle 3 but was deemed to have met, exceeded or made substantial progress on *circa* 88% of its targets (CIT 2017; HEA 2017f).

An analysis by the author found that 33 of the 40 system HLIs are addressed in the objectives/KPIs within CIT’s strategic compact (Appendix M). The gaps in each case relate to HLIs that are mainly in the domain of the HEA. CIT was deemed by the HEA to have met/exceeded or made substantial progress on KPIs relating to 90% of its targets. CIT had adjusted a small number of targets in cycles 2 and 3 and subsequently achieved or made substantial progress on four targets that the HEA had considered over ambitious in cycle 2. The HEA pressed CIT to consider an upward adjustment of some targets in light of “notable achievements” (HEA 2017f, p.1) but CIT indicated that factors in the external environment, particularly funding, were constraining it (CIT 2015; CIT 2017; HEA 2015c; HEA 2017f).

The government’s system objectives are considered by interview informants to be relevant but the associated KPI targets are regarded as not meaningful in terms of incentivising behaviour due to funding constraints, staff cutbacks, and lack of incentives (HEI202, HEI203, HEI204, HEI205).

The current lack of penalty approach is subverting the whole idea of performance based funding, it needs additional money as an incentive.

(HEI201)

The lack of a borrowing framework was also raised as a significant issue in relation to addressing infrastructural deficits (HEI201, HEI202, HEI203, HEI204) along with a lack of flex in

teaching capacity, each of which is also considered to be outside the direct control of the HEA (HEI202).

#### 4.3.5 Constituents: Dependence on Institutional Constituents (CIT) – Comply or Negotiate

CIT is the “second most successful IOT in terms of research income, increasing from €9.5m in 2007/08 to €13.7m in 2014/15” but this is regarded as a “money in, money out activity” that does not generate surpluses for the institute (HEA 2016c, p.16). In addition, the percentage of international fee income at CIT had grown to *circa* 2% in 2014/15 compared to 2.9% for the sector, with some IOTs reaching 6% (*ibid*, pp.17-18). CIT has invested some additional resources in this area as part of its compact objectives but it is struggling to meet the expected yield. Despite the projected drop in state funding (from grants and fees) to 51%, its influence seems set to continue.

For the type of institution that we are, there aren't a huge number of funding sources. The state will continue to be the major payer. This gives the state leverage on decision making.

(HEI201)

#### 4.3.6 Content: Consistency with Organisational Goals (CIT) – Comply or Negotiate

With its student-centred mission, CIT regards the extension of the campus into the workplace and the communities it serves as a “key defining characteristic of CIT”, with research cast as “an essential core activity” that underpins teaching/learning and engagement, in an environment that is imbued with an ethos of access and opportunity for all (CIT 2012, p.5). CIT commits itself to

Work with government, policy makers and other stakeholders to develop our mission and role in order to deliver an effective national higher education system and the best possible return for the Irish economy and the broader society.

(CIT 2012, p.11)

These commitments to the student, industry and the community are in line with the national KSOs and are illustrated through some examples from its strategic compact and strategic plan (CIT 2012; CIT 2014d; CIT 2015; CIT 2016b; CIT 2017; HEA 2015c; HEA 2017f) in figure 4.2.

**Figure 4.2 Examples of Alignment of CIT's Strategic Goals with KSOs**

CIT is part of the DARE programme which is a supplementary admission scheme providing places on CIT programmes on reduced points for eligible school leavers with disabilities. CIT is continually building links and relationships with external advocacy groups, such as the Dyslexia Association of Ireland, DCD Ireland, AHEAD, ChildVision, NLN, Fresh Start, Cork Autism Assoc, Dyspraxia Association of Ireland, the Irish Guide Dogs, ASPECT (HEA 2015c, p.7).

An Institute-wide Strategic Student Engagement and Retention Initiative (CITSSERI) has been in place since September 2012. This initiative seeks to put in place a range of supports and activities across the various academic departments and student services units. It has been the subject of interest from the QQI, HEA and other IOTs (CIT 2015, p.14; CIT 2017).

Formal agreements are in place linking CIT with the Tyndall National Institute (with NIMBUS and CAPPA), the SFI-funded Alimentary Pharmabiotic Centre (with BioExplore) and in the maritime and ocean energy area linking UCC's new Beaufort Research Centre with the Halpin Research Centre at the NMCI. CIT is also partnered with UCC in the PRTU-5 funded Ed-4-Life and INSPIRE structured PhD programmes (CIT 2016b, p.8).

The CIT Extended Campus provides a dedicated agency to coordinate efforts internally and to facilitate external organisations in their interactions with CIT along with collating business intelligence on engagement to further inform local and national strategy. It was described as excelling in performance in cycle 3 (CIT 2014d, p.29; HEA 2017d).

CIT plans to become a major campus of a newly designated Technological University and to actively promote the development of a regional higher education cluster (CIT 2012, p.11; CIT 2017).

International student intake is projected to increase by 100% (although it is experiencing challenges (CIT 2017)) and CIT plans to play a leading role in the development of the European Graduate School (CIT 2012, p.12).

According to interview informants, the HESPF deflected CIT's attention from its own strategic plan but this did not result in goal displacement due to their congruence and the steering light approach attributed to the HESPF (HEI201, HEI202, HEI203, HEI204, HEI205). However, the HESPF is credited with an acceleration of planned improvements in the use of KPIs and institutional data to improve performance (HEI201, HEI202). The HESPF is also credited with accelerating planned changes in additional supports for retention and international recruitment (HEI201, HEI202, HEI203, HEI204).

Despite its overall co-operation with the new HESPF, cluster activities are not considered high priority at CIT and the current cluster configuration is regarded as problematic (HEI201, HEI202, HEI203, HEI204, HEI205). CIT has strong, productive partnerships with individual cluster members on specific projects and programmes and, in addition, regards discipline based clustering as more suitable for its Art & Design, Maritime, and Music disciplines (HEI201, HEI202, HEI203, HEI204, HEI205). The State was considered to be overemphasising the

rationalisation agenda associated with clusters (HEA 2014a), where a greater focus on benefits accruing was considered to be more appropriate (HEI205).

CIT was commended by the HEA for a coherent strategy, robustness of its self-evaluation report, meeting a substantial number of its targets and identifying action points relevant to other indicators. Overall, CIT was deemed to be a “well performing institution” (HEA 2015b, p.1) and was placed in the “category 1” performance level in cycles 2 and 3 (HEA 2015a, p.2; HEA 2017e).

#### **4.3.7 Content: Discretionary Constraints Imposed on the Organisation (CIT) – Comply or Negotiate**

Apart from concerns raised about the appropriateness of the cluster concept and the financial dependency on the HEA (discussed earlier), the HESPF was described as not encroaching on CIT’s autonomy and steering is regarded as light and at the appropriate level (HEI201, HEI202, HEI203, HEI204).

#### **4.3.8 Control: Legal Coercion or Enforcement (CIT) – Comply or Negotiate**

The HEA commended CIT on identification of risks and issues in a self-reflective process and acknowledged its performance through allocation of “performance funding of € 257,000” in 2014 (CIT 2014d, p.39) and “the release of performance funding in full” in relation to its 2015 and 2016 category 1 designation (HEA 2015a, p.2; HEA 2017e). Reputation and compliance were regarded by all interviewees as influencing co-operation with the new process much more so than the funding element at risk.

Compliance is a very important reputational issue.

(HEI202)

CIT emphasised its support for the new HESPF from the outset, highlighting that it was consistent with its efforts “to improve their ability to generate and use data to improve institutional performance” (HEA 2014a, p.1). However, the HEA expressed concern in cycle 1 about how “CIT set their level of ambition” and stated its desire “for all institutions to engage in more benchmarking and outcomes focus to their compacts” as a means to “provide further confidence as to the quality of the institutional strategy” (*ibid*, p.1). CIT argued that the objectives and targets in their compact were appropriate, “given the very difficult financial environment” (*ibid*, p.1). In cycle 2, the HEA welcomed the extensive benchmarking process that CIT had introduced, “as a means to demonstrate that the appropriate level of ambition is

being set” (HEA 2015a, p.2) and its intention to incorporate the strategic dialogue process into existing “strategic planning and risk management structures” (HEA 2016b, p.2). CIT received a commendation in cycle 3 for “the use of appropriate data to inform, support and develop strategic objectives” (HEA 2017e, p.1). It was acknowledged during interviews with key informants that aspects of the planning process that dealt with integration of executive units’ planning with overall institute KPIs (CIT 2012, p.13) required improvement and that some restructuring of CIT’s strategic management framework is planned to engage faculty more closely with the process (HEI202).

The key is to translate institutional metrics into operational metrics that are meaningful on the ground for each school, but it can only be by agreement.

(HEI202)

The debate on upward revision of targets in areas of traditional strength - research and innovation, enterprise and community engagement, flexible learners and non-standard access pathways - continued into cycles 2 (HEA 2015c, pp.28-29) and 3 (HEA 2017f, p.1), with the HEA also noting some slippage against targets where capacity had been increased, most significantly in progression rates and international students (HEA 2015c, p.1) but with good recovery in cycle 3 (HEA 2017e; HEA 2017f). Evidence from the interviews (in cycle 3) points to success in student retention in return for the investment of resources, while acknowledging that increasing international enrolments was proving challenging. Interestingly, the HEA pushed CIT on the perceived lack of ambition in relation to “increasing staff with pedagogical qualifications”, having dropped it as a HLI from the HESPF (HEA 2015b, p.2).

The number of data related queries raised by the HEA during cycle 2 raises some questions as to the extent to which CIT’s existing data capacity and related systems are robust enough to support a metric driven performance management approach (HEA 2015c). This deficit was acknowledged by interviewees and a strengthening of institutional research capacity is planned (HEI201, HEI202). Resources and structures have also been enhanced to progress the final phase of the consolidation/merger project and TU designation, through targeted funding from the HEA.

Overall, CIT highlights its ambition to “deliver in the national interest” while also being cognisant that “staff are over-stretched”, leading to a tempering of its ambition in some areas (HEA 2015b, p.3).

In some instances.....maintaining performance with diminished resources is a successful outcome.

(HEA 2017e, p.2)

#### 4.3.9 Control: Voluntary Diffusion of Norms (CIT) – Comply or Negotiate

The new HESPF has accelerated introduction of planned metric driven performance management across institutional executive units and it is expected that diffusion of the new HESPF process throughout the organisation will increase significantly arising from adjustments in the strategic management framework and increased investment in the institutional research function (HEI201, HEI202).

#### 4.3.10 Summary (CIT)

Cause: The drivers underpinning CIT's strategic plan are consistent with national KSOs and emphasise a high level of engagement and support for industries and communities in its region underpinned by an equity of access approach to the provision of work ready graduates, civic engagement, and applied research and technology transfer initiatives to the benefit of both industry and society. It is strongly supportive of the concept of the new HESPF but the level of ambition it had set for itself at the outset has been reduced over the three cycles due to the resource constraints. The institute's capacity to act strategically over the period of the compact has been significantly impacted by a lack of funding with the exception of the TU project which is the subject of additional funding from the HEA. However, the HESPF process as currently implemented is regarded as not positively incentivised and toothless but with the potential to have a significant impact if underpinned by additional funding for performance.

Content: The HESPF and strategic compact are regarded as not having overly impacted on CIT's goals despite having deflected attention from elements of its own strategic plan. The HESPF is also considered not to have encroached on CIT's autonomy and steering is regarded as light and at the appropriate level. Notwithstanding this, the new HESPF is credited with an acceleration in the planned improvements in the use of KPIs to improve performance and in additional supports for retention and international recruitment.

Constituents: One of the defining characteristics of CIT is its engagement with enterprise and the community through programme provision, research and innovation involving partnerships with enterprise, public bodies and community groups. It is positively disposed towards the use of KPIs and benchmarking processes in building and demonstrating the reputation of the institute across this broad range of stakeholder groups. It committed to ambitious targets across this multiplicity of stakeholders in its compact with the HEA but this has required modification and prioritisation due to resource constraints as the cycles progressed. The government's system objectives are considered relevant but are regarded as not meaningful in terms of incentivising behaviour because of lack of funding incentives and other constraints

relating to staffing and infrastructural deficits. While CIT was the second highest performer in the sector in terms of research income it is struggling to make major gains from international income which gives the state continued leverage on decision making at CIT.

Control: CIT achieved category 1 designation for its performance in cycles 2 and 3 of the strategic compact process. Reputation and compliance are regarded as driving conformance with the new process far more so than the potential financial penalty. There was some debate between the HEA and CIT regarding the level of ambition in some target setting, in what would appear to be a process of constructive dialogue with CIT highlighting the impact of the difficult related financial environment. Nonetheless CIT was placed under some pressure by the HEA to increase some targets in areas of traditional strength. CIT has invested resources in further developing its strategic planning, risk management and institutional research functions, and plans to restructure its strategic management framework to more closely integrate academic units with the new HESPF process. The strengths that CIT had built over the years around external engagement and research were readily acknowledged by the HEA. Targeted additional funding has been provided by the HEA to advance the final phase of the consolidation/merger project with ITT and the related TU designation.

Context: The key environmental factors raised by CIT relate to infrastructural deficits and the lack of a borrowing framework to address these, the lack of a Government strategy to address staffing issues in areas of fluctuating demand, a sustainable funding model, delays in the legislative process for technological university designation and national negotiations on staff contracts, with an important footnote that these are also outside of the direct control of the HEA. These challenges are regarded as significantly impacting on its scope to meet the needs of its stakeholders and respond to the national agenda. Nonetheless, its interrelationship with its environment is well defined and is seen as a powerful force for the institute in responding to the challenges that it faces.

## **4.4 Findings & Analysis WIT Using the Strategic Response Framework**

### **4.4.1 HEI Introduction – Waterford Institute of Technology (WIT)**

WIT describes itself as a “university level organisation and one of the largest institutes of technology in Ireland” (WIT 2014b, p.3). It enrolls over 10,000 students, has circa 1,000 staff, and “offers tuition and research programmes in various areas from Higher Certificate to Degree to PhD....covering the Humanities, Health and Nursing, Science and Informatics, Engineering and Architecture, Business and Education” (WIT 2015b, p.7). It boasts a considerable research profile and is home to three research centres with strong international reputations which are aligned with major industries in the South East: Telecommunication Software Systems Group (TSSG) which is “ranked as one of the top 10 research organisations shaping ‘Future Internet’ research by the European Commission”; Pharmaceutical and Molecular Biotechnology Research Centre (PMBRC) and the Eco-Innovation Research Centre (EIRC) (WIT 2015b, pp.15-16).

Its strategic plan is structured to guide WIT through a “period that is likely to be the most challenging in the life of the organisation” as it seeks “designation as a Technological University....in partnership with IT Carlow” (WIT 2014b, p.5). In the period of the compact, 2014-2016, WIT is predicting minor growth in enrolments, with particular emphasis on post-graduate and international students, and an expansion of an already strong research portfolio in terms of funding and blending emerging areas with existing strengths (WIT 2014c; WIT 2014d; WIT 2015a).

### **4.4.2 Cause: Legitimacy or Social Fitness (WIT) – Comply or Negotiate**

The overriding ambition of WIT is the “establishment of a Technological University for the South East” (WIT 2014a, p.6) and meeting the expected criteria for designation as same. These criteria map neatly onto the KSOs for higher education envisaged under the new HESPF (HEA 2012, pp.14-17) and “WIT recognises the merits of the mission-based compact and its objectives” (WIT 2017b, p.1). In addition, WIT’s vision “embraces access and equality of opportunity” (WIT 2014a, p.6), consistent with government policy (HEA 2015k). Its research and knowledge transfer strategy is aligned “with the National Research Prioritisation Exercise and Horizon 2020” (WIT 2014a, p.23) and regional needs (HEI304), and its international strategy (WIT 2014a, p.32) is consistent with the national HE internationalisation strategy (Department of Education & Skills 2016b; Government of Ireland 2010b).

WIT confirmed to the HEA during the strategic dialogue negotiations that they “have sought to align the strategy with national strategy and the compact format and have included a range of

KPIs in this regard” (HEA 2014g, p.1). However, its regional emphasis was strongly highlighted during interviews.

WIT very much sees itself as being of the region and delivering to the region, and its goals are, in the main, driven by its stakeholders, its sense of identity and its own priorities, based on its core skills sets.

(HEI304)

It would appear that the HEA found a congruence between both emphases and acknowledged that “the mission, planned profile and targets, as set out in....[the] Compact, are consistent with the objectives set for the higher education system and are appropriate to Institute” (WIT 2014a, p.39).

The key system objectives (KSOs) outlined in the HESPF were described by some interview informants at WIT as open to interpretation as envisaged by the HEA and as such do not inhibit institutional planning (HEI301, HEI302). However, the lack of sufficiently well articulated priorities and defined roles for each HEI in the new HESPF was seen by others as a big flaw in a process that expects individual HEIs to focus on their contributions to the national strategy (HEI304).

A risk was identified with the extent to which strategic plans or strategic dialogue articulates what people want to hear as opposed to what actually happens, and the extent to which compacts are strategic documents as intended by the HEA or as funding acquisition responses designed by HEIs (HEI302, HEI301). The 3-tier ranking system is regarded as severely flawed in this regard and running contrary to the developmental focus envisaged under the HESPF, introducing competition instead of co-operation, and leading to behaviours that are risk averse and limited to achievement or maintenance of tier-1 status (HEI304).

The systemisation of institutions, strategic planning capability building, establishing comparators, measuring and declaring performance are, however, regarded as positive aspects of the process and it has proven useful in bringing some of WIT’s existing KPIs more sharply into focus (HEI301, HEI302, HEI303, HEI304). The compact process was also deemed to have value as a forum for raising issues and in the learnings gained regarding the challenges across the sector from such an institutional approach (HEI301), but feedback on performance is regarded as not very rich or impactful (HEI303). Lack of new enabling investment is considered a huge gap in a process that is regarded as having great potential if matched by flexibility in terms of resourcing, and strengthened through collation of learnings from the first three cycles and application of international best practice (HEI301, HEI303, HEI304).

#### 4.4.3 Cause: Efficiency or Economic Fitness (WIT) – Comply or Negotiate

WIT has been subject to similar funding cuts from the exchequer as other HEIs in Ireland. It has been categorised by the HEA as one of five IOTs that are financially vulnerable (HEA 2016c, p.26) and it has agreed a business plan with the HEA to address this problem (HEI304). One of WIT's key strategic priorities is to "balance strategy and resources" through deployment of resources towards activities that have the potential for "efficient economic and social outcomes for the region and the Institute's stakeholders" (WIT 2014b, p.40). It is planning modest increases from international student fees and diversification of its research funding sources, by securing additional industry and EU funding in order to support an already vibrant research base (WIT 2015b, p.29). It surpassed its 4-year target to 2015/16 by 25% (WIT 2017a, p.14).

WIT remains the most successful IOT in terms of research income....in 2014/15, their research grant income was €18.7m.

(HEA 2016c, p.16)

Interviewees highlighted limitations imposed on WIT arising from lack of investment in potential growth areas for the economy (HEI301, HEI303), non-funding of research in the IOT sector (HEI301, HEI304), and lack of enabling funding for international student recruitment (HEI301, HEI303). At present, the funding acquisition element was highlighted as one of the main reasons for engagement in and compliance with the new HESPF process and there was no argument presented at WIT with the appropriateness of bringing institutions that are funded by the state to account for its investment (HEI301).

WIT believes in the merits of the mission based compact and its objectives [but]....lack of resources is even impacting on the institution's ability to comply with all of the requirements of this process.

(WIT 2015b, p.1)

#### 4.4.4 Constituents: Multiplicity of Constituent Demands (WIT) – Comply or Negotiate

The relationship of the Institute to the South East region is a defining characteristic of WIT.

(WIT 2014b, p.25)

Through a process of "continuous enhancement" (WIT 2014a, p.6), WIT plans to "renew" its curriculum "in the light of regional engagement" (*ibid*, p.18), to continue to position itself "at the centre of a knowledge, research and innovation ecosystem", and to be a focal point for "social entrepreneurship and civic renewal within the region" (*ibid*, p.7). These ambitions are reflective of the four major themes and associated KPIs of its strategic plan (WIT 2014b, p.3).

For objectives to be meaningful, they must be accepted by the community that is charged with their achievement and they must be adopted by the units and individuals that deliver and engage the activities of the Institute.

(WIT 2014b, p.42)

A review of the strategic priorities and associated performance indicators in its strategic plan suggests that much of the richness of its activities are lost in condensing them into a very small number of KPIs (WIT 2014b, pp.37-40), reflecting a serious concern by WIT that the narrowness of the compact process carries significant risks of limiting the definition, profile, and development of the institution (WIT 2015b, p.1).

The identification of KPIs is not an exact science and proxies are sometimes used as a result with reporting, measurement and available information sources all key considerations.

(WIT 2014b, p.36)

The tension between the imperfect state of metrics/KPIs as representative of the institute's activities continued to bedevil the evaluation team. There are many instances where the evaluators simply could not adjudicate on whether targets were met or not (HEA 2015q; HEA 2017l). However, the HEA deemed WIT to have demonstrated good progress in cycles 2 and, 3 and commended it for exceeding many targets in 2015 and 2016 (HEA 2015o; HEA 2017l). It highlighted, in particular, its capacity for benchmarking and self-reflection, the appropriateness of its internal QA processes, and the focus on benchmarking teaching and learning (*ibid*). It classified 18 of the 19 agreed targets as being met or substantially progressed and it was asked to consider stretching some targets in research, international and lifelong learning in light of performance (HEA 2015q; HEA 2017l). WIT, in turn, proposed revisions to six KPIs mainly associated with research, engagement and access (WIT 2015a; WIT 2015b; WIT 2017a). These reflected both learning from the process and some stretch in ambition.

An analysis by the author found that 34 of the 40 system HLIs are addressed in the objectives/KPIs within WIT's strategic compact (Appendix M). The gaps in each case relate to HLIs that are mainly in the domain of the HEA. WIT was deemed by the HEA to have met/exceeded or made substantial progress on KPIs relating to *circa* 100% of its targets.

Despite its performance, WIT regards itself as not appropriately funded to deliver the quality of service it desires to its key stakeholder groups - students, industry and the regional community (HEI301, HEI303).

WIT is constrained in its ability to grow its student numbers due to a lack of physical, fiscal and human resources. Despite these limitations, WIT will continue to serve its region to the best of its ability (HEA 2015q, p.4)....The decline in the resources base is the single greatest issue facing the organisation (WIT 2015b, p.1).

The national KPIs, as expressions of quality, are considered to pose a risk of creating homogeneity rather than diversity as HEIs may be tempted to manage to the metrics, resulting in an oversimplification of what the strategic processes might be within the broader context of what an institution is trying to do (HEI302, HEI303). Arguably, the biggest criticism emanating from the interviews at WIT relates to the absence of an underpinning educational philosophy to give a greater meaning to the “brain dump” of national priorities from different sources that populate the new HESPF (HEI304).

Engagement with institutes to help them identify how best they can contribute to Ireland’s objective of being a world leader in knowledge was deemed to place a responsibility on the HEA to create an environment where institutes are willing and supported to move from position A to position B through openly reflecting on their strengths and weaknesses (HEI304). However, the openness and honesty required to achieve this without fear of punishment, public humiliation or risking reputational damage are regarded as absent (HEI304).

#### **4.4.5 Constituents: Dependence on Institutional Constituents (WIT) – Comply or Negotiate**

State funding to the sector has declined from 76% to 56% between 2010 and 2014 and is projected to drop to 51% in 2016 (HEA 2014b, p.27), in line with WIT’s projections. Despite its projected increase in research grants and other income from 28% to 31% between 2010 and 2016 (WIT 2014c; WIT 2014d), its depleted reserves and cash flow problems have resulted in a requirement for additional facilities from the HEA for a number of years to support its business plan to address its deficit (HEA 2017i), increasing its dependence on the Government for a period of three to five years.

#### **4.4.6 Content: Consistency with Organisational Goals (WIT) – Comply or Negotiate**

The mission of WIT is to “Engage, Learn, Challenge, Innovate” and this is discharged through being at the “heart of a cooperative teaching and research eco-system” that serves to improve its region, its country and the world, both socially, culturally and economically (WIT 2014a, p.6). WIT’s strategic plan highlights that its strategic themes give effect to this mission and

also interpret the vision articulated for teaching and learning, research, and engagement in the National Strategy for Higher Education.

Extracts (HEA 2014g; HEA 2015o; HEA 2015q; HEA 2017i; WIT 2014a; WIT 2015b; WIT 2017a) are presented in figure 4.3 from its strategic themes to give some substance to how it lives out this mission.

**Figure 4.3 Examples of Alignment of WIT's Strategic Goals with KSOs**

Expansion of its programme portfolio is a key strategic priority under teaching and learning with an emphasis on undergraduate and postgraduate provision, flexibility in delivery in response to learners' needs, and opportunities for broadening access to HE (WIT 2014a). The HEA found that internal quality assurance and enhancement processes were "well defined" and included an international dimension and were "very focused on benchmarking teaching and learning" (HEA 2015o, p.2). WIT is amongst the six Irish HEIs to be "awarded the EU HR Excellence Logo" (HEA 2015q, p.14).

On the access agenda, WIT reports 22 further education "progression agreements" resulting in growth in enrolments from "17 to 124 under FETAC routes in recent years", an "outreach programme [that] now includes 70 schools", growth from 200 to 400 in "students with disabilities" in line with its "institutional mission" but at an attendant significant overhead (HEA 2015p, p.2). Lifelong learning targets, while met (an increase from 40 to 334 in 2014), were proving challenging but a broader definition was considered to better reflect WIT's contributions in this dimension, for example, upskilling arising from industry collaborations on research and non-accredited courses (HEA 2015p; HEA 2015q).

WIT received a further endorsement of its research reputation (having attracted over €140m in 10 years (WIT 2015b, p.7)) in July, 2015 with the award of €6m in EU funding "to help build the global technical infrastructure for a fifth generation (5G) telecommunications network and mobile internet...the only Irish-led project approved under the Horizon 2020-financed, 5G Public, Private Partnership programme (5G-PPP) (HEA 2015q, p.20). Its strategic compact highlights the scale of its research activity – the "equivalent to 25% of academic staff are funded entirely from external [research] funding" (WIT 2014a, p.23). WIT is the most successful IOT in terms of the number of projects submitted (57) and in success terms (10.5%) under Horizon 2020 (WIT 2017a, p.15).

WIT set a target in its strategic compact to deliver "commercialisation targets" that would include "4 spin-outs, 18 licence agreements, 16 patents filed, 32 invention disclosures, 16 agreements with industry < €25K" in a four-year time frame (WIT 2014a, p.30) and exceeded these targets (WIT 2017a), having achieved an 'A' rating during cycle 2 from an international peer review (HEA 2015q, p.17). In addition, WIT leads an EU project that focuses on developing research clusters in the digital space within in its region.

HEA deemed WIT's internationalisation targets to be quite ambitious and expressed some concern regarding "their feasibility and sustainability". WIT acknowledged that they had expanded rapidly in this domain and expressed confidence in their ability to achieve them, highlighting both ambition and competence to contribute to this particular key system level objective (HEA 2014g, p.2). It has established academic and research collaborations with over 40 HEIs across the globe (WIT 2015b, p.8) and was adjudged to have exceeded its international targets at the end of cycle 3 (HEA 2017j).

The new HESPF was described as not resulting in goal displacement at WIT (HEI304), however setting of compact KPIs and targets was reported as influenced by an expectation to respond to each of the national HLIs to achieve category 1 designation (HEI302). It was also credited with a more overt focus on goals that existed but weren't fully articulated. HEA processes and

publications are expected to play a central role in WIT's strategic planning for the foreseeable future notwithstanding the strong influence of regional stakeholders in this regard (HEI303).

Overall, the HESPF is regarded as steering light, except for the cluster concept which is considered to be more steering-heavy and not particularly effective but potentially becoming more meaningful because of the HEA's "dog with a bone attitude" (HEI303). There was strong criticism of the lack of clarity surrounding rationale for its membership, non-relationship between the group members, and its objectives *vis-à-vis* the role of the individual institute in delivering to its own community. It was described as more of a club, whose members were largely competitors, rather than a framework (HEI304). WIT regards itself as having far more collaborations outside the cluster, both nationally and internationally, and expressed concern about its potential negative impact on "collaborations with non-cluster members" (HEA 2014g, p.2), which formed a significant element of its research portfolio (HEA 2015p). Its level of interconnectedness with the IOTI sector was even described by one interviewee as weak (HEI303), reflecting a "differentiated" position articulated in its compact (WIT 2017b, p.2).

We certainly are not inclined to move with the sector....it's always actually been the WIT way to move against the sector and it was actually a policy decision to disengage from the sector....and for very good reasons.

(HEI303)

WIT also argued that creating pathways to other HEIs would impact on the prestige of the feeder institution (HEA 2015p, p.4). However, it accepted that "similar programme offerings" (*ibid*, p.4) can be a cause of concern and pointed to potential improved efficiencies arising from TU designation (HEA 2014g, p.2) and an investment of funding, along with time to identify opportunities (HEA 2015p, p.5). At interview, the HEA's rationalisation and discipline specialisation agendas were criticised as being reflective of an aspect of Irish culture of 'not saying what you want to say', but creating an environment that moves people by stealth from point A to point B (HEI304).

On the basis that cost savings could be made by squeezing the system, consolidation and merger....became part of the solution proposed solely by the civil servants.

(Thorn 2018, p.162)

WIT was commended by the HEA on the strength of its self-evaluation report, "demonstrating significant progress in implementing compact objectives" (HEA 2016i, p.2), and "identification of future issues/ risks (HEA 2016i, p.2). Overall, WIT was placed in the "category 1" performance level (HEA 2016i, p.1) but found itself in category 2 in cycle 3 "because of its financial position and the non-modification of compact goals to reflect its deficit" (HEI304).

WIT disagreed with this designation on the basis that “it had already agreed a business plan with the HEA to address the deficit” and did not consider it appropriate to “completely change its goals in the third year of a three-year cycle” (HEI304). There was also a strong reaction to being singled out for negative comment in relation to cluster performance (HEA 2017I) as opposed to providing a common performance evaluation for all cluster participants (HEI304). Its category 2 designation was also considered not to reflect its international research profile and its connectedness with its region, each regarded as key drivers of the regional and national economy (HEI304), and recognised as such in the HEA’s evaluation (HEA 2017I).

#### **4.4.7 Content: Discretionary Constraints Imposed on the Organisation (WIT) – Comply or Negotiate**

In spite of the steering light approach, the cluster concept is subject to criticism and the merger requirement surrounding the technological university process was described as a very significant intrusion on WIT’s autonomy and goals, and a denial of evidence of WIT’s achievements (HEI301, HEI303). It is nonetheless moving forward in partnership with IT Carlow, in line with Government policy, on its long held ambition for university designation (HEI304).

#### **4.4.8 Control: Legal Coercion or Enforcement (WIT) – Comply or Negotiate**

WIT adopted the IOTI KPI Framework (IOTI 2012) for its strategic planning process, using “external benchmarks....as reference points in setting these targets” where “directly comparable data” existed (WIT 2014b, p.36). However, the HEA requested an expansion of benchmarking to demonstrate that an appropriate level of ambition is being set without identifying specific deficits in this regard or in domains of activity (HEA 2016i, p.2). WIT described the compact process as “useful” and a learning process and it is addressing resource deficits to support the level of evidence-based strategic planning that it aspires to (HEA 2015p, p.2, HEI301, HEI302).

It is institute policy to prioritise resource allocation towards strategic priorities with a particular emphasis on the region and the institute’s stakeholders (HEI303, HEI304). In line with its mission to serve its region, WIT has developed a strong research support function and focuses on a number of specific domains of regional importance and with strong international reputations (WIT 2014a, p.22). It has also prioritised investment to “support [other] areas of strategic importance to the Institute” (WIT 2015b, p.24) - a Quality Office to support an excellence agenda, and a Knowledge Transfer Office to “harness research capacity” for “cultural, societal and economic benefit” (WIT 2014b, p.38).

WIT's compliance with the strategic dialogue process is acknowledged by the allocation of performance funding of €189,000 in 2014 (WIT 2014a, p.38) and "the release of performance funding in full" in 2015 (HEA 2015o, p.2) and 2016 notwithstanding its revised categorisation that it associates with its deficit. Financial imperatives were identified by interviewees as one of the main reasons for compliance with the new process, but the HESPF is not regarded as supported by enabling funding to bring about a step change in institutional behaviours in support of the national priorities (HEI301, HEI302). While the strategic dialogue minutes provide evidence of constructive dialogue around targets and regional impact, distractions associated with TU designation, insufficient infrastructure, funding and the lack of an appropriate HR toolkit were presented as significant barriers to WIT's mission and strategic priorities (HEA 2015p, p.4; HEA 2017k).

They are crucial and....are not part of the compact discussions that we had in Dublin.

(HEI301)

#### **4.4.9 Control: Voluntary Diffusion of Norms (WIT) – Comply or Negotiate**

The next iteration of WIT's strategic plan is expected to see greater diffusion of the new HESPF throughout the institution, supported by the strategic emphasis in self-evaluation processes by administrative and academic units, such as, faculty programmatic reviews (HEI303). At WIT, programmatic reviews are strategic in nature and are required to address the institutional priorities thereby providing a platform for a significant level of integration between academic units' goals and institutional priorities (HEI302).

The cycle of School Reviews is a vehicle for embedding Institute thinking on its future.

(WIT 2017b, p.3)

#### **4.4.10 Summary (WIT)**

Cause: WIT's strategic goals are, in the main, driven by its regional stakeholders, its sense of identity and its own priorities, while cognisant of the policy instruments that underpin the national strategy for higher education. Its overriding ambition is the establishment of a TU for the South East. The expected criteria for designation as a TU significantly overlap with the KSOs articulated under the new HESPF and these are regarded as not representing a significant departure from the trajectory it had been following. The funding acquisition element of the process is regarded as having highest precedence at WIT in engaging and complying with the new HESPF but the national KSOs are regarded as not enabled by funding and conversely having huge potential if this is reversed. Improving strategic focus and

capability are considered positive aspects of the process, but are also in need of supporting funding. The potential for shared learnings from the institutional approach to the HESPF is seen as a constructive element but limited by a lack of richness in feedback and lack of flexibility in terms of resourcing.

Content: WIT's close relationship with its region is reflected in its strategic themes which interpret the vision articulated for teaching and learning, research, and engagement in the National Strategy for Higher Education. Setting of KPIs and targets at WIT have been influenced by a sense that the institute needed to address the national KSOs/HLIs and HEA processes and publications are expected to play a central role in WIT's strategic planning for the foreseeable future. However, concern was expressed in relation to the risk of homogenisation of the sector if HEIs' strategic plans become slaves to the national KSOs/HLIs. WIT's progress in addressing strategic compact objectives was reflected in category 1 designation in cycle 2 but it is highly critical of being relegated to category 2 in cycle 3, attributed to its financial deficit, given that it had agreed a business plan with the HEA to address this. The steering component of the HESPF is regarded as light, except for the cluster concept which is regarded as not effective, and the merger requirement surrounding TU designation which is considered an encroachment on its autonomy.

Constituents: WIT has established a strong track record of collaboration with regional industry, community, cultural and other stakeholders and this has significantly influenced the direction of its strategic planning and compact targets. In addressing their needs it has also managed to address the majority of the HE system HLIs and has been classified by the HEA as making substantial achievements against the vast bulk of agreed targets. While the HESPF experience has been acknowledged as constructive and the KPIs are regarded as useful reference points, they are not considered to be incentivising behaviour due to a lack of associated funding. Infrastructural advantages are deemed to have been conferred on the university sector at the expense of the IOT sector and the metrics driven approach, as an expression of quality, is considered to pose a risk of creating homogeneity rather than diversity, as envisaged by the HEA. However, the concept of performance measurement, benchmarking, and declaration of performance is regarded as a positive aspect of the HESPF.

Control: Strategic planning capability building is regarded by WIT as a positive aspect of the new HESPF process but additional funding for institutional research functions within institutions is regarded as essential. It has adopted the IOTI KPI Framework which integrates KPI development into the strategic planning processes and resources are aligned with strategic priorities. WIT's co-operation with the new HESPF process was strongly influenced by a

funding imperative but the HESPF is not regarded as supported by enabling funding. The institute has resolved to strengthen its capacity to act as a major resource for its region through generation of additional income from sources independent of the exchequer.

Context: Capacity issues that are identified by WIT as outside its direct control include staffing, an appropriate HR toolkit, a sustainable funding model, and investment for infrastructural deficits. It is critical of the absence of baseline funding for research despite its substantial success in this domain. Lack of funding is considered to be hampering realisation of its strategic priorities and its capacity to comply with the requirements of the compact. However, WIT is addressing areas that are under its direct control. It has reoriented its TU ambition with IT Carlow and committed itself to diversification of income streams to support its strategic priorities and to mitigate funding deficits from the state.

## 4.5 Findings & Analysis IT Carlow Using the Strategic Response Framework

### 4.5.1 HEI Introduction – Institute of Technology, Carlow (ITC)

IT Carlow with almost 7,000 students is the fourth largest IOT in Ireland and provides higher education across NFQ levels 6 to 10 in Humanities & Arts, Social Science, Business & Law, STEM, and Health & Welfare. It describes itself as having an “extensive collaborative provision with strong international links” (IT Carlow 2015, p.37) and its collaborations are seen as “a benchmark against which collaborative provision should be established and maintained” (IT Carlow 2015, p.3). It is currently placing a significant focus on accelerating its research development (IT Carlow 2015, p.38) pursuant to its TU ambition and is a market leader in its sector in “lifelong learning and flexible learning” (HEA 2017h; IT Carlow 2014e, p.15). Its mission is to “Engage with Society, Learn through Engagement, Challenge through Learning and Lead through Innovation” (IT Carlow 2014a, p.7) and its “over-arching vision is to be Ireland’s Leading Technological University”, in partnership with WIT (IT Carlow 2014a, p.4).

### 4.5.2 Cause: Legitimacy or Social Fitness (ITC) – Comply or Negotiate

IT Carlow’s strategic plan, 2014-2018 was developed through “extensive consultation with all stakeholders over a 2-year period” (IT Carlow 2014e, p.6), in what the chairperson of the Governing Body described as “ownership through collaboration conferring authority and authenticity” (IT Carlow 2014a, p.3). The plan was strongly framed by its TU ambition which flows into its compact with the HEA (IT Carlow 2014e, p.6).

The new strategic plan (2014 - 2018), focuses on TU readiness....the critical targets for the plan align with those chosen for the compact. This includes some metrics agreed jointly with WIT as part of the pathway towards TU readiness.

(HEA 2015f, p.1)

It also set its sail against meeting what it describes as “challenging national and international priorities” that include the KSOs outlined in the new HESPF (IT Carlow 2014a, p.5) and government publications relating to the economic development strategy for its region (Government of Ireland 2013). Notwithstanding the breadth of its ambition it has placed Learner Experience & Graduate Attributes at the centre of its value system, and the number one goal in its strategic plan (IT Carlow 2014a, pp.16-34).

Our primary purpose is to educate, to undertake research and to contribute to the sustainable development and improvement of society as a whole.

(IT Carlow 2014a, p.4)

IT Carlow described the strategic dialogue process as “helpful” (HEA 2015f, p.4) and the HEA welcomed the “alignment of the process with the broader strategic planning and broader risk

management structures of the institution” (HEA 2016f, p.2). It also agreed that “the mission, planned profile and targets, as set out in the...compact, are consistent with the objectives set for the higher education system and are appropriate to the Institute” (IT Carlow 2014e, p.33). IT Carlow faced some challenges from the HEA in subsequent cycles relating to stretch targets, mission drift and quality. IT Carlow insisted that it didn’t “consider it necessary to increase targets simply because they have been met” but would examine priorities when reviewing their strategic plan (HEA 2015f, p.4). Perceived mission drift from STEM towards Business and Humanities was rejected by emphasising its balanced growth across disciplines, major growth in flexible provision in response to regional demand, and improved retention in line with the national agenda (HEA 2015f; HEA 2015g; IT Carlow 2017a). Ambitious research development targets were debated in cycle 2 along with balancing rapid growth with quality of provision linked to staff: student ratios (HEA 2015f). However, IT Carlow was “commended on its strong progress” in cycle 3 in meeting or exceeding the majority of targets (HEA 2017g, p.1).

Overall the new HE system performance framework is regarded by interviewees as a good concept, while acknowledging some weaknesses (HEI401, HEI402). One of the key positives highlighted was the articulation of the KSOs and related HLIs as a reference point for strategic planning and performance evaluation (HEI402, HEI403). The two-way strategic dialogue is considered helpful and constructive in terms of the HEA getting to know the institutions (HEI403), and as a means of communicating issues (HEI401). Other strengths listed include increased emphasis on accuracy of data reporting (HEI403), visibility on performance, the self-reflective dimension of the process and the international evaluator perspective (HEI401, HEI402) while also acknowledging knowledge deficits of the Irish/regional context on this facet (HEI403).

Cycle 2 feedback was considered by interviewees as not strategic in nature, not nuanced and not helpful, with cycle 3 representing a move towards a more strategic level but still hindered by a strong emphasis on micro detail (HEI401, HEI402, HEI403, HEI404). Lack of access to the HEA’s central repository of data for benchmarking was also considered a limiting factor (HEI402). A broadening or rebalancing of the process to a more qualitative strategic approach was regarded by interviewees as a means of adding more value and reducing the risk associated with driving metrics at the expense of quality or improving reporting rather than performance (HEI402, HEI404). The 3-category system was described as fundamentally flawed, in that no matter how well HEIs perform there are going to be institutions in categories 2 and 3 (HEI402, HEI403). In addition, opaqueness around the scoring criteria was seen as a difficulty in identifying pathways for improving categorisation or indeed avoiding relegation (HEI401, HEI402) when there should be a greater emphasis on developing and

supporting individual HEIs (HEI403). The new HE system performance framework was also considered as overly complex for a simple process (HEI403), an excessive workload for one cycle (HEI401), and an overlapping of data reporting requirements to other agencies or government departments (HEI401).

#### 4.5.3 Cause: Efficiency or Economic Fitness (ITC) – Comply or Negotiate

The HEA has acknowledged the “significant challenges” faced by the IOT sector, “with the state grant falling by 34% between 2008 and 2015 while student numbers grew by 24%” (HEA 2016c, p.5). IT Carlow’s success in increasing its non-exchequer income through “online and part-time provision” and its “innovative approaches” to address staffing issues have been singled out for commendation (*ibid*, pp.17-19). The accumulation of “major reserves” at the institute has also been acknowledged as one of the exceptions to the “worsening of the annual sectoral surplus/deficit position” (*ibid*, p.24), while simultaneously bringing two major capital projects on stream (HEA 2015b).

Progress in implementing change over the last five years has been outstanding given the challenges posed, but the institute has maintained the balance between quality and growth.

(HEA 2015f, p.1)

Despite IT Carlow’s solid financial base, it advised the HEA that it continues to seek to “diversify income streams” through international enrolments in order to “support other activities” (HEA 2015f, p.3). However, it emphasises the restrictions on responding to “increasing student demand” (HEA 2014c, p.2) from “the fastest growing regions of the Midlands and Mid-East” (IT Carlow 2014e, p.8) due to constraints on staffing and new capital infrastructure. It requested the “introduction of a borrowing framework” to bridge the capacity gap (HEA 2017g, p.2).

Attempting to introduce performance funding within a reducing funding envelope is regarded as a fundamental problem with the new HESPF (HEI402) and the government is regarded as not fulfilling its side of the bargain from a resourcing perspective (HEI404). There is no funding incentive for high performance and imposing penalties on HEIs that have sustainability problems was considered to limit their capacity to adjust their behaviour (HEI401, HEI402, HEI403), and an inhibitor in reaching the national benchmarks given the already significant energy expended on survival strategies (HEI403). It was deemed appropriate to provide funding advantages (with caution) to high performers and to motivate upward movement across categories, while simultaneously managing the weakest links (HEI402, HEI403, HEI404). However, funding between sectors was judged to be inequitable due to the lack of a

borrowing framework and non-funding of research (HEI402, HEI403, HEI404). Reputation is driving performance and is regarded as more critical than the potential funding penalty in complying with the new HESPF (HEI401, HEI402, HEI403, HEI404).

#### 4.5.4 Constituents: Multiplicity of Constituent Demands (ITC) – Comply or Negotiate

IT Carlow's level of interconnectedness with its regional partners and stakeholders is emphasised "through a broad inclusive consultative process" (IT Carlow 2014a, p.4) that led to the framing of its five key goals that describe its ambitions for the Learner Experience and Graduate Attributes; Knowledge Creation, Application and Exchange; Strategic Collaborations and Partnerships; Societal, Economic and Environmental Impact; and Reputation, Public Confidence and Sustainability (IT Carlow 2014a, pp.16-34). The HEA acknowledged IT Carlow as "a model of industry engagement" arising from its engagement across the full spectrum of its mission (HEA 2014c, p.2). In its award of Sunday Times Institute of Technology of the Year for 2014 it was recognised for placing "students and student support at the heart of everything" and for its impact as an entrepreneurial organisation "playing a key role in the economy of the Southeast" (IT Carlow 2014d, p.1). Its market leadership position in flexible and lifelong learning and its leadership role in the regional skills forum hallmark its contribution to the development of human capital for its region (HEA 2015f; HEA 2016e; IT Carlow 2017a).

Of the lifelong learners, 98% of students are in employment in their catchment area....so there is, a significant contribution to the region.

(HEA 2015f, p.2)

It is also notable that the proportion of academic staff with a PhD had exceeded the targets set for cycles 2 and 3 under 'Excellent Teaching & Learning' (HEA 2015g, p.1; HEA 2017h), supporting IT Carlow's emphasis on the 'Learner Experience and Graduate Attributes' as its number one goal. Its strategy to increase its international profile and student enrolments (HEA 2015g, pp.16-18) was described by the HEA as demonstrating "a strong appetite for risk in the area of internationalisation" (HEA 2015f, p.3), but was largely achieved in cycle 3 (IT Carlow 2017a). Its targets for research represent an ambition to "grow strongly in a relatively short period" (HEA 2015f, p.3) which, in part, is influenced by its strategic ambition towards TU designation. This matter was the subject of negotiation with the HEA, relating to inequities in staffing arising from the ECF compared to HEIs of similar size and, in particular, its impact on development of its research portfolio (HEA 2015f, p.4).

An analysis by the author found that 34 of the 40 system HLIs are addressed in the objectives/KPIs within IT Carlow's strategic compact (Appendix M). The gaps in each case

relate to HLIs that are mainly in the domain of the HEA. IT Carlow was deemed by the HEA to have met/exceeded or made substantial progress on KPIs relating to *circa* 100% of its targets. The HEA requested that two targets be considered for an upward adjustment (staff PhDs, international) in light of performance in cycle 2 (similarly for staff PhDs in cycle 3) and noted that two targets seemed over ambitious (research, lifelong learning) but both were acknowledged as targets' substantially progressed or exceeded in cycle 3 (HEA 2014c; HEA 2015g; HEA 2017l). IT Carlow had argued over the earlier cycles that its ambitious research targets had been developed with strategic partners, were relevant to regional industry and well aligned with the national priorities, and it had managed to address some of the restraining environmental factors through developing physical capacity and freeing up staff to lead its COREs (HEA 2014c; HEA 2015f).

The scale of expectation in the entire package of KSOs/HLIs that constitutes the new HESPF was described by one interviewee as unrealistic at individual institute level (HEI401). It was considered appropriate for HEIs to focus on a limited number of KSOs (HEI401, HEI403), per the HEA's emphasis on profiling and prioritisation, but category one designation would not ensue (HEI401).

The national KPIs were regarded as not supported or incentivised by funding and, as such, not meaningful in terms of incentivising behaviour (HEI404). However, articulation of the national KPIs was deemed a positive which added value in policy discussions with academic units (HEI402). The primary drivers for co-operation with the new system are reputational (HEI401, HEI402, HEI403, HEI404), a history and culture of compliance (HEI404), and a sense of responsibility on behalf of the institute to support the national as well as regional agenda (HEI404). While, the state KPIs were deemed to have influenced some of IT Carlow's targets, the TU criteria were seen as the main driver (HEI401) along with key stakeholder influences (HEI402).

If we don't meet the expectations of students then we are out of business and it doesn't matter what anyone else thinks.

(HEI402)

#### 4.5.5 Constituents: Dependence on Institutional Constituents (ITC) – Comply or Negotiate

From a resource dependence perspective, the Irish government would appear to exercise the greatest control over funding sources, although state funding to the sector has declined from 76% to 56% between 2010 and 2014 and is projected to drop to 51% in 2016 (HEA 2014b, p.27). IT Carlow's income from state grants and fees was projected to remain stable at 61%

over the same period (IT Carlow 2014b; IT Carlow 2015), reflecting strong growth in student enrolment, international income which is around the sectoral average, and constraints in its research development. The latter two are the subject of targeted and ambitious development plans (IT Carlow 2014b; IT Carlow 2014c; IT Carlow 2015) and ITC reports “diversifying its dependency on core state funding which has reduced from over 53% in 2009/10 to under 39% in 2014/15” in its cycle 3 self-evaluation (IT Carlow 2017a, p.13). It “projects a budget surplus of €1,805,000 for 2016” (HEA 2017h, p.6).

#### **4.5.6 Content: Consistency with Organisational Goals (ITC) – Comply or Negotiate**

IT Carlow’s mission (IT Carlow 2014a, p.7) is threaded through its goals which are woven around the learner, equity of access, knowledge discovery and application, strategic collaborations regionally/nationally/internationally and engagement with communities and industry, while maintaining public confidence through quality enhancement (IT Carlow 2014a, pp.16-34). These goals are reflective of the KSOs for higher education as set by the Irish Government.

The HEA and IT Carlow agree that the mission, planned profile and targets....are appropriate to the place of IT Carlow within the system.

(HEA 2014c, p.1).

The national KSOs/HLIs were regarded by interviewees as not dictating IT Carlow’s goals, strategies or KPIs but are taken into account (HEI401, HEI404) and visibility of the national goals has helped alignment (HEI402, HEI403). It was considered important that the institute’s strategic plan is greater than the compact, reflecting the values of the organisation and the uniqueness of its region (HEI402, HEI403, HEI404) This was seen as mitigating the risk of isomorphism that might arise from conformance to a common set of national KSOs/HLIs (HEI401, HEI404).

IT Carlow’s goals and related “ambitions” (IT Carlow 2014a, p.16) are illustrated in figure 4.4 with examples from its strategic plan and strategic compact (Department of Education & Skills 2016b; Department of Enterprise Trade & Innovation 2010; Department of Foreign Affairs & Trade 2014; HEA 2014c; HEA 2015f; HEA 2016f; IT Carlow 2014a; IT Carlow 2014e; IT Carlow 2015; IT Carlow 2017a).

**Figure 4.4 Examples of Alignment of IT Carlow’s Strategic Goals with KSOs**

Successive strategic plans since 2003 have prioritised the national access targets with significant progress reported against targets for mature entrants, students with disabilities, and reserved places for students affected by socio-economic disadvantage and disability (IT Carlow 2014e, p.14).

The HEA noted that IT Carlow is a model of industry engagement as reflected in its relationship with UNUM which had been highlighted by IDA as a model of best practice covering involvement in programme design and delivery, work placement, innovation research and knowledge transfer (HEA 2014c, p.2). Its TTSI (Technology Transfer Strengthening Initiative) consortium involving AIT, MU and WIT was recognised as being very effective through the achievement of an “A Rating” in performance (IT Carlow 2017a, p.44)

IT Carlow emphasises that its centres of research and enterprise (CORE) are focused on delivering research outputs with clear societal or economic impact, working in partnership with both academia and industry (IT Carlow 2014e, p.20). Prioritisation of the establishment of the new Dargan RDI centre and committing additional staffing to its COREs bear testament to IT Carlow’s commitment to this aspect of its mission (HEA 2015f; IT Carlow 2015).

IT Carlow’s internationalisation strategy is focused on Enterprise Ireland’s tier 1 markets in line with the national trade, tourism, and investment strategy and Ireland’s international education strategy (Department of Education & Skills 2016; Department of Enterprise Trade & Innovation 2010; Department of Foreign Affairs & Trade 2014) (HEA 2014c, p.2). ITC is consistently in the top 5 of IoTs in terms of non-EU recruitment (IT Carlow 2017a, p.50).

IT Carlow has moved to a more strategic focus in quality enhancement following its institutional review in 2010 and has included a detailed quality assurance and enhancement work plan as a KPI in its strategic compact with the HEA, a feature that the HEA recognised as important (HEA 2016f; IT Carlow 2015).

In an endeavour to foster its social and cultural remit, the institute hosts many events relating to culture, the arts, health, sport and public policy (IT Carlow 2014e, p.23).

IT Carlow commits itself to the vision of being a partner in Ireland’s leading technological university (IT Carlow 2017a) and the objectives of the southern cluster relating to co-operation towards supporting the economic, social and cultural development of the region (IT Carlow 2014a, p.5).

The HEA commended IT Carlow on its performance at its cycle 2 and 3 evaluations, placing it in the category one performance level, but recommended an expansion of its benchmarking process in cycle 2 to illustrate that an appropriate level of ambition was being set (HEA 2016f, p.2), and progress on this was welcomed in cycle 3 (HEA 2017g, p.1). Despite the “uncertainty surrounding the TU process and the work involved in the project sapping our ability to do other things” (HEI403), its category one designation (HEA 2016f, p.1) was not met with any surprise given its healthy financial position and its strong track record of compliance with government policy, including alignment of its TU ambitions with the HE reform agenda (HEI401, HEI402, HEI403, HEI404).

The new HESPF process was regarded by interview informants as reasonably well assimilated into the institute (HEI401) and, while it hasn't resulted in goal displacement, the new system is considered to have improved attention to continuous monitoring of progress against strategy (HEI404), focus on achievement of goals (HEI402) and further development of benchmarking is considered a positive element (HEI402, HEI403). This is reflected in the level of performance against its KPIs across the 3-year compact cycle as evidenced in its self-evaluation report (IT Carlow 2017a; IT Carlow 2017b).

#### **4.5.7 Content: Discretionary Constraints Imposed on the Organisation (ITC) – Comply or Negotiate**

The new HE system performance framework (HESPF) was judged by interviewees to be steering light with no impact on IT Carlow's autonomy or decision making, despite some tensions around rapid expansion and accelerated research targets (HEI402, HEI403, HEI404). However, imposition of the cluster concept was regarded as not working, notwithstanding some individual project related successes (HEI403). The Southern cluster is regarded as geographically too dispersed with no tradition of co-operation across the five HEIs as a group (HEI402, HEI403, HEI404). IT Carlow's relationships (e.g. under TTS12) with other partner institutions were regarded as having a far greater influence on its strategic plan and compact than any cluster related objectives (HEI404).

The cluster is a notional idea and is not working....existing HEI partnerships are far more effective.

(HEI404)

#### **4.5.8 Control: Legal Coercion or Enforcement (ITC) – Comply or Negotiate**

Feedback to IT Carlow in cycle 1 was positive overall with no specific recommendations or conditions attached, but the HEA noted the challenges posed by ambitious research targets and the challenging timelines for institutional consolidation. IT Carlow noted positive adjustments to the funding model but highlighted that the ECF continued to present a significant barrier to expansion of student numbers (HEA 2014c, p.2), a point reiterated by interview informants. The cycle 2 evaluation by the HEA recognised IT Carlow's "significant progress in implementing compact objectives", the alignment of strategic dialogue with strategic and risk management processes, and the "careful use of quality measures" (HEA 2016f, p.2), similarly in cycle 3 (HEA 2017g). Interviewees also highlighted these strengths and added that the institute's strategic plan was informed by a series of peer reviewed self-evaluation exercises covering the breadth of the Institution's activities including at sub-unit

level, with a particular emphasis on quality assurance enhancement (HEI401, HEI402). Yet, the HEA insisted on keeping quality on the agenda.

The HEA will keep student number growth under review by means of engagement with QQI in relation to the institutional quality reviews they conduct.

(HEA 2015e, p.2)

IT Carlow's performance in cycle 1 was acknowledged through allocation of full performance funding of € 107,000 (IT Carlow 2014e, p.32). Likewise, the cycle 2 and 3 submissions were classified as category 1 performance and funding was released in full (HEA 2015e, p.2), with reputational risk deemed more important than the funding at stake (HEI401, HEI402, HEI403, HEI404).

The new system was described as a lot of additional work, but worth it as long as IT Carlow remains in Category 1. The key challenge is seen as continuing to raise the bar despite having limited resources to support priority projects (HEI401, HEI402, HEI404). The main obstacle to growth has been identified as the constraint on new capital infrastructure (HEI401, HEI404). A deficit was also identified by interviewees in relation to its institutional research capacity and it is establishing an institutional research function to bridge the gap in its repository of institutional knowledge (HEI401, HEI402).

#### **4.5.9 Control: Voluntary Diffusion of Norms (ITC) – Comply or Negotiate**

There is a strong collaborative approach to strategic planning at IT Carlow and diffusion of the new HESPF throughout the organisation is consistent with established approaches to strategic planning. The new HESPF is credited with supporting organisational change through alignment of academic units' activities towards national goals (HEI402).

#### **4.5.10 Summary (ITC)**

Cause: IT Carlow's overarching ambition is to be designated a technological university in partnership with WIT. The policy instruments that underpin the criteria for TU designation are consistent with those that inform the new HESPF framework which is an aid to institutional planning. Articulation of the national KPIs is regarded as positive and the strategic dialogue process is considered constructive. The primary drawbacks identified in the new system relate to lack of funding incentives, the level at which dialogue is conducted, the overly metric driven approach, the value of feedback, and flaws in the system of categorisation. The success of the new HESPF is considered to be contingent on management of the weakest links as well as supporting the high performers. The primary drivers for co-operation with the new system

are reputational, a history and culture of compliance, and a sense of responsibility on behalf of the institute to support the national as well as regional agenda. These have a far greater influence than the potential funding penalty.

Content: There is a strong alignment between the HE key system objectives and IT Carlow's goals, strategies and ambitions for the period 2014-2018, but the KSOs are not dictating IT Carlow's goals although their visibility has helped alignment. Steering through the new HESPF is considered light and is not impacting on its autonomy, although it considers itself very compliant historically. The new system is considered to have improved the focus on regular monitoring of progress against KPIs and on goal achievement.

Constituents: While the TU criteria were seen as the main driver of IT Carlow's targets, the state KPIs are also considered to have some influence, with other key influencers including regional stakeholders and professional and regulatory bodies. Their needs are manifested through strategic planning processes, ongoing engagement initiatives and academic QA procedures. However, the scale of expectation in the entire package of KPIs that constitutes the new HESPF is considered too big a stretch for many HEIs, particularly in the absence of funding.

Control: It has been acknowledged by the HEA that there are mature processes in place at IT Carlow that integrate risk management and strategic planning with the new HESPF across the organisation and there is a commitment to strengthen the institutional research function to support the new HESPF. There is some tension around quality and rapid expansion of student numbers, and targets for research and internationalisation were initially deemed somewhat ambitious, with the institute emphasising its prioritisation of resources to support these priority goal areas. The related targets were generally deemed to have been achieved in cycle 3. It continues to diversify its funding sources in support of its strategic plan despite its strong financial position.

Context: Very significantly, most of the big risks are considered to be outside both the Institute's and the HEA's control, specifically funding and industrial relations matters each of which resonates across the sector. Decisions are taken in these areas that have the potential to impact hugely on HEIs and this is considered particularly difficult in a performance compact environment. The process was adjudged to be inequitable in terms of funding between sectors which arises from the lack of a borrowing framework and non-funding of research. The shifting policy context was also found to be not helpful in framing compacts within HEIs, with particular reference to the TU agenda. The main obstacle to growth, in response to a bulging demographic, is the constraint on new capital infrastructure.

## 4.6 Findings & Analysis ITT Using the Strategic Response Framework

### 4.6.1 HEI Introduction – Institute of Technology Tralee (ITT)

IT Tralee is a higher education institution situated in the South West of Ireland enrolling in the region of 2,800 students, 97% at undergraduate and 3% at post-graduate level (HEA 2016e, p.116), in Health and Social Sciences, STEM, and Business and Computing. Its research activities are primarily focused on Applied Biotechnology (Shannon ABC) in partnership with LIT, Intelligent Mechatronics and RFID (IMAR), and its UNESCO Chair in the area of Adapted Physical Activity. It has a proud history in equality of access with 27% of entrants from target socio-economic groups, 21% classed as mature, and 6% categorised with a disability, each close to or above the sectoral average (*ibid*). This is reflected through its mission which has transcended many strategic planning cycles.

To excel in teaching, research and development work for the benefit of students, industry and the wider community.

(IT Tralee 2014d, p.4)

The Institute's flagship project is the establishment of a technological university (TU) in partnership with CIT, arguably the most significant development in its 40-year history (IT Tralee 2017, p.3). Over the period of the compact it is projecting an increase of 23% in enrolments, including growing from 3% to 5% in post-graduate and from 1% to 16% in international (IT Tralee 2014a; IT Tralee 2014b).

### 4.6.2 Cause: Legitimacy or Social Fitness (ITT) – Comply or Negotiate

ITT adopted its strategic compact (IT Tralee 2014c) as its new strategic plan for the period 2014-2016 (IT Tralee 2014d), following the expiry of its previous plan in 2013, in order to manage resources more efficiently (HEA 2015i, p.1). The President of IT Tralee described the goals of its previous strategic plan - Quality Teaching & Learning, Academic Differentiation, Regional Significance and Alliances & Collaborations - as forming the "foundation stones" for its new plan and referred to them as being "as relevant today as when first defined" (IT Tralee 2014d, p.3), albeit with a greater emphasis on research development linked to the TU agenda, increasing international fee income to offset a decline in exchequer support and institutional consolidation through the TU project (HEI501, HEI502, HEI504, HEI505). In addition to its previous goals, IT Tralee committed itself, through the new HESPF, to full co-operation with the restructuring agenda in the form of the Southern cluster and the TU process (HEA 2014d, p.2), which essentially speak to an agenda of rationalisation, consolidation and efficiency articulated in the national strategy for higher education (Department of Education & Skills 2011).

The HEA and IT Tralee agreed, through the strategic compact for the period 2014-2016, that the “mission, planned profile and targets....are consistent with the national objectives set for the higher education system and are appropriate to the place of IT Tralee within the system” (HEA 2014d, p.1). However, the impact of the process on the financial vulnerability of the institute received considerable attention from interview informants. It was blamed for siphoning off resources from the already financially vulnerable core business in order to support the new process, which is regarded as overly demanding on smaller institutions.

It's costing us money and the only reason we are doing it is to hit an objective that the HEA has set for us.

(HEI501)

The need for a sustainable funding model and a borrowing framework were raised as key concerns by ITT in their compact discussions with the HEA (HEA 2017c). More tailored objectives for different levels of HEI were considered by interview informants to be more appropriate, with particular reference to expectations for research and international (HEI501, HEI502). The system, as currently constructed, is being interpreted as carrying category 3 designation and funding cuts if all key system objectives and HLIs are not addressed (HEI501, HEI503). However, visibility of the national objectives is regarded as positive and the HESPF is mostly considered a good concept and a “true dialogue” (HEI503, HEI505), but the strain on smaller institutions is deemed not worth the effort, given the lack of recognition and reward, for the benefit that accrues (HEI501, HEI502, HEI503, HEI504, HEI505).

IT Tralee would like to see funding for excellence, for progressing best practice in the access area.

(HEA 2015i, p.3)

#### **4.6.3 Cause: Efficiency or Economic Fitness (ITT) – Comply or Negotiate**

From 2008 to 2015, “income per FTE student decreased by 25.5% across the IOT sector” and the “state grant decreased by 34%”, with IT Tralee listed amongst the institutes “with the steepest decline in income per student” (HEA 2016c, p.15). The institute has eaten significantly into its revenue reserves to offset this decline despite its strong performance of “5% to 6% of revenue from international student activities” (*ibid*, p.17). Despite its financial vulnerability it has made substantial progress (IT Tralee 2017) against its commitment to “continue to invest in its technology gateways which are devoted entirely to a research agenda defined by an industry-led representatives’ board” and to engage with the TTSI to “optimise the commercial potential of new technologies” (IT Tralee 2014c, p.22). This progress took place against the backdrop of an overhanging early warning from the HEA “to note the implications for funding if [its stretch research] targets were not being met”,

despite the emphasis placed throughout the process on the importance of stretching ambition with some impunity (HEA 2014d, p.2).

The HEA will further reflect on....how the process can foster the setting of higher risk or stretch targets while accepting that not meeting such targets may not represent failure.

(HEA 2015h, p.2)

However, the institute has not achieved its target on projected revenue from the state (IT Tralee 2014b) due mainly to a flat school-going demographic. In addition, expenditure on its TU ambition has impacted on a recurring deficit which is the subject of a detailed financial planning exercise with the HEA (HEA 2017c). ITT emphasised to the HEA across the 3 cycles that its performance was impacted to a greater extent than anticipated by external factors - funding, volatility in the international market, IR matters and legislation for TU (HEA 2015i; HEA 2017c; IT Tralee 2014c).

The level at which the institute is haemorrhaging money to fully comply with all the requirements of the new HESPF, including all KSOs, is regarded as not sustainable (HEI501). Accountability for public funding and reputational risk, including its relationship with the HEA, are considered the main factors influencing compliance with the new national policy implementation, with the funding component deemed a secondary but yet very important element (HEI501, HEI502, HEI503, HEI504, HEI505).

The new HESPF is generally regarded as lacking in funding supports for either the process or towards achievement of the national KPIs, and is considered in some instances to be overly focused on micro detail to the extent that it is diverting scarce resources to trivial data reconciliations that have no strategic value (HEI502, HEI503, HEI505).

For completion and progression rates for students with disability, students with specific learning difference, pathfinders....IT Tralee should provide the revised numbers in order to verify the increases of 1% as detailed.

(HEA 2015j, p.17)

Feedback is considered to be creating continual pressure to reach category 1, in the absence of clarity on categorisation criteria (HEI502, HEI503, HEI505) and any funding differential (HEI503). Categorisation of HEIs into tiers 1, 2, and 3 was considered demoralising and demotivating (HEI501, HEI503), unfortunately leading to undeserved reputational damage (HEI502), and a game of external perspective (HEI503).

I think the HEA jumped too quickly to assign categories to the institutions....it is a ranking system.

(HEI505)

Publishing of compact information is regarded positively as open, transparent and improving visibility on performance, but negatively as a stick to beat institutions in terms of their responses (HEI502, HEI504). This dichotomy is perceived to be creating a break on the degree of honesty that HEIs will engage in because of the manner in which the information is being used (HEI502, HEI505). A strengthening of trust on both sides was considered an important factor in mitigating this risk, with targeted resources rather than a penalty recommended as the appropriate treatment for any weaknesses or deficits on the HEI side (HEI501, HEI502, HEI505).

#### **4.6.4 Constituents: Multiplicity of Constituent Demands (ITT) – Comply or Negotiate**

Regional stakeholders are regarded by ITT as “critical to its success” - industries, communities and students (IT Tralee 2014c, p.6). This inter-connectedness with its environment is recognised by the HEA.

IT Tralee’s commitment to the region is palpable (HEA 2015h, p.2). There was evidence of a clear commitment to the region, the student cohort and research, teaching and learning (HEA 2016g, p.2).

Regional employers play a significant role in graduate formation (HEA 2014d, p.1), job creation is supported through its Centre for Entrepreneurship and Enterprise Development, two EI funded technology gateways (IMAR and Shannon ABC) support regional industry, and community needs are embraced through initiatives such as civic engagement, embedded service learning and the UNESCO Chair (IT Tralee 2014c, p.21).

ITT declared in its cycle 3 self-evaluation report that the “majority of targets had been met, in some cases exceeded, in a minority of cases targets have not been reached” (IT Tralee 2017, p.3), similar to cycle 2 (IT Tralee 2015). However, uncertainty around Government strategy for TU designation is considered a barrier to making progress on this important goal (HEI501). An analysis by the author found that, in the case of ITT, 29 of the 40 system level HLIs are addressed in the objectives/KPIs within its strategic compact (Appendix M). The gaps relate to HLIs that are mainly in the domain of the HEA. ITT was deemed by the HEA to have been met/exceeded or made substantial progress on KPIs relating to circa 90% of its targets. In cycle 3, ITT adjusted two targets upwards and three downwards, two of which had been marked by the HEA as over ambitious in cycle 2.

The breadth of its strategic compact objectives when combined with its restructuring project (TU) (HEA 2014d; HEA 2015i; HEA 2017c) was acknowledged as challenging from both a management perspective and financially, diverting attention and resources away from its core activity of teaching and learning.

The national KPIs are influencing behaviour at management level with resources having been prioritised towards retention, teaching & learning, research, and the MTU process but this is not sustainable without an additional injection of funding.

(HEI502, HEI504)

The scale of what ITT is seeking to achieve would appear to be beyond its current financial capacity and this was identified by interviewees as the key environmental factor impacting on its capacity to respond to the national policy objectives. The national KSOs and KPIs were classified as very laudable but not supported by a funding structure that is amenable to achieving them (HEI502, HEI504, HEI505). The concept of stretch ambition and the Government's desire to have a high quality delivery of service for HE are considered to lack credibility and realism in the absence of supporting funding (HEI503, HEI501).

I wouldn't say the national KPIs are incentivising, they are distracting really.

(HEI501)

The institute was strongly encouraged by the HEA to prioritise and reduce its objectives towards those with the greatest potential for impact (HEA 2017c, p.2) and it has essentially been instructed by the HEA to curb its spending and bring its recurrent financial deficit onto an even keel within 3 years.

The national KPIs were also seen as leading towards dedifferentiation in the HE system due to a push by HEIs to address all KSOs and KPIs (HEI501), although it was acknowledged that HEIs have the flexibility to tweak goals or KPIs to develop niche and differentiated elements (HEI504). This influence was described as consistent with other external reviews, as ideas travel within the institutional network and are thereby adopted and adapted by individual HEIs (HEI501, HEI502).

#### **4.6.5 Constituents: Dependence on Institutional Constituents (ITT) – Comply or Negotiate**

From a resource dependence perspective, the Irish government would appear to exercise the greatest control over funding sources, despite a drop of 34% in state grant to the sector between 2008 and 2015 (HEA 2016c). ITT's income from state grants and fees is projected to increase from 63% to 67% in the period 2010 to 2016 (IT Tralee 2014a; IT Tralee 2014b) while the state's proportion of total funding to the HE system is projected to drop to 51% by 2016 (HEA 2014b, p.27), which may account in part for its current financially vulnerable position. At this point the institution could not bear a financial penalty of any magnitude so it is unlikely that the funding penalty proposed under the HESPF could be invoked under any

circumstances, which in a way reduces the leverage of the state on the institution, but paradoxically increases the responsibility on the institution to respond constructively. The institute is currently attempting to restore stability in its finances with the support of the HEA.

#### 4.6.6 Content: Consistency with Organisational Goals (ITT) – Comply or Negotiate

ITT's strategic compact morphed quickly and seamlessly into its strategic plan covering the period 2014-2016 attributed, by its President, to the congruence between the national KSOs and the goals of its previous plan (IT Tralee 2014d, p.3). However, the HEA was regarded by interview informants as dictating at the strategic level through the KSOs and, in so doing, weakening the institute's autonomy through the high level of compliance expected and exhibited by ITT in adhering to the broad spectrum of national KSOs and HLIs from within very limited resources (HEI501, HEI503, HEI504).

It is the biggest show in town as regards our performance....it is steering us quite strongly....it takes over the organisation for a significant period every year (HEI502). We are prioritising within the objectives that are coming down from the HEA and that is limiting our capacity to do other things (HEI501).

The institute's TU ambition is driven from within but the cluster concept represents a new departure, driven by the HEA, but warmly embraced by the institute at the outset (HEA 2014d, p.2). However, the institute acknowledged in cycle 3 that the "wider cluster is not gaining the sort of traction that was anticipated" due to geographical reasons and proposed that the concept was more relevant in "areas such as research technology transfer" (HEA 2017c, p.3). Interview informants described the cluster as, "to a large degree, non-existent....like the emperor's new clothes" (HEI503), with particular reference to programme rationalisation, shared academic planning and student pathways, and attributed mainly to historical geographical enrolment patterns - reflecting the position articulated to the HEA (HEA 2017c, p.3).

ITT's high level of compliance is further evidenced through its positive response (refocusing of roles and internal audit processes) to the renewed emphasis by the HEA, during cycle 3, on the Transitions Agenda and Systems and Workload Management (IT Tralee 2017). Examples are presented in figure 4.5 from ITT's strategic compact to illustrate how it is addressing national priorities (HEA 2015i; HEA 2015j; HEA 2017c; IT Tralee 2014c).

#### Figure 4.5 Examples of Alignment of ITT's Strategic Goals with KSOs

Across the spectrum of participation, equal access and lifelong learning, it is widely accepted that the Institute meets and exceeds national targets (IT Tralee 2014c, p.13).

It is policy to include learners in programme review and development meetings. Student representatives participate in regular joint academic workshops (JAWS) and a Student Open Forum to discuss Programme-related and Institute-related issues (IT Tralee 2014c, p.18).

65 researchers - target exceeded. The target was exceeded as a direct result of a number of strategic measures put in place by the Institute in 2014 to grow and enhance the international standing of research at ITT: (a) A Research Office was established to centralise all institutional research activities (b) The Institute's RDI Strategic Plan 2014-16 was published setting out the key priorities and KPI's to be achieved during this 3 year period (HEA 2015j, p.20).

IT Tralee is working to establish a campus of inclusion and have appointed a UNESCO chair, and want that to be an exemplar worldwide (HEA 2015i, p.2).

The institute is also engaged in a major collaborative project with CIT, with the objective of merging and seeking re-designation as a Technological University. The HEA notes the commitment of the institute to this project and the collaborative approach to detailed planning for this very complex project (HEA 2017a, p.3).

The HEA notes the record of the institute in attracting international students, and the very beneficial contribution this has made to the institute; the HEA also notes the work being undertaken by the institute to manage the risks inherent in this activity (HEA 2017a, p.1).

Overall, IT Tralee was deemed to have made “good progress against mission-coherent objectives” in cycle 3 and was placed in the category 2 performance level (HEA 2017c, p.1), similar to cycle 2.

The Institute has achieved most of its interim targets and provided context on areas where performance is behind trajectory.

(HEA 2017d, p.1)

In noting its positive trajectory from its cycle 2 performance in terms of strategic coherence and the robustness of its self-evaluation, the HEA pointed to the need to further develop its strategic emphasis and make greater use of external benchmarking (HEA 2017c; HEA 2017d). The learning from the first three cycles of the HESPF process is being reflected in a broader benchmarked approach to the strategic planning cycle for 2017-2022 within ITT, where the strategic compact is expected to be an important embedded component of the new strategic plan but not the dominant force it has been for the period 2014-2016 (HEI503).

#### 4.6.7 Content: Discretionary Constraints Imposed on the Organisation (ITT) – Comply or Negotiate

The externally driven system objectives are regarded by some informants at ITT as potentially “blinkering HEIs’ vision” by limiting their expectations of what they should be doing strictly within the bounds of the KSOs (HEI502). However, this view is not shared by all. A number of interviewees asserted that the HESPF in itself does not prohibit institutions from addressing areas not covered in the key system objectives, emphasising that resources are the main constraint in this regard (HEI502, HEI504, HEI505). It could be argued that in the current financial environment in higher education this amounts to the same proposition.

#### 4.6.8 Control: Legal Coercion or Enforcement (ITT) – Comply or Negotiate

The HEA commended the quality of IT Tralee’s initial compact submission and the dialogue surrounding this was at a fairly superficial level, apart from ITT’s financial instability which was referred to another meeting (HEA 2014d). ITT was awarded its full allocation of €81,000 in “performance funding” (IT Tralee 2014c, p.40) in cycle 1, and full funding was awarded for performance against compact objectives in cycles 2 and 3 but ITT was designated category 2 in each instance (HEA 2016g; HEA 2017c).

The HEA requested a more strategic focus, a greater alignment between institutional vision and the compact objectives, more integrated cross-institutional planning, more critical internal and external self-evaluation and a plan to address any “underlying structural issues” (HEA 2016g, p.2). In essence, the cycle 2 assessment amounted to a commendation on performance but with underlying weaknesses in strategic planning processes. In its cycle 3 self-evaluation report, ITT outlined how it had “realigned its structures and resources to address the issues raised” in its cycle 2 feedback:

The establishment of an Office for Strategy and Institutional Performance; appointing a Head of Strategy; introducing an Institute wide performance monitoring and risk management system; refocusing the role of the Assistant Registrar towards improving the student experience and student retention; use of UMultirank for external benchmarking; formalising its community engagement through piloting the “Carnegie Foundation for the Advancement of Effective Community Engagement”.

(IT Tralee 2017, p.2)

Notwithstanding the strengthening of its infrastructure within available resources, the capacity of the institute (related to its size) was considered by interviewees as a limiting factor in the institute’s response to the national policy implementation (HEI501, HEI502, HEI503, HEI504). While the HEA acknowledged the progress made during cycle 3, ITT remained in category 2 and the HEA stressed the need to elevate the objectives of the compact to a more

strategic level focusing on major areas of potential progress “to ensure the release of performance funding in future cycles” (HEA 2017c, p.1). Apart from the pressure point relating to prioritisation, strategic intent and enhancement of strategic capacity, there is little evidence of significant pressure being placed on the institute to adjust specific targets.

It was generally acknowledged throughout the interviews that the HEA is determined to set aside funding to ensure compliance with the new HESPF process and to drive performance within the HE sector (HEI501, HEI505), however, there is a lack of certainty in relation to the size of the penalty and whether it would ever be applied (HEI501). The majority of respondents were not in favour of additional funding for high performers based on their existing capacities, their ability to attract external funding, and the difficulties and uncertainties surrounding the ability to move between categories (HEI503).

You’ll see the divide between rich and poor in performance. The spider web will actually look uglier and less coherent across the system because those who can afford will.

(HEI503)

#### **4.6.9 Control: Voluntary Diffusion of Norms (ITT) – Comply or Negotiate**

Having the capacity and resources to conduct a detailed evidence based self-analysis is regarded as critical to identifying issues and achieving the performance improvements envisaged under the new HESPF (HEI502). Integration of the new HESPF with established academic planning processes has not been realised to date due to limitations on resources and this is also regarded as a limiting factor in diffusion of the new system throughout the institution (HEI502, HEI504). These matters are being addressed through establishing an institutional research function and revision of QA procedures to achieve greater levels of cohesion and efficiency between strategic planning, the strategic compact and academic planning processes.

#### **4.6.10 Summary (ITT)**

Cause: The primary drivers for the new HESPF are largely consistent with ITT’s trajectory in the period leading into the introduction of the strategic compacts, resulting in a natural alignment of the national KSOs with ITT’s goals. However the institute regards its current progress as being hampered by a dearth of resources. There is strong criticism of the process of categorisation and the punitive financial approach adopted by the HEA. Ranking of institutions into success and fail categories is regarded as carrying a significant risk of

incomplete disclosure of issues which is the antithesis to improving performance, arguably the most critical objective of the new HESPF. It is proposed that the new process be tailored to take account of organisation size, profile and geography, be appropriately resourced, be more strategically and developmentally focused, and that both effort and excellence be rewarded.

Content: The advent of the strategic dialogue process coincided with the renewal of IT Tralee's strategic plan and the strategic compact dominated the institute's planning in this period to the extent that it placed itself under severe financial strain trying to meet compact objectives and address evolving emphases from the HEA, while simultaneously moving forward with its TU agenda. ITT's performance was deemed by the HEA to be satisfactory and on an upward trajectory as the cycles progressed, while acknowledging limited progress on the cluster objectives and highlighting the need to further hone its strategic priorities.

Constituents: Overall, the HEA has acknowledged that IT Tralee has demonstrated a strong commitment to a broad range of stakeholders across its region. However, it has been acknowledged by both the institute and the HEA that this level of commitment is not sustainable within current resources and is the subject of a detailed financial planning exercise in preparation for the next iteration of its strategic plan, 2017-2022. In addition, the national KPIs, while considered laudable, are deemed by ITT contributors to be not underpinned or enabled by supporting finance. Further weaknesses identified relate to a tendency towards isomorphic behaviour in the sector and the impact of the uncertain political climate on the TU agenda.

Control: ITT has satisfied all of the requirements to date to avoid cuts in funding associated with non-performance in the new HESPF. Over the three cycles it has addressed strategic and institutional research capabilities and generally aligned additional resources with its strategic objectives, but in the process has placed further financial stresses on itself. Further integration of academic planning and strategic planning are planned to streamline activities and cascade the new process through the organisation. There is significant criticism of the lack of resources to support the new process and reputation is driving co-operation far more so than the penalty associated with it.

If we decided to strip back what we are spending in trying to achieve the targets and said we won't spend this money but we'll take a hit of 5% on our recurrent grant....the reality is that we would probably be better off....it's costing us money.

(HEI501)

Context: The list of environmental woes impacting on ITT centred on its financial vulnerability, the lack of momentum in the TU project arising from delays and uncertainty around the

underpinning legislation, and related IR matters. For the most part, all of these issues are also outside the direct control of the HEA.

#### **4.7 Conclusion**

This section examined the strategic responses from HEIs, using the strategic response framework adapted from Oliver (1991), across the five antecedent factors 'cause', 'constituents', 'content', 'control' and 'context'. Each of the HEIs faced challenges in seeking to serve its own mission while also cognisant of the national priorities. Institutional capacity to respond to the national agenda was also at varying stages of development and there were contributory factors in the environment that were common across all the HEIs, most notably a sustainable funding model for HE and an appropriate HR toolkit. There was general agreement that the new HESPF framework was a useful concept, with potential, but there were also several weaknesses identified both in its design and implementation. Section 6 undertakes a cross-case analysis that explores these issues in detail while also taking into account the findings from the quantitative analysis of questionnaires from the section that follows.

## Chapter 5 Findings from Quantitative Analysis

This chapter commences with a description of the sample and then seeks to examine the findings relating to visibility of the HESPF and HEI strategic compacts, and goal alignment, arising from analysis of the HESPF questionnaire responses. There follows a factor analysis of four individual sections (C to F) that examines the goals of the HESPF, its influence on HEIs, institutional capacity to respond to the HESPF and the usefulness of the national KPIs. Finally, a discriminant analysis is undertaken to explore if there are particular trends that distinguish responses across staff categories for all of the variables by reducing the data set to the most prominent underlying constructs.

### 5.1 Description of the Sample

The questionnaire sample consists of 92 responses of which 41.3% describe themselves as a Lecturer/Senior Lecturer, 31.5% as Professor/Head of Faculty or Department, 25% as Senior Administrator and 2.2% as Researcher. 19.6% of participants had up to 10 years' experience in HE compared to 40.2% with 10-20 years and 40.2% with 20 or more years. 40.2% of the sample came from HEIs with up to 5,000 students compared to 39.1% with 5,000-10,000 students and 20.7% with 10,000 or more.

### 5.2 Visibility of the HESPF

The level of awareness of Ireland's HESPF (figure 5.1) is strong among management grades but weak among lecturing grades. 50% of lecturers indicated that they know little or nothing while only 17.5% have a strong awareness.

**Figure 5.1 Awareness Levels of Ireland's HESPF**

		Awareness of Ireland's HESPF				Total
		Not at all	Very little	Somewhat	To a great extent	
Lecturer/Researcher	Count	10	10	13	7	40
	% within Staff position	25.0%	25.0%	32.5%	17.5%	100.0%
Professor/Head of Faculty/Head of Department	Count	0	0	10	19	29
	% within Staff position	0.0%	0.0%	34.5%	65.5%	100.0%
Senior Administrator	Count	1	0	6	16	23
	% within Staff position	4.3%	0.0%	26.1%	69.6%	100.0%
Total	Count	11	10	29	42	92
	% within Staff position	12.0%	10.9%	31.5%	45.7%	100.0%

As illustrated in figure 5.2, the awareness level drops across all staff categories in relation to knowledge of the KSOs in the HESPF, with the main shift being from ‘great extent’ to ‘somewhat’ by about 10%.

**Figure 5.2 Awareness Levels of KSOs in the HESPF**

		Awareness system level objectives				Total
		Not at all	Very little	Somewhat	To a great extent	
Lecturer/Researcher	Count	11	13	13	3	40
	% within Staff position	27.5%	32.5%	32.5%	7.5%	100.0%
Professor/Head of Faculty/Head of Department	Count	0	0	13	16	29
	% within Staff position	0.0%	0.0%	44.8%	55.2%	100.0%
Senior Administrator	Count	1	1	8	13	23
	% within Staff position	4.3%	4.3%	34.8%	56.5%	100.0%
Total	Count	12	14	34	32	92
	% within Staff position	13.0%	15.2%	37.0%	34.8%	100.0%

A more detailed analysis of awareness levels of the individual KPIs found that academic managers (i.e. professor, head of faculty or department) have the greatest awareness levels across all KSOs. *Circa* 60% to 70% indicated ‘great extent’ across most KSOs but unexpectedly only 48.3% indicated ‘great extent’ for knowledge of the KSOs for human capital needs, a core aspect of their business. Lecturers’ greatest level of awareness (*circa* 20%) was around the KPIs for access and teaching and learning (T&L) with *circa* 30% expressing some awareness across each of the KSOs. Senior administrators’ greatest level of awareness (*circa* 50%) was around access, T&L and research. The restructuring agenda and internationalisation featured as the weakest levels of awareness amongst lecturers (*circa* 6%) and senior administrators (*circa* 27%), with 64% and 22% respectively indicating that they knew little or nothing.

The pattern of awareness of participants’ HEI strategic compact with the HEA (figure 5.3) is similar to the awareness levels of the national HESPF, with strong awareness levels among senior administrators and managers compared to 50% of lecturers with little or no awareness and only 20% with a strong awareness. This reflects similar patterns when the individual dimensions of the HEI’s compact with the HEA are considered. 42.4% of participants indicated that there was internal dissemination of their HEI’s compact with the HEA, 31.5% were unsure. Internationalisation and the restructuring agenda again feature as the two dimensions with the lowest awareness levels but at a healthier level than the national agenda (*circa* 53% for senior administrators and academic managers and 10% for lecturers). Higher

levels of awareness are reflected in indications by these staff categories that their HEIs' goals are largely aligned with the national agenda (*circa* 45%) or somewhat so (*circa* 52%) regardless of the HESPF.

**Figure 5.3 Awareness Levels of HEI's Strategic Compact with the HEA**

		Awareness own HEI strategic compact with HEA				Total
		Not at all	Very little	Somewhat	To a great extent	
Lecturer/Researcher	Count	10	10	12	8	40
	% within	25.0%	25.0%	30.0%	20.0%	100.0%
Professor/Head of Faculty/Head of Department	Count	0	0	8	21	29
	% within Staff position	0.0%	0.0%	27.6%	72.4%	100.0%
Senior Administrator	Count	0	1	8	14	23
	% within Staff position	0.0%	4.3%	34.8%	60.9%	100.0%
Total	Count	10	11	28	43	92
	% within Staff position	10.9%	12.0%	30.4%	46.7%	100.0%

The analysis in the sections that follow only considers responses from those (n=71) who indicated that they were 'somewhat' or to a 'great extent' aware of the HESPF.

### 5.3 Goals of the HESPF

A factor analysis of section C responses (Goals of the HESPF) was undertaken to reduce the set of variables to a smaller number of underlying constructs that summarise their key information. It resulted in a three factor solution that explains 49.18% of the variation in the data (Appendix D figure 1). The first factor (Cronbach's Alpha 0.828) is labelled 'Autonomy and Accountability for Public Funding' to reflect the loadings of the variables relating to autonomy, accountability and funding on the factor and it comprises six items (Appendix D figure 2). The second factor (Cronbach's Alpha 0.751) is labelled 'Visibility and Steering' and comprises four variables and the third factor (Cronbach's Alpha 0.488) consists of two variables and is labelled 'Stability and Co-operation'.

Factor 1 'Autonomy and Accountability for Public Funding': 66.2% of respondents agreed or somewhat agreed that the HESPF is a useful concept, *circa* 41% agreed or somewhat agreed that it respected the substantive autonomy of their HEI and balanced this with accountability and co-ordination, while 51% were of the opinion that it improves accountability for public funds (Appendix D figure 3). A mere 15% agreed that the HESPF is supported by a sustainable

funding model. A significant difference ( $F(2,68) = 3.548, p = .034$ ), ( $\eta^2=0.09$  indicates a moderate effect size (Cohen 1988, pp.285-287)), exists between academic managers and lecturers relating to using the HESPF for funding allocations (20.6% versus 40% agreement) and the balance between accountability and co-ordination with autonomy (44.8% versus 25% agreement).

Factor 2 'Visibility and Steering': There was broad consensus (circa 74%) that the HESPF clearly articulates government expectations across HE but that uncertainty in the HE landscape is hindering its development (Appendix D figure 4). There was less certainty around improving visibility on performance (57.7%) and, similarly, on its effectiveness in steering HE towards national priorities (53%). The significant difference ( $F(2,68) = 6.318, p = .003$ ) ( $\eta^2=0.16$  indicates a large effect size (Cohen 1988, pp.285-287)) between academic managers & senior administrators and lecturers relates to the level of clarity in government expectations of HE (84% versus 45% agreement) and visibility of HE performance (69% versus 30% agreement).

Factor 3 'Stability and Co-operation': The key finding here is that only 32.4% agree that the HESPF is improving co-operation between HEIs, one of the key objectives under the restructuring agenda.

#### 5.4 Influence of the HESPF

A factor analysis of section D responses (Influence of the HESPF) resulted in a two factor solution that explains 49.64% of the variation in the data (Appendix D figure 5). The first factor (Cronbach's Alpha 0.879) is labelled as 'Strategic Impact' to reflect the loadings of the variables relating to strategic capacity and alignment, and it comprises seven items (Appendix D figure 6). The second factor (Cronbach's Alpha 0.598) is labelled 'Goal Displacement' and comprises three variables.

Factor 1 'Strategic Impact': *Circa* 68% agreed or somewhat agreed that it was central to determining the HEI's goals and in becoming more strategic, but without accelerating change processes (36.6%) or necessarily improving visibility of the HEI's work (46.5%) (Appendix D figure 7).

Factor 2 (Goal Displacement): Twice as many respondents from management positions (58%) as lecturers (30%) indicated a displacement of HEI goals towards the national agenda, suggesting that the HESPF is impacting more or there is a greater overall level of awareness at this level (Appendix D figure 8). *Circa* 32% overall indicated a negative impact on department

goals not aligned with the national agenda and avoidance of projects with uncertain outcomes.

### 5.5 Institutional Capacity and the HESPF

A factor analysis of section E responses (Institutional Capacity and the HESPF) resulted in a three factor solution that explains 46.94% of the variation in the data (Appendix D figure 9). The first factor (Cronbach's Alpha 0.669) is labelled 'Institutional Capacity' to reflect the heavy loadings of the variables relating to institutional capacity and it comprises five items (Appendix D figure 10). The second factor (Cronbach's Alpha 0.697) is labelled 'Resource Constraints' and comprises two variables. The third factor (Cronbach's Alpha 0.593) is labelled 'Co-operation' and comprises two variables.

Factor 1 'Institutional Capacity': There was very limited evidence of the use of financial rewards to incentive performance (18.3% agreement). Evidence of visibility of HESPF at department level was also limited (33.9%) (Appendix D figure 11). Confidence was high (69%) in relation to the HEIs' strategic capacity to compete in its priority areas with 54.9% attributing improved goal attainment to the HESPF. However, only 39.5% overall agreed that their HEI has the institutional research capacity to monitor performance.

Factor 2 'Resource Constraints': A significant difference ( $F(2,68) = 3.340, p = .041$ ) ( $\eta^2=0.089$  indicates a moderate effect size (Cohen 1988, pp.285-287)) between lecturers and academic managers on this factor is underscored mainly by the impact of resource constraints in contributing to the national agenda, with academic managers almost twice as likely to more strongly agree (*circa* 73%) (Appendix D figure 12). This suggests that lecturers may not be aware of, or are cushioned from, the level of impact experienced at management level.

Factor 3 'Co-operation': 74.6% agree that their HEI's co-operation with the HESPF is influenced by financial imperatives with 50.9% signalling that PIs that are not consistent with departmental goals decrease their potential for adoption (Appendix D figure 13).

### 5.6 Usefulness of the KPIs and the HESPF

A factor analysis of section F responses (Usefulness of the KPIs and the HESPF) resulted in a three factor solution that explains 50.3% of the variation in the data (Appendix D figure 14). The first factor (Cronbach's Alpha 0.841) is labelled as 'Long Term Effectiveness' to reflect the heavy loadings of the variables relating to long term gains and appropriateness of the KPIs, and it comprises five items (Appendix D figure 15). The second factor (Cronbach's Alpha

0.716) is labelled 'KPI Impact' due to its loading on variables relating to the impact of KPIs and comprises four items. The third factor (Cronbach's Alpha 0.593) is labelled 'Shaping Issues' and comprises one variable.

Factor 1 'Long Term Effectiveness': *Circa* 50% were in agreement that the HESPF would produce long term gains for the Irish HE system or for their HEI and that the goals most influenced by stakeholders are consistent with the HESPF, with fewer (30.9%) convinced that it would improve their HEI's responsiveness to stakeholder needs or help distinguish their profile (36.6%) (Appendix D figure 16). This is all somewhat unconvincing and points to a potential tension between national goals as articulated through the HESPF and stakeholder needs as experienced by the HEIs. In addition, 36.6% indicated that KPIs associated with the HESPF are leading to long-term goals being sacrificed for short-term goals at their HEI.

Factor 2 'KPI Impact': There is relatively strong agreement (58.6%) amongst academic managers that diversity is being reduced through the KPIs in the HESPF with the other staff positions less convinced at *circa* 40% (Appendix D figure 17). There are similar levels of agreement that it has also resulted in the prioritisation of some stakeholders needs and in displacement of resources towards activities that can be measured. There seems to be general consensus (63.3%) that the national KPIs are aspirational in the current HE funding environment.

Factor 3 'Shaping Issues': The key finding here is that the Government's KPIs are shaping the issues that the HEI is thinking about (74% agree) and this is most pronounced for academic managers (89.7%).

## 5.7 Factor Analysis Combining All Variables

A factor analysis that combined responses across all variables resulted in an eleven factor solution that explains 61.79% of the variance in the data (Appendix D figure 18). The five factors with the highest loadings accounted for 41.61% of the variance. The factor with the highest loading (Cronbach's Alpha 0.909) accounted for 11.19% of the variance and is labelled as 'Strategic Orientation' to reflect the heavy loadings of the variables relating to strengthening strategic capacity and alignment with national goals, and it comprises nine items (Appendix D figure 19). The second factor (Cronbach's Alpha 0.818) is labelled 'Goal Impact' due to its loading on variables relating to the impact on goals/activities/KPIs of the HEI, and also comprises nine items (explaining 9.19% of variance). The third factor (Cronbach's Alpha 0.832) is labelled 'Autonomy and Accountability', and comprises seven

variables (explaining 8.83% of variance). The fourth factor (Cronbach's Alpha 0.826) is labelled 'HESPF Benefits' and mainly references the effort/benefit balance, and comprises five variables (explaining 7.74% of variance). The fifth factor (Cronbach's Alpha 0.757) is labelled 'Steering and Visibility' and loads on Government expectations, steering and visibility, and comprises three variables (explaining 4.64% of variance).

### **5.8 Multiple Discriminant Analysis (MDA) on the Five Factors for All Variables for Staff Position**

MDA Analysis using staff position in the organisation as the grouping variable and factors 1 to 5 (Strategic Orientation, Goal Impact, Autonomy and Accountability, HESPF Benefits, Steering and Visibility) as the predictor or independent variables showed significant differences ( $p < 0.05$ ) across staff positions on two of the predictor variables (Goal Impact, Steering and Visibility) (Appendix D figure 20). The mean score for academic managers on Goal Impact was 0.3029, compared to 0.1153 for lecturers and -0.4679 for senior administrators suggesting a decreasing impact of the HESPF on goals for each of these staff positions (Appendix D figure 21). The mean scores for Steering and Visibility suggest that the HESPF is seen as articulating expectations and effective in steering HEIs towards national priorities most so by senior administrators (0.5221) and least so by lecturers (-0.1757) with academic managers somewhere in the middle (0.1435).

### **5.9 Summary**

There are much greater levels of awareness amongst academic managers and senior administrators than lecturers in relation to the HESPF and its KSOs/KPIs, and the HEIs' strategic compact with the HEA. It is of particular concern that internationalisation and the restructuring agenda are the two dimensions with the lowest awareness levels given their emphasis in the national strategy for higher education and the HESPF.

Two out of every three respondents considered the HESPF a useful concept with a slight majority (51%) indicating that it improves accountability for public funds with lower levels of agreement (41%) that the substantive autonomy of the HEI was respected in the process. Three out of four respondents indicated that the HESPF clearly articulated government expectations across HE but that it was not as effective in steering HE towards national priorities (53%) or in improving visibility on performance (57.7%), and that national KPIs are aspirational in the current funding environment (63.3%). Arguably, of greater concern is that only one in three see an improvement in co-operation between HEIs arising from the process,

one of its key objectives. However, seven out of ten respondents indicated that the HESPF was accorded some priority in determining the HEI's goals and in becoming more strategic while also strongly signalling (74.6%) that financial imperatives were a factor in co-operation with the HESPF. Confidence was high (69%) in capacity to compete in the HEIs' priority areas with more than half (54.9%) attributing improved goal attainment to the HESPF. However, there are concerns around institutional research capacity to monitor performance, forfeiting of long-term goals, responsiveness to stakeholder needs and impact of the national KPIs on diversity within the system. These findings are largely in line with equivalent findings from the qualitative analysis, particularly when the 'don't know/unsure' responses are factored into consideration.

## Chapter 6 Discussion

This chapter distils the findings from the five case studies, the questionnaire analysis and the HESPF performance reports, highlighting the key results (observations) and discussing them in the context of the literature review. Each of the four research questions is presented in turn. A summary of the key findings is presented for each question and each finding is then considered in detail.

### 6.1 RQ1 HESPF – Aiding or Inhibiting Institutional Planning Towards the Related Policy Initiatives

Evidence gathered through the research study identifies both strengths and weaknesses in the new HESPF with respect to institutional planning towards the related policy initiatives. The greatest strengths surround the constructive relationship building with the HEA, the self-reflective value and institutional learning that has arisen from the process, and the strategic planning capacity building that the process requires. The process was considered to be potentially hugely beneficial if resourced and in some instances had helped in driving and managing change. However, significant weaknesses were also identified. The process was considered not to be sufficiently strategic or developmental in nature, structurally flawed in terms of categorisation of institutions with an associated lack of clarity around criteria for evaluation, and not supported by funding towards the process or KSOs, which were regarded in some instances as not clearly or openly defined. The process was also considered to carry significant risks that HEIs would find a way of managing to the metrics without achieving quality or performance improvements and that weaknesses would be hidden to avoid the reputational and financial damage associated with the system of categorisation. It was described in many instances as overly burdensome for smaller HEIs that did not have the supporting infrastructure. These factors are explored in the sections that follow.

#### 6.1.1 RQ1 HESPF Aids to Planning – Constructive Relationship Building

The positive nature of the dialogue process received comment across all of the HEIs in the study and it was mostly regarded as a partnership.

It is wonderful to see that the HEA are reaching out and trying to establish a dialogue (HEI102)...  
surprisingly positive (HEI401)....constructive (HEI2).... improving the relationship with the HEA (HEI503).

“Dialogue and well organised patterns of communication” are regarded as a critical component of performance agreements (de Boer et al. 2015, p.23). Invariably, the validity of

Government having a policy framework and a process for translating that policy into practical guidance to higher education institutions was strongly recognised and this is consistent with international trends in HE (Broucker et al. 2015; Eurydice 2008; Jongbloed 2010). A two-way strategic dialogue, that was challenging and rigorous, was seen as an important component of such a process, consistent with the recommendations of Pruvot et al. (2015a), but it was regarded in the larger HEIs as best served by providing direct access to a higher education unit situated within the ministry rather than through a buffer agency (HEI105, HEI205).

### 6.1.2 RQ1 HESPF Aids to Planning – Self Reflection, Institutional Learning and Strategic Capacity Building

#### *Self Reflection and Institutional Learning*

The value of self-reflection and institutional learning associated with the strategic compact process was noted as a positive element in four of the HEIs, with particular reference to benchmarking, but caveated with the need to “match challenges with intelligent investment” (HEI301) rather than being “penalised” (HEI502) for a comprehensive self-reflection. Burquel and van Vught (2010, p.244) found that “the systematic comparison of core institutional processes leads to innovative practice for improved performance”. Visibility of and benchmarking against the system KPIs was generally seen as an aid to planning, providing clarity in direction, establishing baselines for HEIs, providing some comparators between institutions, and bringing existing KPIs more sharply into focus (HEI301, HEI504, HEI505).

Having national targets and goals is a good discipline.

(HEI104)

However, there was some criticism of the lack of guidance and reference points on benchmarking and the lack of clarity in relation to role definition for each HEI within the new framework.

There’s no documentation that you will find that the HEA has published in terms of the framework that references benchmarking.

(HEI304)

An increase in the visibility of state priorities and a greater level of consciousness of HEI performance were seen as positive effects of performance funding in the US (Dougherty and Reddy 2011).

Nonetheless, there are mixed views by both interviewees and questionnaire respondents on whether the HESPF is “increasing visibility of performance” amongst the “wider public”, one of

the five purposes of the HESPF (HEA 2014b, p.118), and of particular concern is that 50% of lecturers' questionnaire responses indicated they knew little or nothing about it which could be interpreted as indicative of the lack of influence of the HESPF on the goals and behaviours of the organisation.

### *Strategic Capacity Building*

Systemisation of institutions and strategic planning capability building are generally seen as a positive outcome of the process from both data sources (questionnaire and interviews), in some instances acting as an external stimulus to promote adoption of the new approach (HEI201) and managing and driving change (HEI103, HEI201, HEI302).

Insistent on the metrics and being much more obvious in terms of why we're doing what we're doing and how we're doing it and measuring it, and all of that, is pretty good.

(HEI303)

This strength is consistent with the findings of Burquel and van Vught (2010, p.253) on the link between quality of outcomes and institutional capacity to take ownership of their strategic direction.

Overall, the process is seen to have significant potential if "matched by flexibility in terms of resourcing from the HEA" (HEI301), as recommended by Agasisti (2011) and de Boer et al. (2015). It was described as "tosach maith leath no hoibre" (HEI505).

### **6.1.3 RQ1 HESPF Inhibitors to Planning – Strategic and Developmental Level**

One of the key weaknesses identified across a broad spectrum of responses is that the process is not conducted at a sufficiently strategic level and is hampered by an overemphasis on micro detail.

Some conversations around granular detail is not important and should be elevated to a higher level about whether institutions have the structures in place (HEI502)....I would prefer more challenge and feedback at a strategic level (HEI104).

### *Measurement Concerns*

38 of the 40 national monitoring sub-indicators are quantitative (HEA 2014b, pp.121-127) and these are only very weakly correlated statistically ( $r(266) = 0.295$ ,  $p < .05$ ) with the indicator types used by the HEIs. There is thus a risk that conversations become dominated by numeric targets rather than strategic direction and "the use of solely quantitative indicators....sidesteps the qualitative issue" (Boberg 2000, p.11). Locke (2014, p.86) found that the quantitative indicators used in rankings were largely those that are readily available "rather than close

proxies of the qualities they seek to represent” and this is mirrored in the new HESPF (HEI601). de Boer et al. (2015, pp.17-20) identify progress monitoring as a particular challenge with performance agreements, particularly with qualitative targets, and cautions that disagreements are inevitable and will “distract from the real issues” if there isn’t consensus around measurement.

One gets the sense sometimes, and this might be over critical, that it is going through a bureaucratic process rather than a qualitative process.

(HEI103)

Hazelkorn and Massaro (2011, p.97) had earlier cautioned that “Ireland’s compacts will be backed by performance-based funding but are likely to be constrained by a political culture that has tended to micro-manage.” Likewise, Dougherty et al. (2013, p.2) acknowledge political frustrations as an obstacle.

#### *Impact of the Evaluation Approach*

Scriven (2003, p.22) classes outcome-based evaluations as a results oriented approach often linked to performance management and increased accountability. Scriven (2003, p.22) and Patton (2015, p.208) both argue that this approach involves an attendant slighting or relegation of attention to process and values, as is evidenced in the Irish Government’s emphasis on the need for information “at a glance....outputs....and impact indicators” (Government of Ireland 2016b). This also appears to be reflected to some extent, though not entirely (e.g. emphasis on teaching and learning), in HEA feedback.

Any objective related to the development of process should be redefined to place greater emphasis on the outcomes the process is intended to deliver.

(HEA 2015I, p.2)

In contrast, evaluations in higher education typically deploy a utilisation-focused approach - “evaluation done for and with specific intended primary users for specific, intended uses” (Patton 2015, p.178) – with a focus on the achievement and improvement of quality (formative approach), responsiveness to stakeholder needs, and formulation of recommendations that translate into actionable findings (Nevo 2006). A study of “targets of evaluations” in higher education across Europe by Hämäläinen (2003, pp.293-294) found similarities that extend beyond research and programme evaluations that are consistent with the Irish context. Hämäläinen’s study found that while threshold standards existed for some indicators, “few standards or targets of evaluation” were found for “staff, links with working life, internationalisation....regional impact and links between research and teaching” (ibid, p.294), which tend to rely on proxies derived from surveys which lack objectivity (Marginson

2014). De Witte and López-Torres (2017) likewise found that efficiency analysis relies on poor proxies and argue for investment in institutional research capacity. This mirrors similar challenges/gaps in the Ireland's HESPF (HEA 2014b, pp.121-127), a dilemma that Morrill (2010, p.47) refers to as "measuring the immeasurable" while Harvey and Williams (2010) found that linking national KPIs to what is easily measurable harboured suspicion.

### *Strategic and Developmental Emphasis*

The HESPF process was described by interviewees, in its current incarnation, as "not developmental" in nature with the main emphasis on "policing and compliance" (HEI105, HEI205), a "disconnect between performance setting and capacity and planning" (HEI202) and not supporting HEIs "to more effectively contribute to the national needs" but "creating a tiered system" (HEI304). Feedback was described as "too granular" (HEI502) and "giving us ways of improved reporting on performance, maybe, rather than performance" (HEI404). These findings suggest that the strategic dialogue is not operating with the balance or at the level envisaged by the HEA and that there is a disconnect between how HEI's and the HEA are interpreting their experience of the process.

The HEA was not just concerned with whether or not institutions met the targets set out for them....It is also important that the institutions would demonstrate their capability to undertake effective strategic management....This is a much more effective means of using the dialogue process than a simple checking of whether or not original targets were met.

(HEA 2016d, p.73)

de Boer et al. (2015, p.20) recommend that for "improving the dialogue and creating a mutual understanding of the key issues, reaching consensus on broad goals seems to be the best option." It seems that this recommendation frames the mutual aspiration /intent of HEIs and the HEA which is not fully reflected in its application.

Lack of clarity around TU legislation, the rationalisation agenda (referred to as the "elephant target" by Benneworth and Velderman (2016, p.6) in the Welsh HE mergers), funding instability, and a funding model where cluster members (i.e. collaborators) are forced to compete with one another were reported as significant challenges in strategic planning. Yet, the HEA "asks all institutions to consider their strategic priorities more actively....to have regard to the priorities of other institutions regionally and nationally, act to avoid duplication" (HEA 2016d, p.67) and "to improve setting of objectives and benchmarking with national and international peers to set the context for the performance ambitions" (HEA 2016d, p.76). However, de Boer et al. (2015, p.5) caution that "context matters and, given the uniqueness of each higher education system, experiences from elsewhere always must be interpreted with

care.” The process does not appear to have arrived at point where there is a mutual understanding on what constitutes strategy in the context of the compact and it would appear that conflicting messages are being fed into the system through the level at which reflections on compacts take place and the substance of subsequent evaluation reports.

#### 6.1.4 RQ1 HESPF Inhibitors to Planning – Structural Flaws

##### *Performance Tiers*

Categorisation of institutions into three performance tiers was cited as a structural flaw across many of the interviews with the related criteria for categorisation criticised as opaque, not transparent, not published and somewhat politically motivated.

It’s hard to work out how they get to their final results....We can see what they are assessing us on but scoring and all those things....I think it is not transparent....if someone said to me tomorrow ‘ye dropped’, I would find it very hard to figure out what happened here.

(HEI104)

A fundamental flaw was associated with the need to populate categories 2 and 3 irrespective of performance and some interviewees expressed the view that it was “politically not acceptable” for a university to be outside category 1 (HEI402). The system of categorisation was considered to be leading to “undeserved reputational damage” (HEI502) and the antithesis of a supportive and developmental approach that “pitches institute against institute” (HEI304) in a “ranking system” (HEI304, HEI505) that punishes for honesty in declaring weaknesses (HEI304). The introduction of a system for classification of performance has a “coercive power” (Maingot and Zeghal 2008, p.275) and runs contrary to assurances given at the launch of the new HESPF that “it does not reflect any desire on behalf of the HEA to instigate a ranking system” (HEA 2013d, p.7). However, Locke (2014, p.86) contends that such systems still “represent an intensification of rankings logic”.

Three institutions, which did not meet the agreed performance level, now face a potential funding penalty.

(Boland 2016)

Paradoxically, Engwall (2007, p.101) cautions the state on its role in supporting HEI development and safeguarding against populist short-term approaches while Salmi (2009b) makes a similar observation.

Accountability should be less about justifying a poor performance and more about making strategic choices to improve results.

(*ibid*, p.126)

However, media attention towards rankings is unavoidable (Boland 2015; O'Brien 2016b; O'Sullivan 2016). ITT was the only HEI in the sample to appear in category 2 in cycle 2 and worked diligently to address weaknesses identified during cycle 3 but was bitterly disappointed and frustrated that its endeavours were not rewarded with an improved designation. Similar frustrations were felt in WIT which found itself relegated to category 2 in cycle 3 due to not reflecting its financial instability in a revised compact. Frustrations seemed to be linked to insufficient acknowledgement of key achievements as much as reputational issues.

### *Autonomy, Competition and Performance*

Introduction of PIs in other European countries was, in part, linked to an ambition to create more competitive sensitised autonomous institutions and in a way the categories reflect this approach although they are not being made publicly available for cycle 3, but the matter is being kept under review (HEI601). Aghion et al. (2010, p.43), in particular, found that autonomy combined with competition positively impacts performance of HEIs although autonomy in the Irish context is currently constrained by funding and staffing restrictions (EUA 2017). Lahr et al. (2014, p.34) found that "the sense of competition could lead easily to a feeling that it is against institutional interests to cooperate with other colleges and share best practices", which impacts on cluster objectives. Only one-third of respondents to the questionnaires indicated improved co-operation between HEIs arising from the HESPF, one of its key objectives. However, Seeber et al. (2015, p.1468) cautions that while "increased competition....may stimulate the pursuit of a peculiar profile, in fields characterized by uncertainty of outcomes it also spurs mimetic behaviour" reflecting a further dichotomy in the Irish context.

The HEA's message that tailoring and prioritising objectives would confer advantage (HEA 2014b, p.103) is consistent with the need to accommodate different institutional capacities as advocated by Salmi and Hauptman (2006a); Sharma (2004) and Dougherty (2011). However, the HEA's signal appears to be distorted during transmission or decoded with scepticism, with reputational risk strongly influencing co-operation with the new HESPF across all the KSOs, as evidenced in all the HEIs, and despite some expressions of support for the concept of objectives tailored to a HEI's capacity (HEI104, HEI401, HEI502). Following two cycles of

strategic compacts in Finland, Vuori (2015, p.324) likewise found that “despite the Ministry’s requests to be more specific, the definition of priority areas seems to be a task some institutions are unwilling to perform” while other HEIs have embraced prioritisation of strategic objectives.

#### 6.1.5 RQ1 HESPF Inhibitors to Planning – Lack of Incentives

Interview respondents were unanimously of the view that the new HESPF does not incorporate performance funding and is not incentivised, blunting its potential as an antidote to “common levels of mediocrity” as discussed by Jongbloed and Vossensteyn (2001, p.130) and de Boer and Jongbloed (2014). An “intelligent response of new investment” (HEI301) to support KSOs was generally considered essential if the new HESPF is to add significant value to the system and such investment was generally regarded as essential “if you really want excellence” (HEI103) and “if you want to really push organisations to deliver” (HEI301).

Performance based funding should be an incremental amount above and beyond what HEIs are already getting and funding should be an integral part of the strategic compact discussions - its absence is a major weakness in the process.

(HEI105, HEI205)

There was broad, though not exclusive, agreement that higher performing HEIs should attract additional funding with targeted support for a limited period for HEIs that are struggling. This is largely in line with recommendations from NCHEMS (2011) and Pruvot et al. (2015a). Withholding a percentage of funding pending satisfactory performance evaluation was deemed to be avoidance of a penalty, the value of which was in most instances considered to be not significant enough to influence co-operation with the new HESPF, which is consistent with findings of de Boer et al. (2015, p.22) and Chan (2015), especially if the HEI has access to diversified funding sources.

There are no performance funding incentives and performance cannot be improved by penalising institutions financially. The amount of money at issue is so small that it is not sufficient to impact behaviour.

(HEI105, HEI205)

This, ironically, could be attributed to the level of funding instability in the HE system and the sense that the system could not bear significant cuts, so the 10% penalty threat is somewhat defunct – “10% maybe too high to be credible as a penalty” (European Commission 2014b, p.6). This observation is also reflected in the lack of knowledge of the funding penalty at risk.

“Failure to put enough funding at risk” was also identified as a weakness by Cavanaugh and Garland (2012, p.35) and withholding funding pending performance is contra-indicated from the American experience (Dougherty et al. 2012; Li 2014). It is even interesting to note the contrast in language when describing Ireland’s approach, i.e. “funding penalty”(Boland 2016) and “10% funding at risk” (de Boer et al. 2015, p.11), compared to the Netherlands (“7% is added in the block grant” (*ibid*, p.10)) or Tennessee (“5.45% bonus” (*ibid*, p.12)). de Boer et al. (2015, p.22) recommend “attaching additional funding to performance agreements” especially when they are a “new steering device....or pilot” while acknowledging that scarcity of public funds may force one to top-slice. “Reward funding” was an integral component in the introduction of strategic compacts in Australia in 2011 (de Boer et al. 2015, p.36).

Reputation and “wanting to be the best we can for the country, for ourselves, for everybody” (HEI104) seeped through the responses as the most significant factor influencing performance, and this is consistent with the findings of Reale and Seeber (2011, p.20) - “the main levers are reputation and the institutional context, rather than funding”. There was little awareness by interview informants of the funding at risk in the HESPF, implying how little it matters.

This runs contrary to the HEA’s apparent belief, which is consistent with international trends (Strehl et al. 2007), that:

The introduction of a direct connection between institutional performance and funding in the second cycle of strategic dialogue has been a significant development.

(HEA 2016d, p.13)

Nonetheless, it also has to be acknowledged that the funding at stake was regarded as not unimportant across all evidentiary sources. Funding was released for cycles 1, 2 and 3 to all HEIs nationally, though three had to undertake some remedial work in cycle 2, which suggests that current funding deficits in individual HEIs make penalties unlikely and unbearable.

The HEA released the performance funding previously withheld.

(HEA 2016d, p.73)

#### 6.1.6 RQ1 HESPF Inhibitors to Planning – Unintended Consequences

##### *Managing to the Metrics*

Managing to the metrics was a significant risk associated with the new process, without embedding underpinning quality and performance improvements, along with camouflaging weaknesses to avoid reputational damage. These findings reflect aspects of the literature

which refer to incentive misalignment, defensive behaviours, escape patterns and gaming (Boberg 2000; Dill 2003; Feller 2002; Herbst 2007; NCHEMS 2011; Strehl et al. 2007; Taylor 2003). de Boer et al. (2015, p.20), in particular, caution that “performance agreements based on (primarily) quantitative measures are likely to hit the target but miss the point” and may result in cheating while Harvey and Williams (2010) found that evaluations with a significant accountability component do not inspire improvements.

People find a way to achieve the metrics without improving quality (HEI402). Out of fear and self-protection....there will not be full disclosure....you expose the warts that you simply can't hide (HEI502).

However, it has to be acknowledged that positive engagement with multi-level models of QA (Appendix B) and transparency instruments, such as context based multidimensional benchmarking (e.g. U-Multirank), along with emphasis on evidence-based reporting through the HESPF mitigate the risk of non-disclosure.

### *Level of Disclosure*

There were frequent references from interviewees to the danger that HEIs will tell the HEA what they want to hear to acquire funding and to avoid penalties and reputational damage. As currently constructed it was deemed to be “creating a break on the degree of honesty that people will engage in because they feel that this will come back as a stick to beat them” (HEI502), metaphorically reflecting the argument on advantage versus “cost of disclosure” made by Maingot and Zeghal (2008, p.275). There was a further risk associated with the possibility of Government and the HEA glossing over weaknesses in order to make a favourable report on the performance of the higher education system (HEI105, HEI205).

Boberg (2000, p.11) argues that any consideration of productivity gain is deficient in the absence of “consideration of the qualitative impact”. While there are many cushioned references to impacts on quality in the national performance reports (HEA 2014b; HEA 2016d), the QQI report on ‘Quality in an Era of Diminishing Resources’ (QQI 2016) only appears briefly in the 2017 HESPF report (HEA 2017b, p.89). Yet,

The ambition to continually improve quality is at the heart of the National Strategy for Higher Education. It transcends all the outcomes in this framework.

(HEA 2014b, p.78)

No definition is provided, although the multi-dimensional treatment of the subject reflects the definition presented by Vlăsceanu et al. (2004, p.46) and the model presented by Van Damme (2004, p.133). However, the HESPF struggles to provide threshold measures of quality, focusing mainly on a combination of an “externally relative” approach through benchmarking

and national surveys, “excellence standards” (*ibid*, p.133) in research, “corporate style criteria” (Maingot and Zeghal 2008, p.270) and some co-operation with the QQI in monitoring compliance with Bologna objectives for QA. This reflects the casting of performance agreements by de Boer et al. (2015, pp.12-13) - “they specify intentions to accomplish given targets, measured against pre-set known standards....[set as] the result of a political decision, a negotiation process among stakeholders, or a benchmark.”

## 6.2 RQ2 HESPF – Goal Displacement and Steering

The HESPF has generally not resulted in goal displacement amongst the HEIs in the study sample and is regarded as steering light, with the exception of the concept of the cluster, which is receiving a lot of emphasis from the HEA but is regarded by interviewees as impractical and unworkable. However, visibility of the national goals has been credited with assisting HEIs in aligning their ambitions with the national agenda and sharpening focus on goals and their achievement. All of the HEIs report alignment of resources with priority projects but funding is a limiting factor. Reputation has a significant influence on co-operation with the new HESPF along with a recognition of the importance of accountability for public funding and compliance with national policy. These findings are discussed in the sections that follow.

### 6.2.1 RQ2 HESPF Strategic Influence & Steering

#### *Strategic Influences*

Evidence gleaned from the research strongly suggests that the strategic compact flows, in most cases, from the HEI’s strategic plan which is influenced by international trends, regional engagement, TU ambitions in the case of the IOTs, and public policy which is enunciated in various ways.

These are global expectations of universities and all that’s happening in this exercise here is that it is codifying them, but not actually requiring any dramatic changes in our behaviours....that was my sense of it.

(HEI105, HEI205)

It was also emphasised that “what happens nationally in the debate is only part of our day-to-day activity, so you can’t over influence it” (HEI102) and that “our motivation and everything that we do....is to raise the standard and the ability of the Irish sector, as a whole, to compete

internationally” (HEI101), particularly in the larger HEIs. This global influence is consistent with the findings from an international study by Seeber et al. (2015).

Meaningful variations in the form of universities are to a large extent linked to the degree of modernization influence, while the characteristics of the national institutional frames play a limited role.....the main role of the national institutional frames has been indirect, in affecting the pace of penetration of political narratives, while having a secondary influence on the content of the policies.

(*ibid*, p.1469)

But, the smallest HEI was stressed to the point where the compact was considered to be “dominating the HEI’s strategic planning” (HEI501). There were also small pockets of influence that resulted in deploying additional resources to specific areas such as retention and international recruitment. These varied effects are reflective of what Klumpp et al. (2014) refer to as contextual and timing factors associated with institutional profiling and mission-based performance funding.

Publication of the national goals through the HESPF process was considered by both interviewees and questionnaire respondents to assist with alignment and in sharpening focus, including prioritisation, on goals and achievement.

Visibility of the national goals helps alignment and policy discussions with academic units (HEI402). It is bringing some of our existing KPIs more sharply into focus (HEI301). The annual touch base really does encourage moving forward on the goals set out for that period of time (HEI102).

### *Steering*

The HESPF is considered, by interviewees, as mostly steering light with the exception of the smallest HEI – “it is regarded as the biggest show in town as regards our performance....it is steering us quite strongly” (HEI502) - and not impacting on autonomy, with the exception of the cluster arrangement and the merger requirement for TU designation. It wasn’t possible to distil out this component from the questionnaires which may account for the somewhat lower autonomy finding in the quantitative analysis. The concept of the cluster was the subject of a lot of attention but little or no support from interview informants and “Munster” is criticised by the HEA for “not reporting similar levels of performance” to other clusters (HEA 2016d, p.65). It was variously described as a “notional idea” (HEI404) lacking a “clear strategy” (HEI402) or “compelling case” (HEI105, HEI205) and “effectively non-existent” (HEI503). However, the HEA planned to continue this agenda in 2017 with funding “to incentivise those making the most efforts” (HEA 2016d, p.65).

The difficulty for us is that there is a certain consumption of time associated with it....with senior people....and there is a financial penalty for not adhering to central bureaucracy’s objectives.

However, 2018 has seen a reconsideration of cluster policy – “On regional clusters, there is a policy gap at present and the clusters/fora landscape will need to be defined” (HEA 2017b, p.103).

Pruvot et al. (2015a), Neave (2012, p.31), Burquel and van Vught (2010) point to dissimilar capacities for adaptation as one of the challenges in reforming or homogenising systems. While it could be argued that the capacity issue is relevant to the staggered progress on the TU agenda across the sector, Marginson’s argument on primacy of ambition between competing HEIs (Marginson 2016a), combined with a perceived lack of a coherent strategy for the clusters, would appear to be of greater relevance. Geographical spread, inconsistency with HEI goals, stakeholder needs, competition for students (i.e. funding) and a veiled rationalisation agenda were also identified as key inhibitors.

### 6.2.2 RQ2 HESPF Reputation & Compliance

Reputation - referred to by Neave (2012, p.192) as a “central nexus” - was acknowledged across all of the HEIs, and strongly so, as one of the key drivers in co-operating with the new HESPF.

Reputational risk is important to us, we’d find the performance money/penalty elsewhere.

(HEI103)

HEIs are dependent on their reputation and achievements in attracting students, staff, investment, industry/research partners regionally and globally, and positioning in international rankings so it is unsurprising that this features highly in the value chain – international standing is considered “instrumental to prestige” (Seeber et al. 2016, p.685). Despite “reservations about international league tables” the HEA acknowledges that:

In many other countries, that are important for Ireland either as a source of inward investment or for recruitment of students, such league tables have a high level of visibility and credibility, and contribute to the reputation of the system.

(HEA 2014b, p.76)

Reputation at local level, or at least avoidance of category 3 designation, was considered particularly important in student recruitment among the IOTs, with regional embeddedness of far greater significance than international rankings.

A compliance culture was also emphasised across all of the HEIs and commitment of staff to students and the organisation was frequently cited as a key factor in institutional performance.

What motivates most academics....is a sense of pride, doing the best for their students, doing the best for their discipline, publications, public service, contribution to the old academy....if I could use that phrase.

(HEI103)

### 6.3 RQ3 HESPF Institutional Capacity

The major deficits identified in institutional capacity to respond to the national policy implementation relate to funding and the lack of an appropriate HR toolkit to manage institutional resources. However, these major risks were identified as being outside the HEA's direct control. Institutional research capacity was identified as an infrastructural gap for all but the largest HEI, both in terms of complying with the requirements of the HESPF process and in managing the "reservoir of institutional intelligence" (HEI402) to support strategic planning processes – capacities that Salmi (2007, p.228) views as critical. However, the HEA's focus narrows to management information to "understand....respective contributions to financial performance" (HEA 2016d, p.69). These issues are explored in the following sections.

#### 6.3.1 RQ3 HESPF Funding

Lack of funding was the dominant constraint identified across all of the HEIs in responding to the national agenda. It manifested itself in the form of infrastructural deficits, recurrent financial deficits, lack of funding to support or incentivise achievement of the national KSOs, diversification of funding streams to offset Government investment in HE, and the onus on the Government to fulfil its side of the compact in terms of investing in the delivery of the national KSOs and putting in place a sustainable funding model for HE.

There are capacity gaps in terms of the technology, the infrastructure, estates, space....and this hasn't been supported by national policy and the framework.

(HEI103)

Hauptman (2014, p.6) emphasises that sustainable funding "must be a key goal" and that the system should encourage "innovation and risk-taking".

Funding and infrastructural deficits were referred to, time and again, as limiting capacity to respond to national policy objectives with particular reference to the quality of the teaching and learning environment, international reputation and capacity to respond to the demographic bubble (HEI103, HEI204, HEI301, HEI404, HEI501), a factor acknowledged by the HEA as limiting "capacity to continue to provide places" (HEA 2016d, p.71), "near to market technical familiarity" (*ibid*, p.25) with concerns emanating from industry on the "calibre of graduates" and state funding for HE (HEA 2017b, p.24). There is significant criticism of the

lack of prioritisation of resources, capital and revenue in the strategic dialogue process (HEI105, HEI205).

I think the HEA are still waiting for things to start falling over even though everyone is complaining about the money....they have said it to us that they are not aware of anything that has collapsed as a result of the funding.

(HEI203)

Funding constraints and financial deficits were considered as prominent on day-to-day agendas and are significantly impacting on most HEIs' capacity to take major strategic decisions.

I would say that over the last few years, the resources that have been available to us have been shrinking at such a rate that we actually haven't been able to make a strategic decision, anyway.

(HEI102)

Each of the five HEIs has adopted major strategies to address the financial sustainability of the organisation which involves diversification of funding streams (international students, philanthropy, commercial activities, research income, lifelong learners (HEA 2016c)), an approach which the HEA describes as "critical" (HEA 2016d, p.69) but yet cautions that "those who have recourse to such strategies will make progress....further widening performance and other gaps" (ibid, p.74), consistent with concerns expressed by Claeys-Kulik and Estermann (2015) around the strong getting richer, Brankovic (2017) on shaping status hierarchies, and Reitz (2017) in relation to competition and academic stratification.

Irish HEIs are not at the same level of resilience when facing budget cuts from the Irish government. Those institutions which are more heavily dependent on the government funding will encounter more struggles than the ones with more diverse income sources.

(Zhang et al. 2017, pp.1618-1619)

This point is echoed by the HEA's acknowledgement of the "uncertainty around future success" from diverse revenue streams and the associated impact on financial planning (HEA 2016c, p.30). Clark (2004a, p.179) describes high-reputation academic units as a "stunning, self-sustaining phenomenon" while Marginson (2014, p.46) classes status as "a circular game in which power makes itself".

One of the leading actions in our strategic plan is financial sustainability and everything else then becomes possible.

(HEI101).

In 2016, Education Minister Jan O’Sullivan announced plans to almost double the number of international students to boost the income of ailing colleges and universities by 2020 (Loughlin 2016). The challenge facing Ireland in this domain is very significant as its leading HEIs (NUIG being the exception) had been slipping in commercial international rankings (Murray 2016b) although this began to stabilise in 2017/18, and Ireland currently accounts for less than 1% of incoming tertiary education mobile students to the EHEA (European Commission/EACEA/Eurydice 2015). Additionally, international enrolment is strongly biased towards three disciplines – Health & Welfare; Arts & Humanities; Business, Administration & Law - and the university sector (72% of international enrolments), thereby limiting its potential for the IOT sector (currently 18%) (HEA 2017a). However, it has to be acknowledged that performance management when combined with an entrepreneurial culture and a diversified funding base has been found to yield positive results (Kuoppala 2005). The vast majority of interview respondents expect diversified funding to loosen the hold of the state which may impact the state’s capacity to use performance funding as a “lever for change” (HEA 2016d, p.13) or “drive performance” (*ibid*, p.8).

### 6.3.2 RQ3 HESPF Human Resources\_Industrial Relations (HR\_IR)

Lack of an appropriate HR toolkit was identified as a major barrier across all of the HEIs – “leveraging more flexibility in employment contracts...would be a game changer” (HEI103). There is no facility to reduce staffing or adjust contracts in areas that go into decline and HEIs are left to carry the financial overheads associated with this which constrains their capacity to stretch targets or expand into new areas.

You can’t transfer people and if you close a programme you are still left with the employment costs.

(HEI105)

A report on the financial health of the IOTI sector acknowledges that “the inflexibility around how staff can be deployed is a major restriction on financial performance” (HEA 2016c, p.5). Yet, the Government has set a lofty ambition to make Ireland’s education system the “best in Europe over the next decade” (Department of Education & Skills 2016a, p.1) but it ranks 19<sup>th</sup> in the world (12<sup>th</sup> in Europe) in 2018 according to Universitas21 (Williams and Leahy 2018).

It will be difficult to achieve while funding lags well behind many others.

(HEA 2017b, p.86)

It also acknowledges that reform of the HE landscape, one purpose of which is to “release capacity” (HEA 2014b, p.24), “is likely to be held back as the HEIs do not currently have the full

management and governance toolkit typical of institutions in the best performing higher education systems” (HEA 2014b, p.13). The EUA argues that “in order to compete in a global higher education environment, universities must be able to hire the most suitable and qualified academic and administrative staff without external prescriptions or interference” (EUA 2017).

We haven’t had it for the last decade, we don’t have it today and we’re not going to get it in the near future.

(HEI105, HEI205)

The EUA declares academic freedom, autonomy and financial sustainability as “pre-conditions for the success of universities in contributing to Europe’s competitiveness” (EUA 2015a, p.5). Ireland ranks second last in Europe in staffing autonomy (EUA 2017) and lies on the “periphery of Europe” in financial autonomy (Estermann 2014, p.7), but few European HEIs are completely autonomous (Aghion et al. 2008; Williams and Leahy 2018). Indeed, in 2016 the Government introduced a new concept labelled “earned autonomy” offering “new flexibility for appropriate HEIs within strict budgets” but with no commitment to a sustainable funding model (Government of Ireland 2016c, p.94) or to staffing flexibility. It is questionable then whether there is a mutual interpretation of the “shared sense of the balance that is required between institutional autonomy and public accountability” as articulated in each of the strategic compacts (UCC 2014a, p.2).

University leaders seek to maintain a healthy balance between necessary accountability towards public authorities and society and institutional autonomy.

(EUA 2015b, p.3)

In addition, lack of funding is impacting on staff development and the economic crisis and related matters have led to an “increasingly difficult IR environment” that makes change difficult (HEI202). The HEA has also identified the need to “develop management and leadership capacity across the IoT sector” (HEA 2016c, p.9).

### 6.3.3 RQ3 HESPF Institutional Research Capacity

The largest HEI in the sample reported having mature strategic planning and performance monitoring systems, with accompanying infrastructure in place for many years (HEI101). The other HEIs have implemented strategic planning processes but reported gaps in institutional research capacity which are “leading to an oversimplification of the kind of metrics that institutions can deal with” (HEI302) and which can result in a “limited portrait of actual performance” (de Boer et al. 2015, p.20). This deficit was described by Pheatt et al. (2014, p.21) as “leading the list” in terms of “inadequate capacity” to respond to performance

funding initiatives, and as “prerequisite” to developing reliable indicators by UNESCO (Martin and Sauvageot 2011, p.13). While these gaps are being addressed there is also criticism of the level of co-ordination across Government agencies in terms of the information requests being imposed on HEIs.

Assimilation of the new framework within HEIs varied from “a reinforcement of the way we were doing things anyway” (HEI101) to “relatively well assimilated” (HEI401) to “maybe 5 years” (HEI504).

The key to it will be to translate institutional metrics into operational metrics that are meaningful on the ground for each school....but it can only be by agreement.

(HEI202)

Surprisingly, de Boer et al. (2015, p.17) highlight that, in many countries, improving strategic capacity has been a “side goal” of introducing performance compacts whereas it is integral to the process in Ireland without being clearly articulated amongst the goals. However, differentiation at sub-unit level is a challenge (Burke 2003; Dougherty 2011; Fagerlind and Strömquist 2004; Lattuca et al. 2010; Locke 2014; Neumann and Guthrie 2006; Taylor 2006). Clark (2004b), in particular, cautions that entrepreneurial academic units can be difficult to integrate into the overall HEI’s strategy due to the extended periphery of their work beyond the boundaries of the organisation, as envisaged in the HESPF. This point was also reflected by one of the interviewees.

Plans/KPIs are influencers....but don’t overthink that is what drives behaviour. External opportunities drive behaviour but that is not easy to plan as an institution.

(HEI102)

The HEA reports that “Ireland can be assured of the strategic capacity and intent of its higher education institutions” (HEA 2016d, p.78), while acknowledging that some improvements are required in benchmarking, prioritisation and strategic focus (HEA 2016f; HEA 2017b). However, such a process has the potential to fall prey to “friendly benchmarks that provide soft landings” (Clark 2004a, p.172) and there is a strong note of caution from within the sector.

We have a situation where the system change is so substantial as to nearly disable organisations from really strong effective planning.

(HEI302)

Thorn (2018, p.173) had earlier identified that “for the IOTs, life was about to become very complicated”.

## 6.4 RQ4 Behavioural Influence and Scale of Expectation

The national KSOs were generally considered as laudable and relevant but lacking in realism mainly due to the absence of any supporting funding towards the KSOs. There seems to be an expectation within HEIs that all of the national HLIs need to be addressed and the threat of penalties and risk of low categorisation are fuelling this, despite the HEA's emphasis on prioritisation. In essence, the levers being used by the HEA to bring about performance improvements, differentiation and change within the system appear to be having a negative impact on the outcomes they are seeking to achieve. While visibility of the national KSOs/HLIs is regarded as a positive and aids policy diffusion, they are generally regarded as not incentivising or impacting on behaviour within HEIs. This runs contrary to expectations from performance funding as articulated by a number of authors (Agasisti 2011; Eurydice 2008; Jongbloed 2010; Salmi and Hauptman 2006b) although de Boer et al. (2015, p.15) describe evidence linking "performance agreements (or performance-based funding) and quality, productivity and efficiency in higher education" as not compelling while acknowledging that "clear improvements" were observed following their introduction. An analysis by Pruvot et al. (2015a, p.11) across Europe reveals that "expectations of performance-based funding are often too high and should therefore be used with caution", with Estermann and Claeys-Kulik (2016) recommending a cautious approach in using such incentives. These behavioural influences and expectations are explored in the sections that follow.

### 6.4.1 RQ4 HESPF Behavioural Influence

#### *Competing Influences*

Visibility and articulation of the national KPIs is regarded as a positive aspect of the new HESPF by interview respondents, drawing together the expectations of Government on the HE system, even though these priorities are already articulated in different ways through other policy channels. Visibility of the national KPIs is considered to help alignment of HEIs' strategic plans and in "policy discussions" (HEI402) within HEIs. However, they are considered to be not incentivised or funded, with little or no impact on behaviour, and would have happened anyway irrespective of the HESPF, reflecting the casting of the Hunt report by Walsh and Loxley (2015, p.1142) as a "synthesis of existing policies" as opposed to a "revolutionary transformation" of HE.

My comment on the Hunt report at that stage, which of course was a forerunner to what is in the strategic compact, was that there was virtually nothing new in that which we weren't doing ourselves. In fact, I asked a simple question: what is the added value of that exercise?

(HEI105, HEI205)

This reflects findings from the Australian experience where “there is an increasing sense that they amount to a bureaucratic burden, with few positive effects on institutional behaviour” (de Boer et al. 2015, p.38). Natow et al. (2014), in turn, found that there is a need to control for competing influences when assessing the impact of state policies on HEI performance.

TU criteria are the main driver for all of the IOTs in the sample and meeting the needs of regional stakeholders is relevant for all of the HEIs. Global expectations and a global outlook are considered to have an even greater influence on the strategic plans of the HEIs with strong research profiles and this is considered a great strength for the HE system and for the Irish economy.

We are actually working on a global scale. Our major partners are not the ones in the country (HEI102). We set out in our strategic plan that our motivation and everything that we do...the purpose of it...is that we raise the standard and the ability of the Irish sector, as a whole, to compete internationally. That is where the competition is.

(HEI101)

“A big positive implication of the use of KPIs is the concept of making central the idea of measuring performance and measuring relative performance” (HEI303) and in “showing the value of the institution” (HEI201). This appears to be the biggest influence of the new HESPF, reflecting the power of performance indicators as highlighted by Frølich (2008) and Lewis et al. (2007).

### *Challenges to the Differentiation Agenda*

There are concerns that the HESPF is encouraging isomorphic behaviour which runs contrary to discipline based specialisations envisaged in the national strategy for higher education. “Homogeneity in programme offerings” (HEI103) is associated with the imperative to get “bums on seats” from a funding perspective (HEI204), as “ideas travel on the institutional network” (HEI502). While the HEA’s language of evaluation speaks to a prioritisation and excellence agenda, as envisaged in the European Commission’s communiqué (European Commission 2006, p.3) and similar in concept to the Danish and Dutch models (de Boer and Jongbloed 2014; de Boer et al. 2015), the politically sensitive attendant rationalisation agenda hasn’t been dealt with openly (HEI304) and key enablers are not in place to support such a process, e.g. HR toolkit.

The [Dutch] government wishes to....reward institutions that seek to differentiate themselves from other institutions in terms of the degree programmes they offer and the disciplinary areas covered in their research.

(de Boer et al. 2015, p.4)

An evaluation by Massaro and Thorn of initial TU submissions in 2012 found that “the commitment to formal and effective regional clustering was weak” and there was “little evidence that there would be any significant level of voluntary rationalisations”, counter to the major objectives of the national strategy for HE (Thorn 2018). There was a strongly expressed view from interview informants that rationalisation of provision and discipline specialisation run contrary to regional needs. Pruvot et al. (2015a, p.15) acknowledges that “the most relevant geographical level at which to measure diversity” in a system is a challenging question.

The national KPIs were also described as “not adequately capturing, or needing nuance to capture, the different institutional visions....[and] as expressions of quality” may be contributing to isomorphism (HEI303).

There is a risk of homogeneity if HEIs' strategic plans become slaves to the national KPIs and an oversimplification of what the strategic planning process should be.

(HEI302)

Interestingly, Orr et al. (2007), Klumpp et al. (2014) and de Boer et al. (2015) attribute homogenisation, similarity in objectives and mimetic behaviour to indicator based systems and target agreements operating through a process where HEIs are rewarded similarly for similar outputs and peer reviews do “not usually encourage outliers” (Klumpp et al. 2014, p.169). The HEA found “less evidence of diversity within the sectors” (HEA 2016d, p.13) which is inconsistent with the “purpose of restructuring” (HEA 2014b, p.24) and which may well continue for the foreseeable future as all four IOTs in the sample (amongst others (HEA 2016d)) have set their sights on achieving the criteria for TU status. Huisman et al (2007) caution on the potential for mimetic behaviour arising from merger operations and File and Huisman (2016, p.37) found that “the goal of profiling Finnish universities has not been achieved” through the merger reforms. However, de Jager (2011, p.1) found that a desire to build a unique brand was far stronger than the practice of emulating more prestigious counterparts and this is critical in the HEA’s ambition towards a differentiated system. de Boer et al. (2015, p.21) argue for “specificity” in institutional contracts in supporting diversification – consistent with the Hamburg Declaration (Altbach 2017) - cautioning that common objectives “bear the risk of institutions all moving into the same direction” and this is an area that would appear to require significant attention moving forward. de Boer et al. (2017, p.271) also identify policy continuity and sufficient resources as key indicators of success in policy reforms related to institutional profiling.

## 6.4.2 RQ4 HESPF Scale of Expectation

There had been an initial tendency, based on both expectation and ambition, to push our profile towards the perimeter of the HEA web profile diagram, through the compact targets....but we had to pull back because of resource constraints.

(HEI202)

This quote reflects an expectation by all the HEIs within the sample that each HLI within the framework would need to be addressed in order to be deemed to be meeting the requirements of the process, particularly with reference to achieving category 1 status, while acknowledging that “the HEA would respect an institution....that prioritised” (HEI203). Lack of clarity in relation to criteria and scoring systems for evaluation is not assisting in this regard. The HEA’s message that tailoring and prioritising objectives towards areas of excellence (HEA 2014b, p.103) is consistent with the need to accommodate different institutional capacities as advocated by Dougherty (2011), Pruvot et al. (2015a) and (Salmi and Hauptman 2006a) and is consistent with messages emanating from the EU (European Commission 2006). However, the HEA’s signal appears to be distorted during transmission or decoded with scepticism, with reputational risk strongly influencing co-operation with the new HESPF on each of the KSOs, as evidenced through interviewee responses across all the HEIs.

HEIs should limit the KSOs addressed but they will not get away with it.

(HEI401)

The national KSOs were described as “a brain dump of priorities that have come from different sources” (HEI304) and mapping them onto an educational framework is adding a further layer of complexity.

It is also questionable how meaningful some of the current national KPI targets are for a HE system that is experiencing a funding crisis. For instance, the current “medium-term target for international students to represent 15% of full-time students” (HEA 2016d, p.12) was recommended as far back as 2004 (Government of Ireland 2010b, p.30), had reached 8.8% by 2014/15 (HEA 2016d, p.1), 11.6% in 2016/17 (HEA 2017b, p.68) and is currently described as an “aspiration....that remains challenging but valid” (ibid, p.53). Similarly, progress on socio-economic, mature and disability entrants are in many instances projecting decreases (HEA 2016d, p.1) rather than growing towards the national access targets (HEA 2015k, pp.35-36). Ireland also faces significant challenges in adult participation in lifelong learning if it is to reach the EU 2020 target of 15% (European Commission 2011, p.7) from its relatively low base of 7% in 2010 and 6.4% in 2016/17 (HEA 2017b, p.35). Most worryingly, a review of the financial

health of the IOTI sector emphasises that a lack of additional funding will essentially hamper most KSOs.

Without a major shift in capital infrastructure development, HR flexibility, streamlined delivery costs or additional recurrent funding, there may be no choice but to place restrictions on student intake to ensure a minimum quality of provision is maintained.

(HEA 2016c, p.7)

In addition, uncertainty around the criteria for TU designation, which has been beset with political and IR issues (O Connor et al. 2016), leaves institutions in the unenviable position of trying to hit targets and meet conditions that are, as yet, not finally determined. Yet, this point is not quite accurately reflected in the second HE system performance report.

Requires consortia to meet the very robust performance and quality criteria that have been set down for merging institutes who wish to apply for the new technological university status.

(HEA 2016d, p.13)

## 6.5 Summary

Overall, the HESPF is generally regarded as a good concept that has resulted in improved accountability through a process of constructive dialogue between the HEA and HEIs. However, it is regarded as not sufficiently strategic, not enabled by funding, a bureaucratic overload, potentially open to deceptive tactics and there are mixed views on the extent to which it improves visibility on performance. Steering through the HESPF is regarded as light, and at the appropriate level, and the process is grounded in HE activity. However, the level of diversity desired within the two main sectors is not being achieved, particularly with respect to programme provision. The level of realism in the national KPIs is questionable in the current funding environment and they are regarded as not impacting behaviour in any significant way. Notwithstanding this, the process is generally regarded as leading to improvements in strategic planning capacity building, and self-reflection and institutional learning are regarded as strengths of the process. The HEA, in its final report of the three-year cycle, acknowledges the non-sustainability of the current operating environment.

There are limits as to what a coherent institutional strategy can deliver, however, without tackling wider issues around historic funding deficits, the HR framework and the broader context in which HEIs operate.

(HEA 2017b, p.6)

## Chapter 7 Conclusions and Recommendations

### 7.1 Conclusions

The main aim of this research study was to examine the extent to which HEIs are responding to the policy goals envisaged in Ireland's new Higher Education System Performance Framework. In particular, the study explores the extent to which the framework aids or inhibits institutional planning and whether institutional goals are being aligned with the national agenda. The extent to which the national performance indicators for the higher education sector are incentivising behaviour is also explored, along with capacity/resource and visibility issues. The conclusions drawn from the research in relation to these matters are presented below, along with contributions to knowledge. Recommendations are presented against the background of the common aims of performance agreements internationally.

#### 7.1.1 HESPF Influence on Goals and Performance

The HESPF 2014-2016 Second Report (HEA 2016d, p.1) describes the performance compact and strategic dialogue process as "enabling delivery of system objectives". Evidence from this research study found that while the strategic dialogue was regarded as both a good concept and constructive, and visibility of the national KSOs was positive in helping align HEIs' strategic plans, the new HESPF was generally regarded as not developmental in nature, in need of being elevated to a more strategic level, not materially impacting behaviour or goals through the KPIs, not enabled by funding and the somewhat defunct funding penalty is not seen as a reverse incentive.

These findings are consistent with key ingredients for success of performance funding instruments proposed by Lewis et al. (2007) and Pruvot et al. (2015a) - an overall plan constructed through true dialogue on system design and contract negotiations, supported by a funding set-aside (i.e. additional money) that is large enough to influence behaviour and reward achievement without having a destabilising effect. Marginson (2014) emphasises grounding of evaluations in real university activity and this is regarded as a key strength of the approach adopted by the HEA as part of the strategic compact process. The set-aside is absent in Ireland's HESPF in that HEIs compete to get their own money back, as they see it. Dougherty (2011, p.17) advises "avoidance of hold back" as critical to retaining support for performance funding and both NCHEMS and Dougherty (2011) endorse "reward for progress....and continuous improvement" (NCHEMS 2011, pp.3-4) which is less obvious in the Irish context, particularly in the system of categorisation which is seen as structurally flawed and, as such, is seen as subject to perverse effects. It is difficult to shake off the persuasive nature of funding associated with key performance areas (Herbst 2007).

Information arouses attention, but money levers action.

(Burke and Minassians 2003, p.2)

Kettunen (2016, p.109) found that performance funding based on output indicators “diminished the importance of the performance agreements” and McGuinness (2011) found that performance funding had more of an effect than budgeting or reporting in leveraging performance so there are competing models out there if the current implementation of the HESPF is not seen to deliver on its objectives.

The national performance reports (HEA 2016d; HEA 2017b) also outline positive trends in terms of growth in enrolments, MST graduates, international students, research performance and restructuring of the IOT sector from 15 to 7 HEIs, while acknowledging a significant deterioration in the staff: student ratios (1:15.6 to 1:20.6) and challenges in 'equity of access' as a proportion of new entrants. In contrast, performance agreements introduced in the Netherlands in 2012 focus on “improving quality instead of quantity (student numbers)” (de Boer et al. 2015, p.28), with a related emphasis in Australia (*ibid*, p.36). There are also time lags (HEA 2016d, pp.82-86) in establishing if performance measures are proving effective thereby challenging the potential for timely corrective or adaptive action, and lag times between improvements and supporting funding (Dougherty and Reddy 2011). The positive trends in Ireland’s HE system are undeniably impressive, particularly given the difficult economic environment since 2008.

Given the significant additional ask of the institutes generally because of the implementation of the National Strategy, and in the context of a significant decline in resources, it is a major achievement that students continue to be taught and that research is sustained.

(Thorn 2018, p.186)

Evidence from this research study suggests that these achievements are generally not attributable to the new HESPF but more so to the resilience, during a period of austerity and retrenchment, of HEIs who continued to “do world-class research, to attract international staff and students, to partner with industry, and to deliver a strong education” (Prendergast 2014, p.3) – a phenomenon that Neave (2012, p.29) refers to as “self-exertion to meet public expectations – but to do so as a result of their own efforts” as regulatory intent “does not always guarantee capacity”.

Improvements in the Universatis21 world ranking of outcomes (Connectivity and Output) have offset deteriorations in inputs (Resources and Environment) to keep the overall rank (19<sup>th</sup>) unchanged.

(Williams and Leahy 2018)

Strehl et al. (2007, p.27) had earlier characterised this as an expectation that HEIs would “improve their own capacity for expansion and renewal” and opponents of performance funding have criticised it as an “excuse to cut back on regular state funding of HE” (Dougherty 2011, p.5). Dougherty also advises on the need to “control for competing causes of changes in institutional outcomes besides performance funding” when assessing its impact (*ibid*, p.10). Claeys-Kulik and Estermann (2015, p.53) in turn emphasise that the effects of performance funding are “hard to control and are highly dependent on other factors” which include regulatory frameworks, governance and management, and the funding constellation at play for HEIs in a particular sector.

Validity of having a policy framework supported by a process that provides practical guidance was strongly recognised by interviewees in this research study. The importance of complying with national policy was acknowledged as a key driver in co-operating with the new HESPF, with reputational risk also high in the list of priorities. Each of the HEIs is strongly guided by its mission which includes regional relevance in all cases, research performance and strong global orientation for the larger HEIs (particularly UCC), and TU ambitions for the IOTs in the sample. There is a tension between the primacy of ambition of each HEI and the level of co-operation envisaged through the concept of the cluster which falls prey to increasing reputation at the expense of co-operation (de Boer et al. 2015).

### 7.1.2 Accountability, Steering and Diversity

Improved accountability is seen as a strength of the process, consistent with the literature (Jongbloed 2010; Jongbloed and Vossensteyn 2001; Leeuw 2009). Apart from the cluster, feedback from interviewees suggests that, in general, the steering touch is light and at the appropriate level as the HEA seeks to develop a “coherent means of co-ordination”, as proposed by Marginson and van der Wende (2009, p.54). However, the HEA is struggling to make sufficient progress on diversity within sectors which one could contend is linked to what Van Vught (2008, p.162) refers to as “uniformity of environmental conditions”, “academic norms and values” and a funding model that encourages isomorphic behaviour in programme provision. Hazelkorn (2012, p.852) points out that “balancing autonomy and accountability with diversity” is difficult and Castro and Ion (2011) argue that centralisation of decision making presents an additional challenge. NCHEMS (2011) recommend a “model that promotes mission differentiation” (p.2), consistent with the HESPF, with “different metrics/drivers for different kinds of institutions” (p.2). Dougherty (2011); Dougherty and Reddy (2011) and Cavanaugh and Garland (2012) make similar recommendations. Mission or sector specific metrics are not apparent in the HESPF but it could be argued are inherent in the principle of prioritisation enunciated by the HEA and through the restructuring and

consolidation agenda, although a HR facility to release capacity to enable this core agenda item is absent (HEA 2014b, p.24). It is also of concern that the restructuring agenda and internationalisation are the two dimensions with the lowest awareness levels among staff, given their centrality to the national strategy for higher education. Mergers and the TU agenda - which is more than three years behind schedule – have been beset with IR issues and political intrusions and the attendant legislation was not in place until March 2018.

While there is currently some ongoing uncertainty on the process, criteria and legislation involved in such a designation, the broad parameters for an internationally credible Technological University are indisputable.

(IT Carlow 2017a, p.6)

Any further interruptions to this process could cause this key system objective to dissolve very rapidly, further impacting on Ireland’s ambition towards a smaller number of higher quality, more efficient and differentiated HEIs as envisaged under the national strategy (Department of Education & Skills 2011). Rabovsky (2014, p.268) adds that the “predispositions of organisational leaders can influence implementation” adding a further layer of complexity given the level of change in top leadership positions in the IOT sector since the commencement of the landscape reform process.

### 7.1.3 Capacity Issues

Evidence from strategic plans and HEA evaluations of strategic compacts suggests that HEI’s in the sample have developed strategic planning capability over the years or are in the process of strengthening this capability (including benchmarking) where gaps have been identified during the strategic dialogue process. Sharpening focus on goals and their achievement is viewed as a positive outcome from the process within HEIs. The HEA is seeking to harness this capacity through the new HESPF to contribute to the national agenda for reform in HE, a quality which Burquel and van Vught (2010, p.253), Hazelkorn (2012, p.852) and Salmi (2007) regard as critical. Institutional research capacity to support the strategic planning and performance management processes is proving a challenge to all but the largest HEI and this area is being prioritised for attention. However, there is no evidence of additional funding to bridge this gap. This deficit was also found by Pheatt et al. (2014, p.21) to be one of the main gaps in HEIs’ armoury.

However, the related requirement to diversify funding sources and reduce dependency on the public purse, a key plank of the national strategy and a key element of Clark’s entrepreneurial university (Clark 1998; Clark 2004b), is in its infancy and is likely to prove very challenging for

all but the most prestigious HEIs (Claeys-Kulik and Estermann 2015), potentially extending the performance gap between institutions .

High-reputation academic units are a stunning, self-sustaining phenomenon. It is a competitive advantage of the first order.

Clark (2004a, p.179)

A further gap was identified across all HEIs in relation to the availability of an appropriate HR toolkit to manage this key resource, a facility that is regarded as critical for high performing HEIs (HEA 2014b; HEA 2016c; Salmi 2007) and in “releasing capacity” (HEA 2014b, p.24) to support the reform agenda – “this fixed cost...is largely outside their control” (HEA 2017b, p.6). There is no expectation that this issue will be resolved in the near term and there is increasing frustration at Government indecision on a sustainable funding model for HE, despite the options presented by Cassells (2016).

The University considers that decisions on the Cassells report are urgently required.

(HEA 2017i, p.3)

#### 7.1.4 Parity Between Process and Outcome

The new HESPF is subject to some of the weaknesses most commonly associated with quality assurance, evaluation and performance funding - cost, bureaucracy and overload, appropriateness of indicators and benchmarks, political symbolism, and opportunities for deception (Dougherty et al. 2012; Feller 2002; Heinrich 2007; Salmi 2009b; Stake and Schwandt 2006; Takayama 2012; Van Damme 2004). Many of these weaknesses can be ameliorated if there is an institutional willingness and capacity to incorporate assessment outcomes into organisational improvement processes, supported by a culture where quality is built on a foundation of “shared values” (Kottmann et al. 2016, p.7), is regarded as never fully “redeemable” (Stake and Schwandt 2006, p.417), is dynamic and invokes a whole of institution approach (European Commission 2014c), and where there is “message credibility” (Srinivasan and Kurey 2014, p.24).

Focus on quality should always be to enhance and improve the current status and develop the systems that assure it. This means that quality is an ongoing exercise: it is not a state that is reached once and for all but one that needs to be pursued continuously.

(EUA 2006, p.10)

This points to the need for parity between process and outcome/output related emphasis in the strategic compact process, achieving a balance between what de Boer et al. (2015, p.13) terms “hard and soft contracts”, in the consideration of institutional self-evaluation reports

and a strengthening of trust in how such outputs will be used, while not undermining public confidence in the process (Eurydice 2008, p.7).

Focus on quality assurance processes and structures needs quality culture to avoid window dressing.

(Westerheijden 2016, p.32)

Self-reflection and institutional learning are regarded by interview informants as strengths of the new process, with particular reference to benchmarking. However, the need to match weaknesses, identified through self-evaluation, with supports rather than some punitive approach is regarded as a gap in the new framework process.

#### **7.1.5 Influence of the National KPIs**

The national KPIs (i.e. HLLs) are regarded as consistent with global expectations of HEIs, commendable and pertinent, but lacking in realism due to the gap between performance targets, capacity and planning, not least attributable to funding deficits. Pruvot et al. (2015a) found that results anticipated from performance agreements across Europe tend to be overly ambitious. The evidence from this research study suggests that HEIs feel compelled to address all system HLLs in order to avoid penalties and reputational damage arising from low categorisation, in the absence of any funding incentives. There is broad, though not total agreement, that higher performing HEIs should attract additional funding, consistent with recommendations from NCHEMS (2011) and Pruvot et al. (2015a). The HEA's emphasis on prioritisation is consistent with accommodating differing missions (Claeys-Kulik and Estermann 2015; de Boer and Jongbloed 2015; Dougherty and Reddy 2011; Salmi and Hauptman 2006a) but is being viewed with a jaundiced eye within HEIs although there is some evidence of tailoring objectives due to funding constraints. The main influences of the KPIs appears to surround the concept of measuring and benchmarking performance, consistent with the findings of Frølich (2008) and Lewis et al. (2007), far more so than incentivising actual performance.

### 7.1.6 Summary

In conclusion, a number of studies have shown that failures are more associated with the form and implementation of related strategies that give effect to the new concept, more so than the concept (NCHEMS 2011; Snyder and Johnson 2015). McGuinness (2014) makes similar observations in relation to Ireland's HE landscape and strategic dialogue process.

The mechanisms for executing the landscape and strategic dialogue processes will determine their ultimate success or failure.

McGuinness (2014, p.30)

Ireland's strategic compact process is generally aligned with the common characteristics of Performance Agreements (de Boer et al. 2015, p.23) as illustrated in figure 7.1. The key strengths in the Irish implementation are around the constructive relationship building with the HEA – described by de Boer et al. (2015, p.161) as the “cornerstone” - the self-reflective value and institutional learning that has arisen from the process, and the strategic planning capacity building that the process is contributing to. If the process is nurtured, streamlined, more developmentally oriented and resourced (the key gap) it is strongly considered to be potentially hugely beneficial in improving performance of the HE system, and in driving and managing change, consistent with the emphasis placed by McGuinness (2014) on building long-term constructive relationships between HEIs, the state and other stakeholders, and decades earlier by Newman (1987, p.xiii) who identifies the need “for a relationship between the university and the state that is constructive for both”.

**Figure 7.1 Characteristics of Performance Agreements and Ireland's HESPF**

Characteristics of PAs (De Boer et al. 2015, p.23)	Author's Observations on Ireland's HESPF (HEA 2013a) Based on Research Study Findings
Government vision and strategic agenda for HE system.	The Government has articulated its expectations on the system in so far as it relates to achievement of measurable targets. The framework lacks a resource plan to signal how achievement of these will be supported or indeed if the system has the capacity to absorb the expectation placed upon it.
Both government and institutions need technical and operational expertise as well as sufficient resources.	The need to strengthen strategic capacity at national and individual institutional level has been identified by the HEA but this has not been followed through with resourcing.
Contract partners must be trustworthy and reliable.	While the integrity of any individuals was not brought into question, there is a lack of trust in the process which is expected to impact on the level of disclosure that HEIs will engage in. The public ranking of HEIs has given substance to this concern. It also has to be acknowledged that the process is contributing to constructive relationship building and this is regarded as a key strength.
Focus on both agreement of content and on measurement and data infrastructure.	This joint focus is present but there are challenges in the area of data infrastructure related to both resources and data interpretation.
Consider relationship and intergation of PAs with other policy instruments and steering tools.	While the HESPF purports to articulate the expectations of Government agencies and departments on HEIs, there is significant criticism of lack of integration across these entities in their interactions with HEIs. The reform/restructuring agenda is a key component of the national agenda but legislation required to give effect to key aspects of this had not been enshrined by the end of the first three-year cycle or at the commencement of the second cycle.
Keep performance agreements as simple, robust and transparent as possible.	The agreements tend to be reasonably concise and easy to read but the format has been somewhat criticised for not allowing sufficient facility to capture context and robustness is brought into question by the level of clarification sought in some of the evaluations, sometimes over very trivial matters.
Performance agreements are dialogue-based and well-organised patterns of communication are crucial.	This would appear to be one of the key strenghts of the process.
Outcomes of the PAs may be used to inform society and improve accountability in higher education.	Accountability is one of the features of the process although the extent to which the public at large engage with information available is questionable. Delays of up to one academic year in publishing compact results somewhat mutes their effectiveness.
<b>Important but unsolved issues:</b>	
Choice and balance between quantitative and qualitative targets.	All of the national targets are quantitative (i.e. based on what is easily measurable) in nature and this is not consistent with the mixture of qualitative and quantitative targets used by HEIs. This has led to frustrations in the evaluation process.
The impact of performance agreements without funding attached.	It could be argued that this research study provides some insights into this in a sample of HEIs. Reputation and a desire to respond to regional and national needs, and global expectations appear to be driving performance far more so than the threat of a funding penalty.
The impact of funding attached to PAs on institutional behaviour.	The feedback from this research study suggests that additional competitive funding would significantly influence behaviour, if introduced.
Agreements to be specified in comprehensive and uniform contracts, or in less broad and more focused contracts (preferable).	Ireland's HESPF provides for focused contracts which is consistent with respecting institutional autonomy as the HEIs propose their own goals and KPIs. There was no evidence uncovered that suggests any desire for this to be changed.

Source: (de Boer et al. 2015, p.23)

## 7.2 Contribution to Knowledge

This research study has found that one of the key strengths associated with the introduction of the new HESPF has been the emphasis on strategic planning capacity building at institutional level, despite limitations imposed by funding constraints and frustrations at the microscopic level at which evaluations of strategic compacts (performance agreements) have taken place. This is in contrast to the approach in many countries where improving strategic capacity has been a “side goal” of performance agreements (de Boer et al. 2015, p.17).

The evidence gathered from the sample of HEIs in this study suggests that the levers being used by the HEA to bring about performance improvements, a system of differentiated HEIs (programme and discipline specialisation) and change appear to be having a negative impact on the outcomes they are seeking to achieve. The current funding model, the threat of funding penalties and the potential reputational damage arising from the system of categorising HEIs’ performance is acting contrary to the prioritisation agenda and levels of specialisation envisaged under the HESPF. This is manifested in the large volume of HLIs addressed by each HEI, isomorphism in programme provision (linked to funding imperatives and stakeholder needs) and the level of disclosure that HEIs may be prepared to engage in due to a lack of trust in how outcomes of the process are being used. Allied to this is the absence of key enablers – no facility to release capacity, insufficient attention to a sustainable funding solution, and the related non-uniformity in capacity to diversify funding sources is potentially widening performance gaps rather than elevating performance across the system.

The HESPF, while regarded as a good concept, has not resulted in any significant behavioural changes (including performance improvements) or in goal displacement. This has been attributed to the lack of enabling or incentive funding and the funding penalty at risk has not been sufficient to impact behaviour, and it could be argued is not fully understood. In contrast, there is broad support for the principle of rewarding high performers and the introduction of new investment to support the national KPIs was considered to have the potential to add significant value to the system and was generally regarded as essential.

The level of change underway in the higher education landscape, its complexity and related environmental uncertainty in relation to sustainable funding and legislation/criteria for technological universities would appear to be disabling the level of co-operation expected at cluster level, especially when pitched against the primacy of ambition of individual HEIs and the level of priority accorded to the cluster *vis-à-vis* competing institutional objectives.

### 7.3 Recommendations

This section presents the recommendations from the study arising from the author's observations of the research findings, through relating the purposes of the HESPF to the common aims of performance agreements internationally. These recommendations are presented in figure 7.2, with each row detailing an aim of performance agreements internationally, the corresponding link to the stated purpose of the HESPF, the research study's findings in relation to this aim/purpose and the author's observations on these findings, which in turn inform the associated recommendation. From this analysis you may say the key issues/recommendations that emerge relate to: the lack of differentiation within the sectors with particular reference to programme provision (i.e. discipline specialisation and rationalisation) and the lack of realism in the national strategy in this regard, given the gaps in key enablers, competing agendas and environmental uncertainties; the need to elevate the process to a more strategic and developmental level and focus on enabling infrastructure to support strategic planning and performance management; matching the expectations placed on HEIs with a resource plan for the system and rewarding excellence relative to institutional mission to drive performance; extending the detailed review process to a two/three year cycle and removing the system of categorisation in order to build trust in the process with potential benefits for performance improvement.

**Figure 7.2 Comparison between Ireland’s HESPF and Common Aims of Performance Agreements**

Aims of Performance Agreements (De Boer et al. 2015, pp.13-15)	Purposes of HESPF (HEA 2013a, P.1)	Research Study Finding	Author’s Observations	Author’s Recommendation
Differentiation and System Diversity	Included as “allow HEIs to identify their strategic niche and mission”	The HEA found “considerable evidence of diversity between the sectors but less evidence of diversity within the sectors” (HEA 2016d, p.13). The HEA continues to strongly encourage HEIs towards establishing strategic niches and differentiating their profile but the process has not resulted in this outcome. Progress in the clusters has been particularly deficient in this regard.	The level of realism associated with this objective is not really there in the short to medium term as HEIs are locked into the resources associated with existing disciplines as the HR toolkit does not allow these to be shed. The current funding model, based on student numbers, also promotes mimetic behaviour in programme provision. This objective is set to be blurred further by the introduction of impending TU legislation.	There may be a mismatch between stakeholder needs in a region and the rationalisation agenda associated with discipline specialisation. The focus should initially be on rationalised provision, discipline specialisation and strategic prioritisation within merging HEIs. Forcing HEIs who compete for funding based on student numbers to co-operate on this strategy is unrealistic with the current funding model. The related cluster objectives are causing frustration and detracting attention from mission specific goals that HEIs regard as far more compelling than cluster objectives. In either situation, the lack of an enabling HR toolkit makes for a very difficult challenge on this front.  In the overall scheme, the HEA’s emphasis on prioritisation conferring advantage does not seem to be trusted. This is in part due to the current categorisation of HEIs through the HESPF and funding imperatives that are placing pressure on HEIs to seek out funding under whatever bushel they can find. In a way, this leads to mimetic behaviour that is counter to the diversity agenda in the national strategy. It is difficult to see how this can be ameliorated in the short term in the absence of a sustainable funding model, an appropriate HR toolkit and the state of flux/uncertainty in the restructuring agenda.
Improving Strategic Dialogue with the intention to align national and institutional agendas, policies and activities.	Included as “articulation of expectations” and “agreeing a performance compact aligned with funding”.	Improving strategic dialogue has been generally agreed as one of the strengths of the process. Articulation of national goals has improved visibility but in the absence of incentive funding the HESPF has not resulted in significant behavioural changes.	There is much consensus that the process needs to be elevated to a more strategic level and proposals to extend evaluations to multi-year cycles may assist in this regard. The role of HEIs is well understood internationally so unless there is some radical shift in Government emphasis there will continue to be a high level of congruence between national and HEI goals.	Elevate the process to a more strategic and developmental level with less emphasis on the micro detail associated with individual targets that seems to bedevil the current implementation. Extend the detailed reviews to a two/three year timeframe with a greater emphasis on strategic direction, having regard to the HEI’s strategic plan as well as its compact with the HEA. Focus in the interim period on ensuring that HEIs have the supporting enabling infrastructure in place for strategic planning and performance management. This could, for example, be achieved through the internal audit function which facilitates institutional learning and sharing of best practice. The HEA can monitor many of the indicators it has committed itself to internationally through SRS returns, DJEI returns and Innovation 2020 returns and can seek corrective action where trends deviate from expectation in between, say, triennial reviews.

Figure 7.2 (Continued) Comparison between Ireland's HESPF and Common Aims of Performance Agreements

Aims of Performance Agreements (De Boer et al. 2015, pp.13-15)	Purposes of HESPF (HEA 2013a, P.1)	Research Study Finding	Author's Observations	Author's Recommendation
<p>Improving quality, productivity and efficiency of core activities (T&amp;L, research and engagement) and weeding out underperformers.</p>	<p>Included as monitoring performance and highlighting structural and other deficits including data capacity.</p>	<p>It is generally agreed that the system has performed well, particularly in the context of shrinking resources and increased enrolment and demands. The HEA reports have highlighted funding issues and weaknesses in the HR toolkit available to HEIs. Strengthening of institutional strategic capacity is also reported but challenges remain, particularly for smaller HEIs, in the area of institutional research functions. HEIs have raised the issue of quality as a significant issue for them.</p>	<p>Overall, there is an acknowledgement that quality is suffering but there is a reluctance on the part of the QQI, the state or the HEA to make a bold statement in that regard. While this is understandable from the point of view of protecting the current reputation of the system it will have very damaging effects going forward unless the seriousness of the situation is acknowledged through significant investment as identified by the Cassells (2016) report. Quality is being sacrificed at the altar of productivity and efficiency.</p>	<p>Match the expectations placed on HEIs with a resource plan and conduct an audit to assess the capacity of the system to absorb the expectation placed upon it, with particular reference to what the Government defines as quality in a higher education context.</p> <p>Provide enabling funding to support the national KPIs and reward excellence relative to institutional mission to drive performance. The level of funding should be large enough to attract attention.</p> <p>Provide supporting funding to HEIs who are struggling and who could reasonably be expected to improve performance arising from such a short term injection. This recommendation should not be taken as rewarding bad behaviour for which HEIs should be held absolutely accountable.</p>
<p>Improve accountability and transparency through informing stakeholders on the system's and individual institutions' performance.</p>	<p>Included as "hold the system accountable for performance for the delivery of national priorities" and "improve the visibility of performance".</p>	<p>There is general acceptance of the importance of being held accountable for public funding but the State is not regarded as fulfilling its side of the bargain in terms of providing access to a sustainable funding model. It is unclear whether the new HESPF improves visibility on performance in any significant way beyond those most directly affected.</p>	<p>There seems to be a very significant emphasis on the policing and compliance element of the process at the expense of its developmental or strategic intent. This is blunting its potential as an instrument to promote excellence in performance and it risks deteriorating into a Higher Education System Policing Framework.</p>	<p>Extending the detailed review process to two/three years has the potential to open up pathways for declaring [under]performance and addressing gaps/weaknesses in the interim period as HEIs have a more realistic time span in which to make recompense before judgement day. Removing the system of categorisation also has the potential to open up the level of disclosure with attendant benefits to performance improvement.</p> <p>While national system performance reports understandably involve a time lag (up to 15 months following strategic compact meetings), publication of evaluations of HEIs has now deteriorated into a similar time frame which brings into question their effective value, and harbours suspicion. The subsequent cycle is well underway before reports on the current cycle appear. The recommendation here is to issue reports on a timely basis.</p>

This research study provides a baseline against which examination of the implementation of the second and subsequent cycle(s) of strategic compacts may be compared, with particular emphasis on the evolution/maturation of the strategic and development level at which the process is conducted and the extent to which the HESPF is contributing to or facilitating key system objectives, such as, delivering on the differentiation agenda and its associated rationalisation and concentration processes. The extent to which incentive funding (if introduced) impacts on behaviours and goals within HEIs and performance across the system (including the achievement of key system objectives and associated KPIs) could also be explored. There is also potential scope to establish longitudinal studies to monitor the effect of concentration processes on institutional learning, system differentiation and performance of the system in meeting economic and societal needs.

## References

- Aagaard, K., and de Boer, H. (2016). *Denmark – Creating university centres of excellence: the UNIK-initiative*. European Commission, Luxembourg.
- Aarrevaara, T., Dobson, I. R., and Elander, C. (2009). "Brave New World: Higher Education Reform in Finland." *Higher Education Management & Policy*, 21(2), 89-106.
- Adler, P. A., and Adler, P. (2012). "How Many Qualitative Interviews is Enough?", in S. E. Baker and R. Edwards, (eds.), *How Many Qualitative Interviews is Enough?: Expert Voices and Early Career Reflections on Sampling and Cases in Qualitative Research*. Available from: [http://eprints.ncrm.ac.uk/2273/4/how\\_many\\_interviews.pdf](http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf) [Accessed on 14 June 2015]: NCRM, pp. 8-10.
- Agasisti, T. (2011). "Performances and spending efficiency in higher education: a European comparison through non-parametric approaches." *Education Economics*, 19(2), 199-224.
- Aghion, P., Dewatripont, M., Hoxby, C., Mas-Colell, A., and Sapir, A. (2010). "The governance and performance of universities: evidence from Europe and the US." *Economic Policy*, 25(61), 7-59.
- Aghion, P., Dewatripont, M., Hoxby, C., and Sapir, A. (2008). *Higher aspirations: An agenda for reforming European universities*. Bluegel Blueprint Series N. 5., Belgium.
- Akkerman, A., Overman, S., and Torenvlied, R. (2015). "Targets for Honesty How Performance Indicators Shape Integrity in Dutch Higher Education" *The Institutional Design Frontiers: Higher Education Summit*. City: Available from: <http://doc.utwente.nl/99438/> [Accessed on 26 May 2017]: Scottsdale, Arizona.
- Altbach, P. (2017). "Postsecondary Systems, Massification and the Research University." *International Higher Education* 91(Fall 2017), 5-6.
- Altbach, P. G. (2004). "The Costs and Benefits of World-Class Universities." *Academe*, 2004(January-February).
- Altbach, P. G., and Salmi, J. (2011). *The Road to Academic Excellence: The Making of World-Class Research Universities*. The World Bank, [www.theworldbank.com](http://www.theworldbank.com).
- Atkinson-Grosjean, J., and Grosjean, G. (2000). "The Use of Performance Models in Higher Education: A Comparative International Review." *Education Policy Analysis Archives*, 8(30), 1-34.
- Back, L. (2012). "How Many Qualitative Interviews is Enough?", in S. E. Baker and R. Edwards, (eds.), *How Many Qualitative Interviews is Enough?: Expert Voices and Early Career Reflections on Sampling and Cases in Qualitative Research*. Available from: [http://eprints.ncrm.ac.uk/2273/4/how\\_many\\_interviews.pdf](http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf) [Accessed on 14 June 2015]: NCRM, pp. 12-14.
- Baker, S. E., and Edwards, R. (2012). *How Many Qualitative Interviews is Enough?*, National Centre for Research Methods, Available from: [http://eprints.ncrm.ac.uk/2273/4/how\\_many\\_interviews.pdf](http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf) [Accessed on 14 June 2015].
- Barnetson, B., and Cutright, M. (2000). "Performance indicators as conceptual technologies." *Higher Education*, 40(3), 277-292.
- Barrett, T. G. (2010). "Professionalisation of Educational Administration Viewed through the Lens of Institutional Theory, 1947-1990." *American Educational History Journal*, 37(1/2), 255-271.
- Bazeley, P. (2013). *Qualitative Data Analysis: Practical Strategies*, Los Angeles: SAGE.
- Bendermacher, G., oude Egbrink, M., Wolfhagen, I., and Dolmans, D. (2017). "Unravelling quality culture in higher education: a realist review." *Higher Education (00181560)*, 73(1), 39-60.

- Bennett, D. C. (2008). "Templates Galore: New Approaches to Public Disclosure." *Change*, 40(6), 36-41.
- Benneworth, P., Pinheiro, R., and Sánchez-Barrionuengo, M. (2016). "One size does not fit all! New perspectives on the university in the social knowledge economy." *Science & Public Policy (SPP)*, 43(6), 731-735.
- Benneworth, P., and Velderman, W.-J. (2016). *United Kingdom – Higher education mergers in Wales*. European Commission, Luxembourg.
- Boberg, A. (2000). "System-Wide Program Assessment with Performance Indicators: Alberta's Performance Funding Mechanism." *Canadian Journal of Program Evaluation*(Special Issue), 3-23.
- Bogdan, R. C., and Biklen, S. K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*, Boston: Pearson.
- Boland, J. (2015). "Why are Ireland's universities sliding down the world rankings?", A. Collins, (ed.) *Moncrieff*. City: Newstalk: Available from: <http://www.newstalk.com/Why-are-Irelands-universities-sliding-down-the-world-rankings> [Accessed on 20 November 2015].
- Boland, T. (2016). "We Finally Know for Sure How Our Colleges are Faring"*Irish Times*. City: Available from: <http://www.irishtimes.com/news/education/tom-boland-we-finally-know-for-sure-how-our-colleges-are-faring-1.2567762> [Accessed on 15 March 2016].
- Bothwell, E. (2016). "World's most prestigious universities 2016 ". City: Times Higher Education: Available from: <https://www.timeshighereducation.com/world-university-rankings/worlds-most-prestigious-universities-world-reputation-rankings-2016-results> [Accessed on 5 May 2016].
- Boudard, E., and Westerheijden, D. F. (2016). *France – Initiatives for Excellence in Higher Education*. European Commission, Available from: <http://doc.utwente.nl/102965/> [Accessed on 26 May 2016].
- Boyer, E. L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching, Lawrenceville, New Jersey.
- Brankovic, J. (2017). "The status games they play: unpacking the dynamics of organisational status competition in higher education." *Higher Education*.
- Breakwell, G., and Tytherleigh, M. (2010). "University leaders and university performance in the United Kingdom: is it 'who' leads, or 'where' they lead that matters most?" *Higher Education*, 60(5), 491-506.
- Brooks, R., te Riele, K., and Maguire, M. (2014). *Ethics and Education Research*, London: SAGE.
- Broucker, B., De Wit, K., and Leisyte, L. (2015). "New Public Management or New Public Governance for the Higher Education sector? An international comparison", EGPA, (ed.) *EGPA Annual Conference* City: Toulouse.
- Bruton, R. (2016). "It's Easy To Find Fault With Proposals - But Those Doing So Should Tell Us How They Would Fund Higher Education"*Irish Independent*. City: Irish Independent: Available from: <http://www.independent.ie/opinion/comment/richard-bruton-its-easy-to-find-fault-with-proposals-but-those-doing-so-should-tell-us-how-they-would-fund-higher-education-34875443.html> [Accessed on 12 July 2016].
- Burch, P. (2007). "Educational Policy and Practice From the Perspective of Institutional Theory: Crafting a Wider Lens." *Educational Researcher*, 36(2), 84-95.
- Burke, J. C. (2003). "Trends in Higher Education Performance." *Spectrum: Journal of State Government*, 76(2), 23-24.
- Burke, J. C. (2005). "Nine Principles: Confirming Principles Before Remodeling Public Higher Education Governance " *National Crosstalk*, 13(4), 1-5.
- Burke, J. C., and Minassians, H. (2003). *Performance Reporting: "Real" Accountability or Accountability "Lite" Seventh Annual Survey 2003*. The Nelson A. Rockefeller Institute of Government, State University of New York.
- Burquel, N., and van Vught, F. (2010). "Benchmarking in European Higher Education: A step beyond current quality models." *Tertiary Education & Management*, 16(3), 243-255.

- Calhoun, C. (2006). "The University and the Public Good." *Thesis Eleven*, 84(1), 7-43.
- Canhilar, K., Lepori, B., and Seeber, M. (2016). "Decision-making Power and Institutional Logic in Higher Education Institutions : A Comparative Analysis of European Universities." *Research in the Sociology of Organisations*, 45, 169-194.
- Carrington, R., Coelli, T., and Rao, D. S. P. (2005). "The Performance of Australian Universities: Conceptual Issues and Preliminary Results." *Economic Papers*, 24(2), 145-163.
- Casciaro, T., and Piskorski, M. J. (2005). "Power Imbalance, Mutual Dependence, and Constraint Absorption: A Closer Look at Resource Dependence Theory." *Administrative Science Quarterly*, 50(2), 167-199.
- Cassells, P. (2016). *Investing in National Ambition A Strategy for Funding Higher Education: Report of the Expert Group on Future Funding for Higher Education*. Government of Ireland, Available from: <http://www.education.ie/en/Publications/Policy-Reports/Investing-in-National-Ambition-A-Strategy-for-Funding-Higher-Education.pdf> [Accessed on 12 July 2016].
- Castro, D., and Ion, G. (2011). "New challenges in the governance of Catalan public universities." *Higher Education Management & Policy*, 23(2), 103-118.
- Cavanaugh, J. C., and Garland, P. (2012). "Performance Funding in Pennsylvania." *Change*, 44(3), 34-39.
- Chan, V. (2015). "Implications of key performance indicator issues in Ontario universities explored." *Journal of Higher Education Policy and Management*, 37(1), 41-51.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*, London: SAGE.
- CIT. (2012). *Strategic Plan 2012 - 2016: Knowledge at Work*. CIT, Available from: [www.cit.ie/contentfiles/CIT STRATEGIC PLAN 2012 to 2016.pdf](http://www.cit.ie/contentfiles/CIT_STRATEGIC_PLAN_2012_to_2016.pdf) [Accessed on 9 August 2016].
- CIT. (2014a). *CIT Annual Report 2013-2014*. CIT, Available from: [http://www.cit.ie/aboutcit/reports\\_plansandpolicies](http://www.cit.ie/aboutcit/reports_plansandpolicies) [Accessed on 17 October 2016].
- CIT. (2014b). *CIT Profile 2010\_11*. CIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- CIT. (2014c). *CIT Projected Profile 2016*. CIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- CIT. (2014d). *Mission-based Performance Compact between Cork Institute of Technology and The Higher Education Authority*. CIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 8 August 2016].
- CIT. (2015). *Strategic Dialogue Cycle 2 HEI Self Evaluation Report*. CIT, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- CIT. (2016a). "CIT Extended Campus". City: CIT: <http://extendedcampus.cit.ie/>.
- CIT. (2016b). *CIT Research and Innovation Strategy 2015\_16*. CIT, Available from: [http://www.cit.ie/innovation\\_research](http://www.cit.ie/innovation_research) [Accessed on 13 October 2016].
- CIT. (2017). *Strategic Dialogue Cycle 3 CIT Self-Evaluation Report*. CIT.
- Claeys-Kulik, A.-L., and Estermann, T. (2015). *DEFINE Thematic Report: Performance-Based Funding of Universities in Europe*. EUA, Available from: <http://www.eua.be/activities-services/publications/eua-reports-studies-and-occasional-papers.aspx> [Accessed on 21 September 2016].
- Clark, B. (2004a). *Sustaining Change in Universities: Continuities in Case Studies and Concepts*, Berkshire, UK: Open University Press.
- Clark, B. R. (1998). *Creating Entrepreneurial Universities: Organizational Pathways of Transformation*, Oxford: IAU:Pergamon.

- Clark, B. R. (2004b). *Sustaining change in universities: continuities in case studies and concepts*, Maidenhead, England: Society for Research into Higher Education & Open University Press.
- Coakes, S. J., Steed, L., and Ong, C. (2010). *SPSS Version 17.0 for Windows: Analysis without Anguish*, Milton, Qld 4064, Australia: Wiley.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences*, Hillsdale, NJ: Erlbaum.
- Cohen, L., Manion, L., and Morrison, K. (2011). *Research Methods in Education*, New York, NY 10017: Routledge.
- Coombe, L. (2015). "Australian higher education reforms – unification or diversification?" *Journal of Higher Education Policy and Management*, 37(2), 125-143.
- Cremonini, L., Westerheijden, D. F., Benneworth, P., and Dauncey, H. (2014). "In the Shadow of Celebrity? World-Class University Policies and Public Value in Higher Education." *Higher Education Policy*, 27(3), 341-361.
- Creswell, J. W. (2009). *Research Design : Qualitative, Quantitative, And Mixed Methods Approaches*, Thousand Oaks, California: SAGE.
- Creswell, J. W. (2012). *Educational Research : Planning, Conducting, And Evaluating Quantitative And Qualitative Research*, Boston, MA: Pearson Education.
- Creswell, J. W., and Plano Clark, V. L. (2007). *Designing and Conducting Mixed Methods Research*, Thousand Oaks, California: SAGE.
- Cullen, J., Joyce, J., Hassall, T., and Broadbent, M. (2003). "Quality in higher education: from monitoring to management." *Quality Assurance in Education: An International Perspective*, 11(1), 5-14.
- Dakka, F. (2015). "Differentiation Without Diversity: The Political Economy of Higher Education Transformation", in J. Huisman, H. de Boer, D. Dill, and M. Souto-Otero, (eds.), *The Palgrave International Handbook of Higher Education Policy and Governance*. UK: Palgrave MacMillan, pp. 323-341.
- Davis, G. F., and Cobb, J. A. (2010). "Resource Dependency Theory: Past and Future", in F. Dobbin and C. B. Schoonhoven, (eds.), *Stanford's organization theory renaissance, 1970-2000*. Bingley, NY: Emerald Group, pp. 21-42.
- DCU. (2014). *DCU Research Ethics & Integrity Guidelines*. Available from: [https://www4.dcu.ie/researchsupport/research\\_ethics/guidelines/types/nosub.shtml](https://www4.dcu.ie/researchsupport/research_ethics/guidelines/types/nosub.shtml) [Accessed 31 October 2014].
- de Boer, H., and File, J. (2009). *Higher Education Governance Reforms Across Europe*. ESMU, Available from: <https://www.utwente.nl/.../Publications%202009/C9HdB101%20MODER...> [Accessed on 29 January 2016].
- de Boer, H., File, J., Huisman, J., Seeber, M., Vukasovic, M., and Westerheijden, D. F. (2017). "Structural Reforms in European Higher Education : Concluding Reflections", in H. de Boer, J. File, J. Huisman, M. Seeber, M. Vukasovic, and D. F. Westerheijden, (eds.), *Policy Analysis of Structural Reforms in Higher Education*. London: Palgrave MacMillan, pp. 269-288.
- de Boer, H., and Jongbloed, B. (2014). *Policy Reform, Performance-Based Funding and Performance Agreements in Thirteen Countries*. CHEPS, Available from: [doc.utwente.nl/94022/1/PBF%20and%20PA%20report.pdf](http://doc.utwente.nl/94022/1/PBF%20and%20PA%20report.pdf) [Accessed on 30 October 2016].
- de Boer, H., and Jongbloed, B. (2015). *Reflections on performance agreements in higher education: Practical considerations in delivering system-wide improvements*. CHEPS, Available from: <http://doc.utwente.nl/97748/> [Accessed on 25 May 2017].
- de Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossensteyn, H. (2015). *Performance-based funding and performance agreements in fourteen higher education systems*. European Commission, Available from: [www.utwente.nl/cheps](http://www.utwente.nl/cheps) [Accessed on 26 May 2017].

- de Jager, G. (2011). "Missions on the move: university systems in England, New York State and California." *Higher Education Management and Policy*, 23(1), 1-23.
- De Witte, K., and López-Torres, L. (2017). "Efficiency in education: A review of literature and a way forward. Journal of the Operational Research Society." *Journal of the Operational Research Society*, 68, 339-363.
- Denman, B. D. (2005). "What is a University in the 21st Century?" *Higher Education Management & Policy*, 17(2), 9-26.
- Denscombe, M. (2008). "Communities of Practice: A Research Paradigm for the Mixed Methods Approach." *Journal of Mixed Methods Research*, 2(3), 270-283.
- Department of Education & Skills. (2011). *National Strategy for Higher Education to 2030*. Available from: <http://www.education.ie/en/The-Department/Bodies-and-Committees/National-Strategy-for-Higher-Education-to-2030-Implementation-Oversight-Group.html> [Accessed on 15 November 2014].
- Department of Education & Skills. (2016a). *Action Plan for Education 2016-2019*. Department of Education & Skills, Available from: [www.education.ie/.../Department-of-Education-and-Skills-Strategy-Statement-2016-2019](http://www.education.ie/.../Department-of-Education-and-Skills-Strategy-Statement-2016-2019) [Accessed on 30 September 2016].
- Department of Education & Skills. (2016b). *Irish Educated, Globally Connected: An International Education Strategy for Ireland, 2016-2020*. Department of Education & Skills, Available from: <http://www.education.ie/en/Press-Events/Press-Releases/2016-Press-Releases/PR16-07-10.html> [Accessed on 12 October 2016].
- Department of Education & Skills. (2017). "Minister Bruton Announces Breakdown of €36.5m Third Level Spend ". City: Department of Education & Skills,; Available from: <http://www.education.ie/en/Press-Events/Press-Releases/2017-Press-Releases/PR17-01-05.html> [Accessed on 11 May 2017].
- Department of Enterprise Trade & Innovation. (2010). *Trading and Investing in a Smart Economy: A Strategy and Action Plan for Irish Trade, Tourism and Investment to 2015*. Department of Enterprise Trade & Innovation, Dublin.
- Department of Foreign Affairs & Trade. (2014). *Review of Government Trade Tourism & Investment Strategy 2010-2015*. Department of Foreign Affairs & Trade, Dublin.
- Dill, D. D. (2003). "Allowing the Market to Rule: The Case of the United States." *Higher Education Quarterly*, 57(2), 136.
- DiMaggio, P. J., and Powell, W. W. (1983). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review*, 48(2), 147-160.
- DJEI. (2014a). *National Policy Statement on Entrepreneurship in Ireland 2014*. DJEI, Available from: <https://dbej.gov.ie/en/Publications/National-Policy-Statement-on-Entrepreneurship-in-Ireland-2014.html> [Available from 8 September 2017].
- DJEI. (2014b). *National Research Prioritisation Exercise First Progress Report*. DJEI, Available from: [www.djei.ie/en/Publications/Publication-files](http://www.djei.ie/en/Publications/Publication-files) [Accessed on 11 February 2016].
- DJEI. (2015). "Government publishes ambitious Innovation Strategy - Innovation 2020: Excellence Talent Impact". City: Department of Jobs, Enterprise and Innovation: Available from: <https://www.djei.ie/en/News-And-Events/Department-News/2015/December/08122015.html#sthash.V5bwtB7k.dpuf> [Accessed on 11 February 2016].
- DoE&S. (2016). *Ireland's National Skills Strategy 2025*. Department of Education & Skills, Available from: [https://www.education.ie/en/Publications/Policy-Reports/pub\\_national\\_skills\\_strategy\\_2025.pdf](https://www.education.ie/en/Publications/Policy-Reports/pub_national_skills_strategy_2025.pdf) [Accessed on 11 February 2016].
- Dougherty, K. J. (2011). "State Performance Funding for Higher Education: Origins, Impacts, and Demise: Policy Implications " *Achieving the Dream State Policy Meeting City: Community College Research Centre*: Available from: [ccrc.tc.columbia.edu/media/.../state-performance-funding-implications.pdf](http://ccrc.tc.columbia.edu/media/.../state-performance-funding-implications.pdf) [Accessed on 21 January 2016].

- Dougherty, K. J., Natow, R. S., Bork, R. H., Jones, S. M., and Vega, B. E. (2013). "Accounting For Higher Education Accountability: Political Origins of State Performance Funding for Higher Education." *Teachers College Record*, 115(1), 1-50.
- Dougherty, K. J., Natow, R. S., and Vega, B. E. (2012). "Popular but Unstable: Explaining Why State Performance Funding Systems in the United States Often Do Not Persist." *Teachers College Record*, 114(3), 1-41.
- Dougherty, K. J., and Reddy, V. (2011). *The Impacts of State Performance Funding Systems on Higher Education Institutions: Research Literature Review and Policy Recommendations*. Columbia University, Available from: [ccrc.tc.columbia.edu/media/k2/.../impacts-state-funding-higher-education.pdf](http://ccrc.tc.columbia.edu/media/k2/.../impacts-state-funding-higher-education.pdf) [Accessed on 7 June 2017].
- Drake, P. (2010). "Grasping at methodological understanding: a cautionary tale from insider research." *International Journal of Research & Method in Education*, 33(1), 85-99.
- Drees, J. M., and Heugens, P. P. M. A. R. (2013). "Synthesizing and Extending Resource Dependence Theory: A Meta-Analysis." *Journal of Management*, 39(6), 1666-1698.
- Drew, N., and Bishop, B. (2007). "Multiple Discriminant Analysis", in S. J. Coakes, L. Steed, and C. Ong, (eds.), *SPSS V14.0 for Windows: Analysis without anguish*. Australia: Wrightbooks, pp. 225-242.
- Drew, N., Bishop, B., and Ong, C. (2007). "Cluster Analysis", in S. J. Coakes and L. Steed, (eds.), *SPSS V14.0 for Windows: Analysis without anguish*. Australia: Wrightbooks, pp. 243-257.
- Drowley, M. J., Lewis, D., and Brooks, S. (2013). "Merger in Higher Education: learning from Experiences." *Higher Education Quarterly*, 67(2), 201-214.
- Editorial Board University News. (2016). "The Government is Once Again Delaying Decisions on Higher Education, But There May be a Positive" *University News*. City: University News: Available form: <http://www.universitytimes.ie/2016/05/the-government-is-once-again-delaying-decisions-on-higher-education-but-there-may-be-a-positive/> [Accessed on 10 May 2016].
- Edwards, B. (2002). "Deep Insider Research." *Qualitative Research Journal*, 2(1), 71-83.
- Engwall, L. (2007). "Universities, the State and the Market: Changing Patterns of University Governance in Sweden and Beyond." *Higher Education Management & Policy*, 19(3), 87-104.
- Ercikan, K., and Roth, W. (2006). "What Good is Polarising Research into Qualitative and Quantitative?" *Educational Researcher*, 35(5), 14-23.
- Erhardt, D., and von Kotzebue, A. (2016). "Competition unleashed: horizontal differentiation in German higher education." *Tertiary Education and Management*, 22(4), 333-358.
- Escrigas, C., Sánchez, J. G., Hall, B., and Tandon, R. (2013). "Introduction: Knowledge, Engagement and Higher Education Contributing to Social Change", in B. Hall and R. Tandon, (eds.), *Higher Education in the World 5: Knowledge, Engagement and Higher Education Contributing to Social Change*. Available from: <http://www.guninetwork.org/report/higher-education-world-5> [Accessed on 8 May 2016]: GUNi, pp. xxxi-xxxix.
- Estermann, T. (2014). "The EUA Autonomy Scorecard – Ireland's Comparative Performance" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Alliance: Dublin.
- Estermann, T., and Claeys-Kulik, A.-L. (2016). "Performance-Based Funding of Universities in Europe." *International Higher Education*, 85(Spring 2016), 31-33.
- EUA. (2006). *Quality Culture in European Universities: A Bottom-Up Approach*. EUA, Available from: [eua.be/eua/jsp/en/upload/PS%202%20-%20Jethro%20Newton.1166003065141.pdf](http://eua.be/eua/jsp/en/upload/PS%202%20-%20Jethro%20Newton.1166003065141.pdf) [Accessed on 26 May 2016].
- EUA. (2015a). *EUA Antwerp Declaration: A Strategic Agenda for Universities: Developing Strong Institutions to Advance the Knowledge-Based Society*. EUA, Available from:

- <http://www.eua.be/activities-services/publications/eua-policy-positions.aspx>  
[Accessed on 1 February 2016].
- EUA. (2015b). *University Leaders' Perspectives: Governance and Funding*. EUA, Available from: <http://www.eua.be/activities-services/publications/eua-reports-studies-and-occasional-papers.aspx> [Accessed on 21 September 2016].
- EUA. (2017). "University Autonomy in Europe". City: EUA: Available from: <http://www.university-autonomy.eu/dimensions/organisational/> [Accessed on 9 May 2017].
- European Commission. (1999). *Bologna Declaration*. European Commission, Available from: <http://www.ehea.info/article-details.aspx?ArticleId=3> [Accessed on 1 February 2016].
- European Commission. (2000). *Lisbon European Council 23 and 24 March 2000 Presidency Conclusions*. European Commission, Available from: [http://www.europarl.europa.eu/summits/lis1\\_en.htm](http://www.europarl.europa.eu/summits/lis1_en.htm) [Accessed on 6 October 2017].
- European Commission. (2001). *Concrete future objectives of education systems*. European Commission, Available from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:c11049> [Accessed on 1 February 2016].
- European Commission. (2002). *Work programme on the follow-up of the objectives of education and training systems in Europe ET2010*. European Commission, Available from: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:c11086> [Accessed on 1 February 2016].
- European Commission. (2006). *Communication of 2006 Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation*. European Commission, Brussels.
- European Commission. (2009a). *Communiqué of the Conference of European Ministers Responsible for Higher Education, Leuven and Louvain-la-Neuve, 28-29 April 2009*. European Commission, Brussels.
- European Commission. (2009b). *Strategic framework for European cooperation in education and training ET2020*. European Commission, Available from: [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52009XG0528\(01\)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52009XG0528(01)) [Accessed on 1 February 2016].
- European Commission. (2010a). *Europe 2020: A strategy for smart, sustainable and inclusive growth*. European Commission, Brussels.
- European Commission. (2010b). *Lisbon Strategy Evaluation Document*. European Commission, Brussels.
- European Commission. (2011). *Progress Towards the Common European Objectives in Education and Training: Indicators and benchmarks 2010/2011*. European Commission, Brussels.
- European Commission. (2012). *Bucharest Communiqué Making the Most of Our Potential: Consolidating the European Higher Education Area*. European Commission, Brussels.
- European Commission. (2014a). *Horizon 2020: The EU Framework Programme for Research and Innovation*. European Commission, Available from: <https://ec.europa.eu/programmes/horizon2020/> [Accessed on 13 September 2016].
- European Commission. (2014b). *Performance Agreements and their Relationship to Funding in Higher Education: ET2020 Country Workshop The Hague 25-26 September 2014*. European Commission, Available from: [ec.europa.eu/assets/eac/education/.../2014-2015/higher/performance-agreements\\_en.pdf](https://ec.europa.eu/assets/eac/education/.../2014-2015/higher/performance-agreements_en.pdf) [Accessed on 2 May 2018].
- European Commission. (2014c). *Report on Progress in Quality Assurance in Higher Education*. European Commission, Available from: [ec.europa.eu/dgs/education\\_culture/.../education/.../higher-education/doc/quality\\_en.pdf](https://ec.europa.eu/dgs/education_culture/.../education/.../higher-education/doc/quality_en.pdf) [Accessed on 20 January 2018].

- European Commission. (2015). *Innovation Union Scorecard 2015*. European Commission, Available from: [http://ec.europa.eu/growth/industry/innovation/facts-figures/scorecards/index\\_en.htm](http://ec.europa.eu/growth/industry/innovation/facts-figures/scorecards/index_en.htm) [Accessed on 16 May 2016].
- European Commission. (2017). "Knowledge Triangle and Innovation". City: European Commission: Available from: [http://ec.europa.eu/education/policy/higher-education/knowledge-innovation-triangle\\_en](http://ec.europa.eu/education/policy/higher-education/knowledge-innovation-triangle_en) [Accessed on 21 July 2017].
- European Commission/EACEA/Eurydice. (2015). *The European Higher Education Area in 2015: Bologna Process Implementation Report*. European Union, Luxembourg.
- Eurostat. (2016). *Key figures on Europe: 2015 edition*. Eurostat, Brussels.
- Eurostat. (2017). *Key Figures on Europe: 2016 Edition*. Eurostat, Available from: [ec.europa.eu/eurostat/documents/3217494/7827738/KS-EI-16-001-EN-N.pdf](http://ec.europa.eu/eurostat/documents/3217494/7827738/KS-EI-16-001-EN-N.pdf) [Accessed on 28 April 2017].
- Eurostat. (2018). "Your Key to European Statistics". City: European Commission: <http://ec.europa.eu/eurostat/web/europe-2020-indicators/europe-2020-strategy/main-tables>.
- Eurydice. (2008). *Higher Education Governance in Europe: Policies, Structures, Funding, and Academic Staff*. Eurydice, EU, Available from: [www.eurydice.org](http://www.eurydice.org) [Accessed on 29 January 2016].
- Eurydice. (2011). *Modernisation of Higher Education in Europe: Funding and the Social Dimension*. Eurydice, Available from: <http://eacea.ec.europa.eu/education/eurydice> [Accessed on 29 January 2016].
- Ewalt, D. (2018). "Reuters Top 100: Europe's Most Innovative Universities – 2018". City: Reuters: Available from: <https://www.reuters.com/article/us-emea-reuters-ranking-innovative-unive/europes-most-innovative-universities-2018-idUSKBN1HW0B4> [Accessed on 2 May 2018].
- Fagerlind, I., and Strömquist, G. (2004). *Reforming higher education in the Nordic countries – studies of change in Denmark, Finland, Iceland, Norway and Sweden*. UNESCO International Institute for Educational Planning <http://www.unesco.org/iiep>, Available from: <http://www.unesco.org/iiep> [Accessed on 21 November 2015].
- Fahey, S. (2014). "Fahey 2014 An Academic Perspective Looking Forward" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Alliance: Dublin.
- Faul, F., Erdfelder, E., Lang, A.-G., and Buchner, A. (2007). "G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences." *Behavior Research Methods*, 39, 175-191.
- Feller, I. (2002). "Performance Measurement Redux." *American Journal of Evaluation*, 23(4), 435-452.
- Feller, I. (2009). "Performance Measurement and the Governance of American Academic Science." *Minerva: A Review of Science, Learning & Policy*, 47(3), 323-344.
- Fielden, J. (2007). *Global Trends in University Governance*. The World Bank, Washington, DC.
- File, J., and Huisman, J. (2016). *Structural Higher Education Reform Design and Evaluation*. European Commission, Luxembourg.
- Floyd, A., and Arthur, L. (2012). "Researching from Within: External and Internal Ethical Engagement." *International Journal of Research & Method in Education*, 35(2), 171-180.
- Frank, A. W. (2004). "Ethics as process and practice." *Internal Medicine Journal*, 34(6), 355-357.
- Freeman, M., deMarrais, K., Preissle, J., Roulston, K., and St. Pierre, E. A. (2007). "Standards of Evidence in Qualitative Research: An Incitement to Discourse." *Educational Researcher*, 36(25).
- Frølich, N. (2008). *The politics of steering by numbers: Debating performance-based funding in Europe*. NIFU/STEP, Available from: [www.nifustep.no](http://www.nifustep.no) [Accessed on 20 January 2016].

- Frølich, N., Waagene, E., and Aamodt, P. O. (2011). "Old Players-New Rules: Higher education institutions' response to educational demand." *Tertiary Education & Management*, 17(2), 163-179.
- Gibbs, G. (2007). *Analyzing Qualitative Data*, London: SAGE.
- Gillard, E., Cremonini, L., Ejere, G., and Mulugeta, F. (2016). *Case Studies on Higher Education Developments in Selected Countries*. CHEPS, Available from: <http://doc.utwente.nl/103154/> [Accessed on 26 May 2016].
- Government of Finland. (2015). *Towards a Future Proof System for Higher Education and Research in Finland*. Ministry of Education and Culture, Available from: <http://www.minedu.fi/OPM/Julkaisut/julkaisulistaus?lang=en> [Accessed on 25 January 2016].
- Government of Ireland. (2006). *Strategy for Science, Technology and Innovation 2006-2013* Government of Ireland, Available from: [www.agriculture.gov.ie/media/migration/research](http://www.agriculture.gov.ie/media/migration/research) [Accessed on 11 February 2016].
- Government of Ireland. (2008). *Building Ireland's Smart Economy: A Framework for Sustainable Economic Renewal*. Government of Ireland, Available from: [www.taoiseach.gov.ie/.../BuildingIrelandsSmartEconomy.pdf](http://www.taoiseach.gov.ie/.../BuildingIrelandsSmartEconomy.pdf) [Accessed on 11 February 2016].
- Government of Ireland. (2010a). *Innovation Ireland: Report of the Innovation Task Force*. Government of Ireland, Available from: <http://www.slideshare.net/burtonlee/irish-innovation-taskforce-final-report-march-2010> [Accessed on 11 February 2016].
- Government of Ireland. (2010b). *Investing in Global Relationships: Ireland's International Education Strategy 2010-15*. Government of Ireland, Available from: <https://www.education.ie> [Accessed on 26 August 2016].
- Government of Ireland. (2012). *Action Plan for Jobs 2012*. Government of Ireland, Available from: <https://www.enterprise-ireland.com> [Accessed on 14 September 2016].
- Government of Ireland. (2013). *South East Economic Development Strategy (SEEDS) 2013 - 2023*. Government of Ireland, Available from: <https://www.oireachtas.ie> [Accessed on 2 November 2016].
- Government of Ireland. (2016a). *Action Plan for Jobs 2016*. Government of Ireland, Available from: <https://www.enterprise-ireland.com> [Accessed on 14 September 2016].
- Government of Ireland. (2016b). "Oireachtas Debates Public Sector Reform Implementation", D. o. P. E. a. Reform, (ed.). City: Government of Ireland: Available from: <http://oireachtasdebates.oireachtas.ie/Debates%20Authoring/DebatesWebPack.nsf/tales/dail2016070600073?opendocument&highlight=19719/16> [Accessed on 12 July 2016].
- Government of Ireland. (2016c). *A Programme for a Partnership Government*. Government of Ireland,, Available from: [www.merrionstreet.ie/merrionstreet/en/.../programme\\_for\\_partnership\\_government.pdf](http://www.merrionstreet.ie/merrionstreet/en/.../programme_for_partnership_government.pdf) [Accessed on 13 September 2016].
- Grant Thornton. (2014). *A changing landscape: A Review of the Financial Health of the Irish Higher Education Sector*. Grant Thornton, Available from: <http://www.grantthornton.ie/de/insights/publications/higher-education-a-changing-landscape/> [Accessed on 25 January 2016].
- Gravetter, F. J., and Wallnau, L. B. (2002). *Essentials of Statistics for the Behavioural Sciences*, Pacific Grove, CA: Wadsworth.
- Gubrium, J. F., and Holstein, J. A. (2002). "Handbook of Interview Research Context & Method". City: SAGE: Thousand Oaks, CA.
- Guest, G., Bunce, A., and Johnson, L. (2006). "How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability." *Field Methods*, 18(1), 59-82.
- Guest, G., MacQueen, K. M., and Namey, E. E. (2012). *Applied Thematic Analysis*, Los Angeles: SAGE.

- Guri-Rosenblit, S., Sebkova, H., and Teichler, U. (2007). "Massification and diversity of higher education systems: Interplay of complex dimensions." *Higher Education Policy*, 20, 373-389.
- Hämäläinen, K. (2003). "Common Standards for Programme Evaluations and Accreditation?" *European Journal of Education*, 38(3), 291.
- Hamilton, L., and Corbett-Whitter, C. (2013). *Using Case Study in Education Research*, London: SAGE.
- Hartmann, E. (2008). "Bologna goes global: a new imperialism in the making?" *Globalisation, Societies and Education*, 6(3), 207-220.
- Harvey, L., and Williams, J. (2010). "Fifteen Years of Quality in Higher Education." *Quality in Higher Education*, 16(1), 3-36.
- Hauptman, A. (2014). "Overview of University Funding Models" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Association: Dublin.
- Hazelkorn, E. (2012). "'Everyone Wants to Be Like Harvard' – Or Do They? Cherishing All Missions Equally", in A. Curaj, P. Scott, V. L., and L. Wilson, (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms*. Dordrecht: Springer, pp. 837-862.
- Hazelkorn, E. (2014). "Reflections on a Decade of Global Rankings: what we've learned and outstanding issues." *European Journal of Education*, 49(1), 12-28.
- Hazelkorn, E. (2015). "How the Geo-Politics of Rankings is Shaping Behaviour." *Higher Education in Russia and Beyond*, 2(4), 6-7.
- Hazelkorn, E. (2016). "The next GUNi Report, university rankings and their popularity, social impact, and how to measure the reaching of the SDGs", GUNi, (ed.). City: GUNi: Available from: <http://www.guninetwork.org/guni-talks/ellen-hazelkorn-member-editorial-team-next-guni-report> [Accessed on 7 May 2016].
- Hazelkorn, E. (2017a). "Is the Public Good Role of Higher Education Under Attack?" *International Higher Education* 91(Fall 2017), 2-3.
- Hazelkorn, E., Gibson, A. . (2017b). "New Ways to Make the Case for the Public Good of HE" *University World News*. City: University World News: Availab from: <http://www.universityworldnews.com/article.php?story=20170501182626170> [Accessed on 9 May 2017].
- Hazelkorn, E., Loukkola, T., and Zhang, T. (2014). *Rankings In Institutional Strategies And Processes: Impact Or Illusion?*, EUA, Available from: [www.eua.be](http://www.eua.be) [Accessed on 26 March 2015].
- Hazelkorn, E., and Massaro, V. (2011). "A tale of two strategies: higher education and economic recovery in Ireland and Australia." *Higher Education Management and Policy*, 23(2), 79-102.
- HEA. (1998). *Programme for Research in Third Level Institutions (PRTL)* HEA, Available from: <http://www.heai.ie/en/funding/research-funding/programme-for-research-in-third-level-institutions> [Accessed on 11 February 2016].
- HEA. (2008a). *National Plan for Equity of Access to Higher Education 2008-2013*. HEA, Available from: [Accessed on 11 February 2016].
- HEA. (2008b). *Proposals for the Incorporation of Performance into Institutional Funding*. HEA, Higher Education Authority, Ireland.
- HEA. (2012). *Towards a Future Higher Education Landscape*. HEA, Available from: <http://www.heai.ie/node/889> [Accessed on 17 December 2015].
- HEA. (2013a). *Higher Education System Performance Framework 2014 - 2016*. Available from: <http://www.education.ie/en/the-educationsystem/higher-education/hea-higher-education-system-performance-framework-2014-2016.pdf> [Accessed on 15 November 2015].
- HEA. (2013b). *Report to the Minister for Education and Skills on system reconfiguration, inter-institutional collaboration and system governance in Irish higher education*. [www.heai.ie](http://www.heai.ie).

- HEA. (2013c). "Strategic Innovation Fund". City: HEA: Available from: <http://www.heia.ie/en/policy/policy-development/strategic-innovation-fund> [Accessed on 7 May 2016].
- HEA. (2013d). *Towards a performance evaluation framework: profiling Irish higher education*. Available from: [www.heia.ie/sites/default/files/evaluation\\_framework\\_long.pdf](http://www.heia.ie/sites/default/files/evaluation_framework_long.pdf) [Accessed on 15 November 2014].
- HEA. (2014a). *Cork Institute of Technology Minute of Strategic Dialogue Meeting*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 8 August 2016].
- HEA. (2014b). *Higher Education System Performance: First Report 2014-2016*. <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16> Accessed 24/3/2015.
- HEA. (2014c). *Institute of Technology Carlow Minute of Strategic Dialogue Meeting*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 8 August 2014].
- HEA. (2014d). *Institute of Technology Tralee Minute of Strategic Dialogue Meeting*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- HEA. (2014e). *RGAM Summary 2014 Final*. HEA, Available from: <http://www.heia.ie/node/1045> [Accessed on 7 May 2016].
- HEA. (2014f). *University College Cork Minute of Strategic Dialogue Meeting*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- HEA. (2014g). *Waterford Institute of Technology Minute of Strategic Dialogue Meeting*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- HEA. (2015a). *CIT Strategic Dialogue Cycle 2 Assessment of Performance*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015b). *CIT Strategic Dialogue Cycle 2 Bilateral Meeting Minute 7 September 2015*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015c). *CIT Strategic Dialogue Cycle 2 Reflections on Performance*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015d). *Higher Education System Performance: Institutional and Sectoral Profiles 2012/13*. HEA, Available from: <http://www.heia.ie/en/publications/2015-0> [Accessed on 30 December 2015].
- HEA. (2015e). *IT Carlow Strategic Dialogue Cycle 2 Assessment of Performance*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015f). *IT Carlow Strategic Dialogue Cycle 2 Bilateral Meeting Minute 22 September 2015*. IT Carlow, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015g). *IT Carlow Strategic Dialogue Cycle 2 Reflections on Performance*. IT Carlow, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015h). *IT Tralee Strategic Dialogue Cycle 2 Assessment of Performance*. HEA, Available from: <http://www.heia.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].

- HEA. (2015i). *IT Tralee Strategic Dialogue Cycle 2 Bilateral Meeting Minute 25 September 2015*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015j). *IT Tralee Strategic Dialogue Cycle 2 Reflections on Performance*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015k). *National Plan for Equity of Access to Higher Education 2015-2019*. HEA, Available from: <http://www.heai.ie/en/policy/national-access-office/national-plans-equity-access-higher-education/2015-2019-access-plan> [Accessed on 11 February 2016].
- HEA. (2015l). *UCC Strategic Dialogue Cycle 2 Assessment of Performance*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015m). *UCC Strategic Dialogue Cycle 2 Bilateral Meeting Minute 8 October 2015*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015n). *UCC Strategic Dialogue Cycle 2 Reflections on Performance*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2015].
- HEA. (2015o). *WIT Strategic Dialogue Cycle 2 Assessment of Performance*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015p). *WIT Strategic Dialogue Cycle 2 Bilateral Meeting Minute 28 September 2015*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2015q). *WIT Strategic Dialogue Cycle 2 Reflections on Performance*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2016a). "About the HEA". City: HEA: Available from: <http://www.heai.ie/en/about-hea> [Accessed on 13 September 2016].
- HEA. (2016b). *CIT Strategic Dialogue Cycle 2 Formal Outcome*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2016c). *Financial Review of the Institutes of Technology*. HEA, Available from: [www.heai.ie](http://www.heai.ie) [Accessed on 4 November 2016]
- HEA. (2016d). *Higher Education System Performance 2014–2016; Second Report of the Higher Education Authority to the Minister for Education and Skills*. HEA, Available from: <http://www.heai.ie/news/minister-bruton-publishes-performance-report-ireland%E2%80%99s-higher-education-system> [Accessed on 22 December 2016].
- HEA. (2016e). *Higher Education System Performance: Institutional and Sectoral Profiles 2013/14*. HEA, HEA, Dublin.
- HEA. (2016f). *IT Carlow Strategic Dialogue Cycle 2 Formal Outcome*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2016g). *IT Tralee Strategic Dialogue Cycle 2 Outcome*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2016h). *UCC Strategic Dialogue Cycle 2 Formal Outcome*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].

- HEA. (2016i). *WIT Strategic Dialogue Cycle 2 Formal Outcome*. HEA, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- HEA. (2017a). *Higher Education Factsheet: Internationalisation Irish Educated, Globally Connected*. HEA, [www.heai.ie](http://www.heai.ie).
- HEA. (2017b). *Higher Education System Performance Report 2014-2017: Third Report of the Higher Education Authority to the Minister for Education and Skills*. HEA, Available from: [www.heai.ie](http://www.heai.ie) [Accessed on 16 January 2018].
- HEA. (2017c). *IT Tralee Strategic Dialogue Cycle 3 Bilateral Meeting Minute 7 September 2016 & Performance Evaluation*. HEA, Available from: [Accessed on 2017].
- HEA. (2017d). *IT Tralee Strategic Dialogue Cycle 3 Reflections on Performance*. HEA, Available from: [Accessed on 2017].
- HEA. (2017e). *Strategic Dialogue Cycle 3 CIT Bilateral Meeting Minute 8 September 2016*. HEA.
- HEA. (2017f). *Strategic Dialogue Cycle 3 CIT Reflections on Performance*. HEA.
- HEA. (2017g). *Strategic Dialogue Cycle 3 IT Carlow Bilateral Meeting Minute 7 September 2016*. HEA.
- HEA. (2017h). *Strategic Dialogue Cycle 3 IT Carlow Reflections on Performance*. HEA.
- HEA. (2017i). *Strategic Dialogue Cycle 3 UCC Bilateral Meeting Minute 12 Sept 2016*. HEA.
- HEA. (2017j). *Strategic Dialogue Cycle 3 UCC Reflections on Performance*. HEA.
- HEA. (2017k). *Strategic Dialogue Cycle 3 WIT Bilateral Meeting Minute 8 September 2016*. HEA.
- HEA. (2017l). *Strategic Dialogue Cycle 3 WIT Reflections on Performance*. HEA.
- Heinrich, C. J. (2007). "False or fitting recognition? The use of high performance bonuses in motivating organizational achievements." *Journal of Policy Analysis & Management*, 26(2), 281-304.
- Herbst, M. (2007). *Financing Public Universities: The Case of Performance Funding*, Dordrecht: Springer.
- Hillman, A. J., Withers, M. C., and Collins, B. J. (2009). "Resource Dependence Theory: A Review." *Journal of Management*, 35(6), 1404-1427.
- Huisman, J., Lepori, B., Seeber, M., Frølich, N., and Scordato, L. (2015). "Measuring institutional diversity across higher education systems." *Research Evaluation*, 24(4), 369-379.
- Huisman, J., Meek, L., and Wood, F. (2007). "Institutional Diversity in Higher Education: a Cross-National and Longitudinal Analysis." *Higher Education Quarterly*, 61(4), 563-577.
- Huisman, J., and van der Wende, M. (2005). "On Cooperation and Competition II: Institutional Responses to Internationalisation, Europeanisation and Globalisation". City.
- IMD. (2016). "IMD 2015 World competitiveness scoreboard". City: IMD: Available from: <http://www.imd.org/wcc/news-wcy-ranking/> [Accessed on 19 January 2016].
- IOTI. (2012). *Institutes of Technology Ireland Key Performance Indicator (KPI) Framework*. Available from: [www.ioti.ie](http://www.ioti.ie) [Accessed on 15 November 2014].
- IT Carlow. (2014a). *Inspiring Individuals Transforming Society: Strategic Plan 2014 - 2018*. IT Carlow, Available from: <http://www.itcarlow.ie/resources/strategic-plan.htm#> [Accessed on 9 August 2016].
- IT Carlow. (2014b). *IT Carlow Profile 2010\_11*. IT Carlow, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- IT Carlow. (2014c). *IT Carlow Projected Profile 2016*. IT Carlow, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- IT Carlow. (2014d). "IT Carlow Sunday Times Institute of Technology of the Year 2014". City: IT Carlow: Available from: <https://www.itcarlow.ie/news.htm/view/id/1737#> [Accessed on 31 October 2016].

- IT Carlow. (2014e). *Mission-based Performance Compact between Institute of Technology Carlow and The Higher Education Authority*. IT Carlow, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 8 August 2016].
- IT Carlow. (2015). *IT Carlow Strategic Dialogue Cycle 2 Self Evaluation Report*. IT Carlow, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- IT Carlow. (2017a). *Strategic Dialogue Cycle 3 IT Carlow Self-Evaluation Report*. IT Carlow.
- IT Carlow. (2017b). *Strategic Dialogue Cycle 3 IT Carlow Self-Evaluation Report Appendices*. IT Carlow.
- IT Tralee. (2014a). *IT Tralee Profile 2010\_11*. IT Tralee, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- IT Tralee. (2014b). *IT Tralee Projected Profile 2016*. IT Tralee, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- IT Tralee. (2014c). *Mission-based Performance Compact between The Institute of Technology, Tralee and The Higher Education Authority*. IT Tralee, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- IT Tralee. (2014d). *Our Strategy For The Future: Strategic Plan 2014-2016*. IT Tralee, Available from: <http://www.ittralee.ie/en/InformationAbout/InstituteandDepartments/StrategicPlan/> [Accessed on 9 August 2016].
- IT Tralee. (2015). *Strategic Dialogue Cycle 2 HEI Self Evaluation Report*. IT Tralee, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- IT Tralee. (2017). *Strategic Dialogue Cycle 3 HEI Self Evaluation Report*. IT Tralee, Available from: [Accessed on 2017].
- IUA. (2014). *National Policy Statement on Ensuring Research Integrity in Ireland*. Available from: <http://www.iua.ie/research-innovation/research-integrity/> [Accessed 18 March 2015].
- Jessop, B. (2017). "Varieties of academic capitalism and entrepreneurial universities." *Higher Education (00181560)*, 73(6), 853-870.
- Johnson, J. C., and Weller, S. C. (2002). "Elicitation Techniques for Interviewing", in J. F. Gubrium and J. A. Holstein, (eds.), *Handbook of Interview Research Context & Method*. Thousand Oaks, CA: SAGE.
- Jongbloed, B. (2010). *Funding Higher Education: A View Across Europe*. European Centre for Strategic Management of Universities, [www.highereducationmanagement.eu](http://www.highereducationmanagement.eu).
- Jongbloed, B., and Vossensteyn, H. (2001). "Keeping up Performances: An international survey of performance-based funding in higher education." *Journal of Higher Education Policy and Management*, 23(2), 127-145.
- Kaiser, F., and Vossensteyn, H. (2005). "Targets and Tools in Dutch Access Policies." *Higher Education Quarterly*, 59(3), 187-204.
- Karlsson, O. (2003). "Program Evaluation in Europe: Between Democratic and New Public Management Evaluation", in T. Kellaghan and D. K. Stufflebeam, (eds.), *International Handbook of Educational Evaluation Part 1*. Boston: Kluwer Academic Publishers, pp. 419-439.
- Kauko, J., and Diogo, S. (2012). "Comparing higher education reforms in Finland and Portugal." *Higher Education Management and Policy*, 23(3), 115-133.
- Kehm, B. M., and Stensaker, B. (2009). "University Rankings, Diversity, and the New Landscape of Higher Education". City: Sense Publishers: Rotterdam.

- Kerr, C. (2001). *The Uses of the University*, Cambridge: Harvard University Press.
- Kettunen, J. (2016). "The Performance-Based Funding Scheme of Universities." *Management Dynamics in the Knowledge Economy*, 4(1), 109-124.
- Kivistö, J., and Hölttä, S. (2008). "Information as a Regulative Element in Higher Education Systems." *Tertiary Education & Management*, 14(4), 331-344.
- Kivistö, J., Pekkola, E., and Lyytinen, A. (2017). "The influence of performance-based management on teaching and research performance of Finnish senior academics." *Tertiary Education and Management*, 23(3), 260-275.
- Klumpp, M., de Boer, H., and Vossensteyn, H. (2014). "Comparing national policies on institutional profiling in Germany and the Netherlands." *Comparative Education*, 50(2), 156-176.
- Kohlbacher, F. (2006). "The Use of Qualitative Content Analysis in Case Study Research." *Forum Qualitative Social Research*, 7(1).
- Kohtamäki, V. (2011). "How do Higher Education Institutions Enhance their Financial Autonomy? Examples from Finnish Polytechnics." *Higher Education Quarterly*, 65(2), 164-185.
- Kottmann, A., Huisman, J., Brockerhoff, L., Cremonini, L., and Mampaey, J. (2016). *How Can One Create a Culture for Quality Enhancement?*, CHEPS and CHEGG, Available from: <http://doc.utwente.nl/101882/> [Accessed on 26 May 2016].
- Kuoppala, K. (2005). "Management by Results at Finnish Universities." *Journal of Higher Education Policy and Management*, 27(3), 345-355.
- Kyvik, S., and Stensaker, B. (2013). "Factors Affecting the Decision to Merge: The case of strategic mergers in Norwegian higher education." *Tertiary Education & Management*, 19(4), 323-337.
- Lahr, H., Pheatt, L., Dougherty, K. J., Jones, S., Natow, R. S., and Reddy, V. (2014). *Unintended Impacts of Performance Funding on Community Colleges and Universities in Three States*. Columbia University, Available from: <http://ccrc.tc.columbia.edu/media/k2/attachments/unintended-impacts-performance-funding.pdf> [Accessed on 31 May 2017].
- Larsen, I. M., Maassen, P., and Stensaker, B. (2009). "Four Basic Dilemmas in University Governance Reform." *Higher Education Management and Policy*, 21(3), 41-58.
- Lattuca, L., Terenzini, P., Harper, B., and Yin, A. (2010). "Academic Environments in Detail: Holland's Theory at the Subdiscipline Level." *Research in Higher Education*, 51(1), 21-39.
- Leeuw, F. L. (2009). "Evaluation policy in the Netherlands." *New Directions for Evaluation*(123), 87-102.
- Lepori, B., Huisman, J., and Seeber, M. (2014). "Convergence and differentiation processes in Swiss higher education: an empirical analysis." *Studies in Higher Education*, 39(2), 197-218.
- Lewis, D. R., Hendel, D. D., and Kallsen, L. (2007). "Performance Indicators as a Foundation of Institutional Autonomy: Implications for Higher Education Institutions in Europe." *Tertiary Education & Management*, 13(3), 203-226.
- Li, A. Y. (2014). "Performance Funding in the States: An Increasingly Ubiquitous Public Policy for Higher Education." *Higher Education in Review*, 11.
- Liefner, I. (2003). "Funding, resource allocation, and performance in higher education systems." *Higher Education*, 46(4), 469-489.
- Lincoln, Y. S., and Guba, E. (1985). *Naturalistic Enquiry*, Beverly Hills, CA: SAGE.
- Locke, W. (2014). "The Intensification of Rankings Logic in an Increasingly Marketised Higher Education Environment." *European Journal of Education*, 49(1), 77-90.
- Loughlin, E. (2016). "Foreign student increase to boost Irish colleges" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20160123092545909> [Accessed on 25 January 2016].

- Loukkola, T. I., and Morais, R. (2015). *EUA Members' Participation in U-Multirank: Experiences from the First Round*. EUA, Available from: <http://www.eua.be/activities-services/publications/eua-reports-studies-and-occasional-papers.aspx> [Accessed on 21 September 2016].
- Maassen, P. (2017). "The University's Governance Paradox." *Higher Education Quarterly*, 71(3), 290-298.
- Maassen, P., Gornitzka, Å., and Fumasoli, T. (2017). "University reform and institutional autonomy: A framework for analysing the living autonomy." *Higher Education Quarterly*, 71(3), 239-250.
- Maingot, M., and Zeghal, D. (2008). "An Analysis of Voluntary Disclosure of Performance Indicators by Canadian Universities." *Tertiary Education & Management*, 14(4), 269-283.
- Mangeol, P. (2014). "Overview of Higher Education Financing Trends in OECD" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Association: Dublin.
- Marginson, S. (2014). "University Rankings and Social Science." *European Journal of Education*, 49(1), 45-59.
- Marginson, S. (2016a). "Rankings Must Disaggregate Data to Drive Performance" *University Rankings and International Academic Relations - a Bridging Tool or a Hindrance?* City: IREG: Lisbon, Portugal.
- Marginson, S. (2016b). "The worldwide trend to high participation higher education: dynamics of social stratification in inclusive systems." *Higher Education (00181560)*, 72(4), 413-434.
- Marginson, S., and van der Wende, M. (2009). "The new global landscape of nations and institutions", *Higher Education to 2030*. Paris: Organisation for Economic Co-operation and Development (OECD), pp. 17-62.
- Marope, P. T. M., Wells, P. J., and Hazelkorn, E. (2013). "Rankings and Accountability in Higher Education: Uses and Misuses". City: UNESCO: Available from: <http://unesdoc.unesco.org/images/0022/002207/220789e.pdf> [Accessed 21 April 2015].
- Martin, M. (2018). "Action Required to Support HE as a Common Good" *University World News*. City: UWN: Available from: <http://www.universityworldnews.com/article.php?story=20180320151011539> [Accessed on 26 March 2018].
- Martin, M., and Sauvageot, C. (2011). *Constructing an Indicator System or Scorecard for Higher Education: A Practical Guide*. UNESCO, Available from: [uis.unesco.org/.../constructing-an-indicator-system-or-scorecard-for-higher-education](http://uis.unesco.org/.../constructing-an-indicator-system-or-scorecard-for-higher-education) [Accessed on 5 February 2018].
- Mason, J. (2012). "How Many Qualitative Interviews Is Enough?", in S. E. Baker and R. Edwards, (eds.), *How Many Qualitative Interviews is Enough?: Expert Voices and Early Career Reflections on Sampling and Cases in Qualitative Research* Available from: [http://eprints.ncrm.ac.uk/2273/4/how\\_many\\_interviews.pdf](http://eprints.ncrm.ac.uk/2273/4/how_many_interviews.pdf) [Accessed on 14 June 2015]: NCRM, pp. 29-30.
- McGuinness, A. (2011). "The States and Higher Education", in P. Altbach, P. J. Gumport, and R. O. Berdahl, (eds.), *American Higher Education in the Twenty-First Century: Social, Political and Economic Challenges*. Baltimore: Johns Hopkins University Press, pp. 139-169.
- McGuinness, A. (2014). "System Regulation and Governance: Ireland and the International Context" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Association: Dublin.
- McQuinn, C. (2016). "Plans for Upgrade of Athlone IT to University is in Deal" *Irish Independent*. City: Irish Independent: Available from:

- <http://www.independent.ie/irish-news/politics/plans-for-upgrade-of-athlone-it-to-university-is-in-deal-34696962.html> [Accessed on 10 May 2016].
- Mercer, J. (2006). "The challenges of insider research in educational institutions: wielding a double-edged sword and resolving delicate dilemmas." *Oxford Review of Education*, 33(1), 1-17.
- Mertens, D. M. (2015). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative, and Mixed Methods*, Los Angeles: SAGE.
- Meyer, J. W., and Rowan, B. (1977). "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology*, 83(2), 340-363.
- Miles, M. B., Huberman, A. M., and Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*, Thousand Oaks, CA: SAGE.
- Morrill, R. L. (2010). *Strategic Leadership Integrating Strategy and Leadership in Colleges and Universities*, Lanham, Maryland 20706: Rowman & Littlefield Publishers Inc.
- Münch, R., and Schäfer, L. O. (2014). "Rankings, Diversity and the Power of Renewal in Science. A Comparison between Germany, the UK and the US." *European Journal of Education*, 49(1), 60-76.
- Murray, N. (2016a). "Groups Urge Education Minister to 'Reverse Decade of Cuts to Third-Level'" *Irish Examiner*. City: Irish Examiner: Available from: <http://www.irishexaminer.com/ireland/groups-urge-education-minister-to-reverse-decade-of-cuts-to-third-level-419698.html> [Accessed on 7 September 2016].
- Murray, N. (2016b). "Universities Facing €1bn Shortfall Amid Further Slide in World Rankings" *Irish Examiner*. City: Irish Examiner: Available from: <http://www.irishexaminer.com/ireland/universities-facing-1bn-shortfall-amid-further-slide-in-world-rankings-419541.html> [Accessed on 7 September 2016].
- Myklebust, J. P., and Dobson, I. R. (2016). "Austerity measures hit universities and polytechnics hard" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20160121113257753> [Accessed on 25 January 2016].
- Myklebust, J. P., and O Malley, B. (2018). "Double EU budget Say European University Associations" *University World News*. City: UWN: Available from: <http://www.universityworldnews.com/article.php?story=20180321195118388> [Accessed on 26 March 2018].
- Naidoo, R. (2016). "Higher Education is Trapped in a Competition Fetish" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20160413131355443> [Accessed on 18 April 2016].
- Naidoo, R. (2018). "World-Class Systems Rather Than World-Class Universities" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20180417162622337> [Accessed on 23 April 2018].
- Natow, R. S., Pheatt, L., Dougherty, K. J., Jones, S. M., Lahr, H., and Reddy, V. (2014). *Institutional Changes to Organizational Policies, Practices and Programs Following the Adoption of State-Level Performance Funding Policies*. Columbia University, Available from: <http://ccrc.tc.columbia.edu/media/k2/attachments/institutional-changes-following-performance-funding-policies.pdf> [Accessed on 31 May 2017].
- NCHEMS. (2011). *Performance funding: From idea to action*. National Center for Higher Education Management Systems, Available from: [http://www.nchems.org/pubs/docs/Performance\\_Funding\\_121411.pdf](http://www.nchems.org/pubs/docs/Performance_Funding_121411.pdf) [Accessed on 23 November 2015].
- Neave, G. (1998). "The Evaluative State reconsidered." *European Journal of Education*, 33(3), 265-284.
- Neave, G. (2012). *The Evaluative State, Institutional Autonomy and Re-Engineering Higher Education in Europe: The Prince and His Pleasure*, UK: Palgrave MacMillan.

- Neumann, R., and Guthrie, J. (2006). "Performance Indicators in Australian Universities: Establishment, Development and Issues" *EIASM 2nd Workshop on the Process of Reform of University Systems, 4-6 May 2006*. City: Venice, Italy.
- Nevo, D. (2006). "Evaluation in Education", in I. Shaw, J. Greene, and M. Mark, (eds.), *The SAGE Handbook of Evaluation*. London: SAGE, pp. 441-460.
- Newman, F. (1987). *Choosing Quality: Reducing Conflict Between the State and the University*, Denver: Education Commission of the States.
- Nisar, M. (2015). "Higher education governance and performance based funding as an ecology of games." *Higher Education (00181560)*, 69(2), 289-302.
- Nokkala, T., Välimaa, J., and Westerheijden, D. F. (2016). *Finland – University Mergers and Institutional Profiling*. European Commission, Available from: [doc.utwente.nl/102963/1/NC0416113ENN\\_002.pdf](http://doc.utwente.nl/102963/1/NC0416113ENN_002.pdf) [Accessed on 26 May 2017].
- Nolen, A. L., and Vander Putten, J. (2007). "Action Research in Education: Addressing Gaps in Ethical Principles and Practices." *Educational Researcher*, 37(7), 401-407.
- Northouse, P. G. (2013). *Leadership Theory and Practice*, Thousand Oaks, California: SAGE.
- Norusis, M. J. (2008a). *SPSS 16.0: Statistical Procedures Companion*, New Jersey: Prentice Hall.
- Norusis, M. J. (2008b). *SPSS Statistics 17.0 Guide to Data Analysis*, New Jersey: Prentice Hall.
- O'Brien, C. (2016a). "Funding Cuts Putting Third-Level Sector Under Pressure" *The Irish Times*. City: The Irish Times: Available from: <http://www.irishtimes.com/news/education/analysis-funding-cuts-putting-third-level-sector-under-pressure-1.2483810> [Accessed on 12 February 2016].
- O'Brien, C. (2016b). "Third-level Colleges Face Penalties Over 'Poor Performance'" *The Irish Times*. City: The Irish Times: Available from: <http://www.irishtimes.com/news/education/third-level-colleges-face-penalties-over-poor-performance-1.2573165> [Accessed on 15 March 2016].
- O'Brien, C., and Prendergast, P. (2016). "Irish Universities Have Been Resilient But It Isn't Sustainable" *Irish Times*. City: Irish Times: Available from: [www.irishtimes.com](http://www.irishtimes.com) [Accessed on 19 April 2016].
- O'Connor, N., McQuinn, C., and Denny, K. (2016). "5 Other Measures that will Probably Never be Implemented" *Irish Independent*. City: Irish Independent: [www.independent.ie](http://www.independent.ie).
- O'Shea, T. L. (2013). *Essential Statistics for Researchers*, Tralee, Ireland: Treorai Publications.
- O'Sullivan, J. (2014). "Towards a Sustainable Funding Model – Issues and Options" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Alliance: Dublin.
- O'Sullivan, J. (2016). "Statement by Jan O'Sullivan, Minister for Education and Skills on the Publication by HEA of Institutional Strategic Dialogue Outcomes". City: Department of Education & Skills: Available from: <http://www.education.ie/en/Press-Events/Press-Releases/2016-Press-Releases/PR2016-03-15.html> [Accessed on 21 March 2016].
- OECD. (2004). *Reviews of National Policies for Education - Higher Education in Ireland*. OECD, Available from: <http://www.oecd.org/ireland/reviewsofnationalpoliciesforeducation-highereducationinireland.htm#HTO> [Accessed on 20 January 2016].
- OECD. (2008). *Tertiary Education for the Knowledge Society*. Paris.
- OECD. (2014). *Education at a Glance 2014: OECD Indicators*. OECD, Available from: <http://dx.doi.org/10.1787/eag-2014-en> [Accessed on 24 January 2016].
- OECD. (2015). *Education at a Glance 2015: OECD Indicators*. OECD, Available from: [http://www.oecd-ilibrary.org/education/education-at-a-glance\\_19991487](http://www.oecd-ilibrary.org/education/education-at-a-glance_19991487) [Accessed on 24 January 2015].
- OECD. (2017a). *Education at a Glance 2017: OECD Indicators*, Available from: <http://www.oecd.org/edu/education-at-a-glance-19991487.htm> [Accessed on 18 September 2017]: OECD Publishing.
- OECD. (2017b). "Gross Domestic Expenditure on R&D (GERD)". City: OECD: Available from: [http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=t2020\\_20&plugin=1](http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=t2020_20&plugin=1) [Accessed on 12 June 2017].

- Oliver, C. (1991). "Strategic Responses to Institutional Processes." *Academy of Management Review*, 16(1), 145-179.
- Orr, D., Jaeger, M., and Schwarzenberger, A. (2007). "Performance-based funding as an instrument of competition in German higher education." *Journal of Higher Education Policy & Management*, 29(1), 3-23.
- Orr, D., Usher, A., and Wespel, J. (2014). *Do Changes in Cost-Sharing Have an Impact on the Behaviour of Students and Higher Education Institutions: Evidence from Nine Case Studies Volume I: Comparative Report*. European Commission, Available from: [ec.europa.eu/dgs/education.../education/.../2014/cost-sharing/comparative-report\\_en.pdf](http://ec.europa.eu/dgs/education.../education/.../2014/cost-sharing/comparative-report_en.pdf) [Accessed on 2 May 2018].
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods*, Los Angeles: SAGE.
- Pfeffer, J., and Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective, Classic Edition*, Stanford, CA: Stanford University Press.
- Pheatt, L., Lahr, H., Dougherty, K. J., Jones, S., Natow, R. S., and Reddy, V. (2014). *Obstacles to the Effective Implementation of Performance Funding: A Multi-State Cross Case Analysis*. Columbia University, Available from: <http://ccrc.tc.columbia.edu/media/k2/attachments/obstacles-to-performance-funding-implementation.pdf> [Accessed on 31 May 2017].
- Pollitt, C. (2007). "The New Public Management: An Overview of Its Current Status." *ADMINISTRATIE SI MANAGEMENT PUBLIC*, 8, 110-115.
- Pollitt, C., and Dan, S. (2011). *The Impacts of the New Public Management in Europe: A Metaanalysis*. COCOPS, Available from: [www.cocops.eu](http://www.cocops.eu) [Accessed on 6 June 2017].
- Prendergast, P. (2014). "The Role and Contribution of Universities" *21st Century Universities: Performance and Sustainability*. City: Irish Universities Alliance: Dublin.
- Pruvot, E. B., Claeys-Kulik, A.-L., and Estermann, T. (2015a). *Designing Strategies for Efficient Funding of Universities in Europe*. EUA.
- Pruvot, E. B., Estermann, T., and Kupriyanova, V. (2017). *Public Funding Observatory Report 2017*. EUA, Available from: [www.eua.be](http://www.eua.be) [Accessed on 14 December 2017].
- Pruvot, E. B., Estermann, T., and Mason, P. (2015b). *DEFINE Thematic Report : University mergers in Europe*. EUA, Available from: <http://www.eua.be/activities-services/publications/eua-reports-studies-and-occasional-papers.aspx> [Accessed on 21 September 2016].
- Pugh, G., Coates, G., and Adnett, N. (2005). "Performance Indicators and Widening Participation in UK Higher Education." *Higher Education Quarterly*, 59(1), 19-39.
- QQI. (2013). *The IRIU of University College Cork*. QQI, Available from: <https://www.ucc.ie/en/qpu/iriu/> [Accessed on 24 September 2016].
- QQI. (2016). *Quality in an Era of Diminishing Resources: Irish Higher Education 2008-15*. QQI, [www.qqi.ie](http://www.qqi.ie).
- Rabovsky, T. M. (2014). "Using Data to Manage for Performance at Public Universities." *Public Administration Review*, 74(2), 260-272.
- Reale, E., and Primeri, E. (2015). "Approaches to Policy and Governance in Higher Education", in J. Huisman, H. de Boer, D. D. Dill, and M. Souto-Otero, (eds.), *The Palgrave International Handbook of Higher Education Policy and Governance*. UK: Palgrave MacMillan, pp. 20-37.
- Reale, E., and Seeber, M. (2011). "Organisation response to institutional pressures in Higher Education: the important role of the disciplines." *Higher Education*, 61(1), 1-22.
- Reichert, S. (2009). *Institutional Diversity in European Higher Education: Tensions and challenges for policy makers and institutional leaders*. European University Association, Brussels.
- Reitz, T. (2017). "Academic hierarchies in neo-feudal capitalism: how status competition processes trust and facilitates the appropriation of knowledge." *Higher Education*, 73(6), 871-886.
- Richards, L. (2015). *Handling Qualitative Data: A Practical Guide*, London: SAGE.

- Rumbley, L. E., Altbach, P. G., Stanfield, D. A., Shimmi, Y., de Gayardon, A., and Chan, R. Y. (2015). *Higher Education: A Worldwide Inventory of Research Centers, Academic Programs, and Journals and Publications*, New York: Lemmens Media.
- Saldana, J. (2009). *The Coding Manual for Qualitative Researchers*, Los Angeles: SAGE.
- Salerno, C., Jongbloed, B., Slipersaeter, S., and Lepori, B. (2006). *Changes in University Incomes and their Impact on University-Based Research and Innovation (CHINC) project.*, European Commission, IPTS Seville.
- Salmi, J. (2007). "Autonomy from the State vs. Responsiveness to Markets." *Higher Education Policy*, 20(3), 223-242.
- Salmi, J. (2009a). *The Challenge of Establishing World Class Universities*. The World Bank, Washington, DC.
- Salmi, J. (2009b). "The Growing Accountability Agenda: Progress or Mixed Blessing?" *Higher Education Management*, 21(1), 109-129.
- Salmi, J. (2016). "Excellence Initiatives to Create World-Class Universities." *International Higher Education* 87(Fall 2016), 17-18.
- Salmi, J. (2017). *The Tertiary Education Imperative: Knowledge, Skills and Values for Development*. Rotterdam.
- Salmi, J., and Hauptman, A. M. (2006a). *Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms*. The World Bank, Available from: [www.theworldbank.org/education](http://www.theworldbank.org/education) [Accessed on 14 December 2015].
- Salmi, J., and Hauptman, A. M. (2006b). *Resource allocation mechanisms in tertiary education: A typology and an assessment*. World Bank, Available from: [http://scholar.google.de/citations?view\\_op=view\\_citation&hl=de&user=LDGnkcsAAAJ&citation\\_for\\_view=LDGnkcsAAAJ:hqOjcs7Dif8C](http://scholar.google.de/citations?view_op=view_citation&hl=de&user=LDGnkcsAAAJ&citation_for_view=LDGnkcsAAAJ:hqOjcs7Dif8C) [Accessed on 14 December 2015].
- Salmi, J., and Saroyan, A. (2007). "League Tables as Policy Instruments: Uses and Misuses." *Higher Education Management & Policy*, 19(2), 31-68.
- Santiago, P., Tremblay, K., Basri, E., and Arnal, E. (2008a). *Tertiary Education for the Knowledge Society Volume 1*. OECD, Available from: <http://www.oecd.org/edu/skills-beyond-school/tertiaryeducationfortheknowledgesocietyvolume1specialfeaturesgovernancefundingsquality-volume2specialfeaturesequityinnovationlabourmarketinternationalisation.htm> [Accessed on 15 November 2015].
- Santiago, P., Tremblay, K., Basri, E., and Arnal, E. (2008b). *Tertiary Education for the Knowledge Society Volume 2*. Available from: [www.oecd.org/education/skills-beyond-school/41266759.pdf](http://www.oecd.org/education/skills-beyond-school/41266759.pdf) [Accessed on 11 November 2015].
- Schmidt, P. (2002). "Most States Tie Aid to Performance, Despite Little Proof That It Works." *Chronicle of Higher Education*, 48(24), A20.
- Schulze-Cleven, T., and Olson, J. (2017). "Worlds of higher education transformed: toward varieties of academic capitalism." *Higher Education (00181560)*, 73(6), 813-831.
- Scott, P. (2016). "International Higher Education and the "Neo-liberal Turn"." *International Higher Education*, 84(Winter 2016), 16-17.
- Scott, W. R. (2008). *Institutions and organizations: ideas and interests*, Los Angeles: SAGE.
- Scriven, M. (2003). "Evaluation Theory and Metatheory", in T. Kellaghan and D. K. Stufflebeam, (eds.), *International Handbook of Educational Evaluation Part 1*. Boston: Kluwer Academic Publishers, pp. 15-30.
- Seeber, M., Cattaneo, M., Huisman, J., and Paleari, S. (2016). "Why do higher education institutions internationalize? An investigation of the multilevel determinants of internationalization rationales." *Higher Education*, 72(5), 685-702.
- Seeber, M., Lepori, B., Montauti, M., Enders, J., and de Boer, H. (2015). "European Universities as Complete Organizations? Understanding Identity, Hierarchy and Rationality in Public Organizations." *Public Management Review*, 17(10), 1444-1474.
- SFI. (2015). *Innovation 2020: Excellence Talent Impact*. Science Foundation Ireland, Available from: [www.sfi.ie](http://www.sfi.ie) [Accessed on 11 February 2016].

- Shaffer, D. F., and Wright, D. J. (2010). *A New Paradigm for Economic Development: How Higher Education Institutions Are Working to Revitalize Their Regional and State Economies*. The Nelson A. Rockefeller Institute of Government, State University of New York.
- Sharma, R. (2004). "Performance-based funding in the entrepreneurial North American and Australian universities." *Journal of Higher Education Policy & Management*, 26(1), 109-118.
- Sharma, S. (1996). *Applied Multivariate Techniques*, USA: Wiley.
- Shattock, M. (2017). "The 'world class' university and international ranking systems: what are the policy implications for governments and institutions?" *Policy Reviews in Higher Education*, 1(1), 4-21.
- Shin, J.-c., and Milton, S. (2004). "The effects of performance budgeting and funding programs on graduation rate in public four-year colleges and universities." *Education Policy Analysis Archives*, 12(22).
- Silverman, D. (2014). *Interpreting Qualitative Data*, Los Angeles: SAGE.
- Skolnik, M. L. (2010). "Quality assurance in higher education as a political process." *Higher Education Management & Policy*, 22(1), 67-86.
- Slaughter, S., and Cantwell, B. (2012). "Transatlantic moves to the market: the United States and the European Union." *Higher Education (00181560)*, 63(5), 583-606.
- Smidt, H. (2018). "Lifelong Learning is More Relevant than Ever Before" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20180327112443137> [Accessed on 3 April 2018].
- Snyder, M., and Johnson, N. (2015). *Driving Better Outcomes: Aligning State Investments With Completion Needs*. HCM Strategists, Available from: <http://hcmstrategists.com/analysis/driving-better-outcomes-aligning-state-investments-with-completion-needs/> [Accessed on 23 November 2015].
- Spence, D. S. (2006). "Accountability in the California State University system." *New Directions for Higher Education*, 2006(135), 103-110.
- Srinivasan, A., and Kurey, B. (2014). "Creating a Culture of Quality." *Harvard Business Review*, 92(4), 23-25.
- Stake, R. E. (2005). "Qualitative Case Studies", in N. K. Denzin and Y. S. Lincoln, (eds.), *The SAGE Handbook of Qualitative Research*. Thousand Oaks: SAGE, pp. 443-466.
- Stake, R. E., and Schwandt, T. A. (2006). "On Discerning Quality in Evaluation", in I. Shaw, J. Greene, and M. Mark, (eds.), *The SAGE Handbook of Evaluation*. London: SAGE, pp. 404-418.
- Stensaker, B., Enders, J., and H.F., d. B. (2007). *Comparative Analysis, Final report of the project: The Extent and Impact of Governance Reform across Europe*. European Commission, Brussels., Available from: <https://www.utwente.nl/bms/cheps/publications/.../governance1.pdf> [Accessed on 11 November 2015].
- Stensaker, B., and Fumasoli, T. (2017). "Multi-level Strategies in Universities: Coordination, Contestation or Creolisation?" *Higher Education Quarterly*, 71(3), 263-273.
- Strehl, F., Reisinger, S., and Kalatschan, M. (2007). *Funding Systems and their Effects on Higher Education Systems*. OECD Publishing, Available from: [www.oecd.org/edu/imhe](http://www.oecd.org/edu/imhe) [Accessed on 20 January 2016].
- Takayama, K. (2012). "Exploring the interweaving of contrary currents: transnational policy enactment and path-dependent policy implementation in Australia and Japan." *Comparative Education*, 48(4), 505-523.
- Tashakkori, A., and Teddlie, C. (2010). *Handbook of Mixed Methods in Social & Behavioural Research*, Thousand Oaks, CA: SAGE.
- Taylor, J. (2003). "Sticks and Carrots: The Effectiveness of Government Policy on Higher Education in England Since 1979." *Higher Education Management & Policy*, 15(1), 91.

- Taylor, J. (2006). "'Big is Beautiful.' Organisational Change in Universities in the United Kingdom: New Models of Institutional Management and the Changing Role of Academic Staff." *Higher Education in Europe*, 31(3), 251-273.
- Taylor, J., and Baines, C. (2012). "Performance management in UK universities: implementing the Balanced Scorecard." *Journal of Higher Education Policy and Management*, 34(2), 111-124.
- Teddlie, C., and Tashakkori, A. (2009). *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences*, Thousand Oaks: SAGE.
- Teichler, U. (2006). "Changing Structures of the Higher Education Systems: The Increasing Complexity of Underlying Forces." *Higher Education Policy*, 19(4), 447-461.
- Thorn, R. (2018). *No Artificial Limits: Ireland's Regional Technical Colleges*, Dublin: IPA.
- Thornberg, R. (2012). "Informed Grounded Theory." *Scandinavian Journal of Educational Research*, 56(3), 243-259.
- Tight, M. (2013). "Institutional churn: institutional change in United Kingdom higher education." *Journal of Higher Education Policy and Management*, 35(1), 11-20.
- Tirronen, J., and Nokkala, T. (2009). "Structural Development of Finnish Universities: Achieving Competitiveness and Academic Excellence." *Higher Education Quarterly*, 63(3), 219-236.
- UCC. (2013a). *UCC Strategic Plan 2013-2017: Finance*. Available from: <http://www.ucc.ie/en/strategicplanning/2013/> [Accessed on 11 August 2016].
- UCC. (2013b). *UCC Strategic Plan Sustaining Excellence 2013 - 2017*. UCC, Available from: <http://www.ucc.ie/en/strategicplanning/2013/> [Accessed on 11 August 2016].
- UCC. (2014a). *Mission-based Performance Compact between University College Cork and The Higher Education Authority*. UCC, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- UCC. (2014b). *UCC Profile 2010\_11*. UCC, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- UCC. (2014c). *UCC Projected Profile 2016*. UCC, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- UCC. (2015a). *Strategic Dialogue Cycle 2 UCC Self Evaluation Report 2015*. UCC, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- UCC. (2015b). "UCC named The Sunday Times University of the Year". City: UCC: Available from: <http://www.ucc.ie/en/about/uccnews/fullstory-606071-en.html> [Accessed on 12 August 2016].
- UCC. (2016). "UCC Named Best University in Ireland ". City: UCC: Available from: <http://www.ucc.ie/en/about/uccnews/fullstory-709490-en.html> [Accessed on 15 November 2016].
- UCC. (2017a). "EU Ranking Success for UCC". City: UCC: Available from: <https://www.ucc.ie/en/about/uccnews/fullstory-756313-en.html> [Accessed on 7 April 2017].
- UCC. (2017b). *Strategic Dialogue Cycle 3 UCC Self Evaluation Report 2015*. UCC.
- UMultirank. (2015). "UMultirank: Universities Compared Your Way". City: U-Multirank: Available from: <http://www.umultirank.org/#!/readymade?trackType=illustrative&signtMode=undefined&ranking=6&sortCol=sortname&sortOrder=asc&section=illustrativeSelectRanking&valueLetterMode=showLetters> [Accessed on 16 September 2016].

- University College Cork. (2015). "Research at UCC: News". City: University College Cork: Available from: <http://www.ucc.ie/en/research/news-events/news/> [Accessed on 24 May 2015].
- Usher, A. (2016). "Funding World-Class Universities." *International Higher Education*, 87(Fall 2016), 18-20.
- Välilmaa, J. (2011). "The New University Law and the Corporatisation of National Universities in Finland", in J. Lasonen and J. Ursin, (eds.), *Education in a Changing Society: Continuities and Discontinuities*. Helsinki: Finnish Educational Research Association, pp. 43-93.
- Van Damme, D. (2004). "Standards and Indicators in Institutional and Programme Accreditation in Higher Education: A Conceptual Framework and a Proposal", in L. Vlăsceanu and L. C. Barrows, (eds.), *Indicators for Institutional and Programme Accreditation in Higher/Tertiary Education*. Bucharest: UNESCO-CEPES, pp. 125-157.
- Van Vught, F. (2008). "Mission Diversity and Reputation in Higher Education." *Higher Education Policy*, 21(2), 151-174.
- Van Vught, F. (2009). "The EU Innovation Agenda: Challenges for European Higher Education and Research." *Higher Education Management & Policy*, 21(2), 13-34.
- van Vught, F., and De Boer, H. (2015). "Governance Models and Policy Instruments", in J. Huisman, H. de Boer, D. D. Dill, and M. Souto-Otero, (eds.), *The Palgrave International Handbook of Higher Education Policy and Governance*. UK: Palgrave Macmillan, pp. 38-56.
- van Vught, F. A., Kaiser, F., File, J. M., Gaethgens, C., Peter, R., and Westerheijden, D. F. (2010). "U-Map The European classification of higher education institutions". City: <http://www.u-map.eu/>.
- Vlăsceanu, L., Grünberg, L., and Pârlea, D. (2004). *Quality Assurance and Accreditation: A Glossary of Basic Terms and Definitions*. UNESCO-CEPES, Bucharest.
- Vukasovic, M., and Huisman, J. (2017). "Europeanization, Policy Transfer or Domestic Opportunity? Comparison of European Impact in Higher Education Policy." *Journal of Comparative Policy Analysis*.
- Vukasovic, M., Jungblut, J., and Elken, M. (2017). "Still the main show in town? Assessing political saliency of the Bologna Process across time and space." *Studies in Higher Education*, 42(8), 1421-1436.
- Vuori, J. (2015). "Making sense of institutional positioning in Finnish higher education." *Tertiary Education and Management*, 21(4), 316-327.
- Walsh, J., and Loxley, A. (2015). "The Hunt Report and higher education policy in the Republic of Ireland: 'an international solution to an Irish problem?'" *Studies in Higher Education*, 40(6), 1128-1145.
- Walshe, J. (2016). "Universities Face Cash Crisis Over Cuts and Youth Boom" *University World News*. City: University World News: Available from: <http://www.universityworldnews.com/article.php?story=20160412171524349> [Accessed on 18 April 2016].
- Warren, C. A. B. (2002). "Qualitative Interviewing", in J. F. Gubrium and J. A. Holstein, (eds.), *Handbook of Interview Research Context & Method*. Thousand Oaks, CA: SAGE.
- Weick, K. E. (1995). *Sensemaking in Organisations*, Thousand Oaks, CA: SAGE.
- Weick, K. E., Sutcliffe, K. M., and Obstfeld, D. (2005). "Organizing and the Process of Sensemaking." *Organization Science*, 16(4), 409-421.
- Wellman, J., and Harvey, D. (2016). *Recent Statewide Reforms in Higher Education Financing and Accountability: Emerging Lessons from the States*. College Futures Foundation, Available from: [www.higheredfinance.org/report/lessons-from-other-states](http://www.higheredfinance.org/report/lessons-from-other-states) [Accessed on 24 May 2016].
- Westerheijden, D. F. "Trends in Quality Assurance and Quality Enhancement." *Presented at CNED XXI Seminario internacional 'El aseguramiento de la calidad de la educación superior con acceso masivo'*, Santiago.

- Westerheijden, D. F., Beerkens, E., Cremonini, L., Huisman, J., Kehm, B., Kovac, A., Lazetic, P., McCoshan, A., Mozuraityte, N., Souto-Otero, M., Weert, E., White, J., and Yagci, Y. (2010). *Bologna process independent assessment: The first decade of working on the European Higher Education Area Final report to the European Commission*. European Commission, Available from: <http://opus.bath.ac.uk/18235/> [Accessed on 1 February 2016].
- Whiteman, R. S. (2015). "Explicating metatheory for mixed methods research in educational leadership." *International Journal of Educational Management*, 29(7), 888-903.
- Williams, R., and Leahy, A. (2018). *U21 Ranking of National Higher Education Systems*. Available from: <https://universitas21.com/news-and-events/news/u21-ranking-national-higher-education-systems-2018-released> [Accessed on 14 May 2018].
- WIT. (2014a). *Mission-based Performance Compact between Waterford Institute of Technology and The Higher Education Authority*. WIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- WIT. (2014b). *Waterford Institute of Technology Strategic Priorities and Vision to 2017*. WIT, Available from: [https://www.wit.ie/about\\_wit/at\\_a\\_glance/strategic\\_plan](https://www.wit.ie/about_wit/at_a_glance/strategic_plan) [Accessed on 9 August 2016].
- WIT. (2014c). *WIT Profile 2010/11*. WIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- WIT. (2014d). *WIT Profile 2016*. WIT, Available from: <http://www.heai.ie/en/policy/national-strategy/cycle-1-strategic-dialogue> [Accessed on 9 August 2016].
- WIT. (2015a). *WIT Strategic Dialogue Cycle 2 Self Evaluation Report*. WIT, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- WIT. (2015b). *WIT Strategic Dialogue Cycle 2 Self Evaluation Report Appendix Narrative*. WIT, Available from: <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16/strategic-dialogue-cycle-2> [Accessed on 11 August 2016].
- WIT. (2017a). *Strategic Dialogue Cycle 3 WIT Self-Evaluation Report*. WIT.
- WIT. (2017b). *Strategic Dialogue Cycle 3 WIT Self-Evaluation Report Narrative*. WIT.
- WLR fm. (2016). "Waterford TD Confident WIT Can Stand Alone in Uni Bid ". City: WLR: Available from: <http://www.wlrfm.com/news/local/65826-waterford-td-confident-wit-can-stand-alone-in-uni-bid.html> [Accessed on 11 May 2016].
- Yin, R. K. (2014). *Case Study Research: Design and Methods*, Los Angeles: SAGE.
- Zhang, Q., Larkin, C., and Lucey, B. M. (2017). "The economic impact of higher education institutions in Ireland: evidence from disaggregated input–output tables." *Studies in Higher Education*, 42(9), 1601-1623.
- Ziegele, F. (2013). "U-Multirank - The Implementation of a Multidimensional Ranking" *EU Presidency Higher Education Conference: Rankings and the Visibility of Quality Outcomes in the European Higher Education Area 30th–31st January 2013*. City: HEA: Dublin.

## Appendices

Appendix A Recurrent Grant Funding Model

Appendix B Quality Assurance Instruments in Higher Education

Appendix C Funding Mechanisms for Higher Education

Appendix D Quantitative Analysis: Factor Data and Cross Tabulations

Appendix E Interview Schedule

Appendix F New Higher Education System Performance Framework  
Questionnaire

Appendix G Nodes List

Appendix H Word Frequency Query

Appendix I Qualitative Analysis Documentation Form Sample

Appendix J Plain Language Statement

Appendix K Informed Consent Form

Appendix L Framework Matrix Sample

Appendix M System KSOs/HLIs Addressed in HEIs' Objectives/KPIs

## Appendix A Recurrent Grant Funding Model

A new recurrent grant funding model (HEA 2014b) for Irish higher education was introduced in 2006 for universities (2011 for institutes of technology), following a detailed consultation process and an OECD review (OECD 2004). The HEA describes its current funding allocation model as “comparing well to best practice models internationally”, comprising three elements: an annual formula-based recurrent grant, a “new element” of performance related funding (up to 10% of the annual core recurrent grant), and a curtailed targeted/strategic fund arising from the economic crisis (HEA 2014a, p.92; HEA 2015).

**Annual Recurrent Grant:** This is a formula-based grant based on “a standard per capita amount in respect of weighted EU student numbers (and non-EU research) in four broad subject price groups”, with an additional 33% weighting to support students from non-traditional backgrounds (HEA 2014b, p.2). This 33% weighting appears not to have materialised in practice – a significantly smaller amount has been top-sliced and is allocated to HEIs pro-rata. 5% of the core grant is top-sliced for and allocated on the basis of performance related research criteria to the university sector. The state also pays tuition fees on behalf of eligible full-time undergraduate EU students. A moderator of +/- 2% is applied to maintain financial stability in the system. In 2011/12 (latest data available), HEI income from state grants and tuition fees paid by the exchequer accounted for 48% of HEI income (HEA 2015).

**Performance Related Funding:** A performance related component (up to 10% of the annual core recurrent grant), introduced in 2014, is based on the achieving targets set out in strategic compacts with individual HEIs. 10% was considered large enough to incentivise behaviour without putting the financial stability of the higher education system at risk.

**Targeted/Strategic Funding:** As part of the Irish Government’s response to the OECD (2004) review, a competitive Strategic Innovation Fund (SIF) was established in 2006 as a mechanism for institutional restructuring and modernisation; for the enhancement of teaching and learning; for the development of postgraduate education and research; and for the improvement of equity of access into, and progression through, higher education. €40m was invested in cycle 1 projects and €50m (50% of original estimate) in cycle 2 projects. These reductions arose from the global economic crisis in 2008, which eventually led to the curtailment of the SIF programme in 2012 (HEA 2013).

## References

- HEA. (2014a). *Higher Education System Performance: First Report 2014-2016*. <http://www.heai.ie/en/policy/national-strategy/higher-education-system-performance-2014-16> Accessed 24/3/2015.
- HEA. (2014b). *RGAM Summary 2014 Final*. HEA, Available from: <http://www.heai.ie/node/1045> [Accessed on 7 May 2016].
- HEA. (2015). *Higher Education System Performance: Institutional and Sectoral Profiles 2012/13*. HEA, Available from: <http://www.heai.ie/en/publications/2015-0> [Accessed on 30 December 2015].
- OECD. (2004). *Reviews of National Policies for Education - Higher Education in Ireland*. OECD, Available from: <http://www.oecd.org/ireland/reviewsofnationalpoliciesforeducation-highereducationinireland.htm#HTO> [Accessed on 20 January 2016].

## Appendix B Quality Assurance Instruments in Higher Education

Higher levels of autonomy and the need to satisfy a diverse range of stakeholder needs have resulted in more rigorous procedures for quality assurance and an increased range of transparency and accountability instruments being deployed in the higher education sector. These include (Abma and Stake 2001; Brennan and Shah 2000; Curran et al. 2003; ESG 2015; European Commission 1999; European Commission/EACEA/Eurydice 2015; Eurostat 2016; Eurostat 2017; Eurydice 2010; Hazelkorn 2014; HEA 2015; McCormick 2008; Nevo 2006; Patton 2015; Stake 1997; Van Damme 2004; van Vught et al. 2010; Ziegele 2013):

**Multi-level models for Quality Assurance:** Multi-level models of quality assurance link self-evaluations of teaching and learning, research and engagement with peer review, operating within national accreditation frameworks and supra-national agencies (Brennan and Shah 2000; Van Damme 2004). For example, the creation of the European Higher Education Area (EHEA), in particular, the agreement on Standards and Guidelines for Quality Assurance in the European Higher Education (ESG) and the creation of a European Quality Assurance Register [EQAR]" (Eurydice 2010), integrate all the elements of van Damme's model (Van Damme 2004).

**Frameworks of Qualifications:** These provide for a greater harmonisation of national higher education systems through the adoption of a common structure for undergraduate and postgraduate studies, promoting comparability and mutual recognition of awards, for example, the Bologna process and the Framework for Qualifications of the EHEA (European Commission 1999; European Commission/EACEA/Eurydice 2015).

**Accreditation:** Accreditation refers to the status accorded to an institution by an authorised body (e.g. government or quality assurance agency) to make awards at appropriate levels on the national framework of qualifications (Brennan and Shah 2000; Hazelkorn et al. 2014).

**Evaluations and Peer Review:** Evaluations in higher education typically deploy a utilisation-focused approach - "evaluation done for and with specific intended primary users for specific, intended uses" (Patton 2015, p.178) – with a focus on the achievement and improvement of quality (formative approach), responsiveness to stakeholder needs, and formulation of recommendations that translate into actionable findings (Nevo 2006). This approach is consistent with Robert Stake's responsive evaluation theory which regards the criteria and associated standards for programme evaluation as emergent from the concerns of stakeholders, with the ultimate rationale being to improve the usefulness of findings to programme stakeholders thereby fostering stakeholder ownership (Abma and Stake 2001; Curran et al. 2003; Stake 1973). This approach is inherent in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015).

## Appendix B

**Benchmarking:** Benchmarking facilitates comparison of academic processes and performance indicators to recognised norms within higher education or with peer groups internally, nationally or internationally. For example, U-Multirank is a user-driven, peer group comparable, multidimensional, multilevel and context based framework for HEIs (Ziegele 2013).

**Classification:** Classification focuses on grouping HEIs by similar characteristics and is typically used in benchmarking exercises or to highlight diversity within systems, for example, the Carnegie Commission on Higher Education's classification system (McCormick 2008), the European classification of HEIs (van Vught et al. 2010).

**Public Databases and Reports:** These provide comparative data at national or international level, for example, HEA Key Facts and Figures (HEA 2015), Key Figures on Europe (Eurostat 2016; Eurostat 2017b)

**Rankings:** Rankings usually denote a hierarchical ordering of institutions or activities or sub-units thereof based on a weighting of indicators that are determined by the ranking agency, for example, the global rankings of HEIs.

## References

- Abma, T. A., and Stake, R. E. (2001). "Stake's responsive evaluation: Core ideas and evolution." *New Directions for Evaluation*, 2001(92), 7-22.
- Brennan, J., and Shah, T. (2000). *Managing Quality in Higher Education: An International Perspective on Institutional Assessment and Change*, Buckingham, MK18 1XW: OECD, SRHE and Open University Press.
- Curran, V., Christopher, J., Lemire, F., Collins, A., and Barrett, B. (2003). "Application of a responsive evaluation approach in medical education." *Medical Education*, 37(3), 256-266.
- ESG. (2015). *Standards and Guidelines for Quality Assurance in the European Higher Education Area*. ESG, Brussels, Belgium.
- European Commission. (1999). *Bologna Declaration*. European Commission, Available from: <http://www.ehea.info/article-details.aspx?ArticleId=3> [Accessed on 1 February 2016].
- European Commission/EACEA/Eurydice. (2015). *The European Higher Education Area in 2015: Bologna Process Implementation Report*. European Union, Luxembourg.
- Eurostat. (2016). *Key figures on Europe: 2015 edition*. Eurostat, Brussels.
- Eurostat. (2017). *Key Figures on Europe: 2016 Edition*. Eurostat, Available from: [ec.europa.eu/eurostat/documents/3217494/7827738/KS-EI-16-001-EN-N.pdf](http://ec.europa.eu/eurostat/documents/3217494/7827738/KS-EI-16-001-EN-N.pdf) [Accessed on 28 April 2017].
- Eurydice. (2010). *Focus on Higher Education in Europe 2010: The Impact of the Bologna Process*. European Commission, Available from: [http://eacea.ec.europa.eu/education/eurydice/documents/thematic\\_reports/122EN.pdf](http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/122EN.pdf) [Accessed on 5 March 2016].
- Hazelkorn, E. (2014). "Reflections on a Decade of Global Rankings: what we've learned and outstanding issues." *European Journal of Education*, 49(1), 12-28.
- HEA. (2015). *Key Facts and Figures 2014/15*. HEA, Available from: [www.hea.ie/en/publications/2015-0](http://www.hea.ie/en/publications/2015-0) [Accessed on 22 March 2016].
- McCormick, A. C. (2008). "The Complex Interplay Between Classification and Ranking of Colleges and Universities: Should the Berlin Principles Apply Equally to Classification?" *Higher Education in Europe*, 33(2/3), 209-218.

## Appendix B

- Nevo, D. (2006). "Evaluation in Education", in I. Shaw, J. Greene, and M. Mark, (eds.), *The SAGE Handbook of Evaluation*. London: SAGE, pp. 441-460.
- Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods*, Los Angeles: SAGE.
- Stake, R. E. (1997). "Advocacy in Evaluation: A Necessary Evil?", in E. Chelmsky and W. R. Shadish, (eds.), *Evaluation for the 21st Century: A Handbook*. Thousand Oaks: SAGE, pp. 470-476.
- Van Damme, D. (2004). "Standards and Indicators in Institutional and Programme Accreditation in Higher Education: A Conceptual Framework and a Proposal", in L. Vlăsceanu and L. C. Barrows, (eds.), *Indicators for Institutional and Programme Accreditation in Higher/Tertiary Education*. Bucharest: UNESCO-CEPES, pp. 125-157.
- van Vught, F. A., Kaiser, F., File, J. M., Gaethgens, C., Peter, R., and Westerheijden, D. F. (2010). "U-Map The European classification of higher education institutions". City: <http://www.u-map.eu/>.
- Ziegele, F. (2013). "U-Multirank - The Implementation of a Multidimensional Ranking" *EU Presidency Higher Education Conference: Rankings and the Visibility of Quality Outcomes in the European Higher Education Area 30th–31st January 2013*. City: HEA: Dublin.

## Appendix C Funding Mechanisms for Higher Education

The variety of mechanisms used to provide public funding for higher education to support teaching, operations and investment, targeted projects, and research are described below. These descriptions are drawn from a wide range of literature sources.

**Negotiated budgets:** the most traditional form and still in effect in some countries and typically allocated on based on historical factors or the political power of the institution.

**Formula-based funding:** uses a combination of input and output measures and is used by the vast majority of countries (for example, Australia, Belgium, Czech republic, Denmark, England, Finland, France, Germany, Hungary, Latvia, Lithuania, Sweden, Japan, The Netherlands, Portugal, Romania, New Zealand, the Nordic states, the United Kingdom, Ireland, South Africa, Canada and the United States). Factors used in formulae include staff costs, enrolments and actual/average/normative/benchmarked cost per student (most common), performance-based components such as number of students completing or credits awarded, priority-based reflecting needs in key areas in the economy or society, student-based related to improving participation from under-represented groups in tertiary education. Introduction of formula-based funding made explicit and transparent the mechanism for funding allocations, provided for equity of treatment, served as an instrument for implementing policy directives, and reduced the scope for political interference.

**Demand-side vouchers:** vouchers issued to students form the basis for refunds by governments to institutions (for example, Colorado). Such a system is considered equitable for all students and thought to be an appropriate incentive for lifelong learning.

**Performance-based funding:** In addition to performance-based formula funding, a number of countries have adopted additional performance related components to fund all or a part of recurrent operating budgets. This is regarded as one of the principal funding innovations in recent decades. This innovation tends to operate as performance set-asides, performance contracts or payment for contracts of service. In performance set-asides, a small percentage of funds (typically up to 10%, but with larger proportions planned in some countries – e.g. Austria 20%, Belgium-Flanders 12%, Germany 20%, Ireland 15%, Netherlands 20%, France up to 15%) is distributed based on performance criteria which are often used to incentivise behaviour towards state priorities. Countries that have used set-asides include South Africa, some US states (e.g. Tennessee, South Carolina), Ireland). Performance contracts or compacts are generally multi-year negotiated agreements between governments or their buffer agencies and individual institutions. Countries that have introduced performance contracts include England, Germany, France, Italy, Spain, Belgium, Ireland, Australia, Denmark, the Netherlands, Norway, Finland, Austria, Switzerland, Latvia, Colorado, Virginia, Chile and Hong Kong. In a way, they are similar in principle to performance set-asides as funding is linked to achievement of agreed performance targets, but differ in that financial penalties may be applied for not meeting agreed objectives and targets. Funding may be provided “ex-ante” (most common) with possible claw back or “ex post” (De Boer et al. 2015, p.17), which most closely resembles the approach in Ireland. According to Pruvot et al. (2015, p.35), in the majority of systems in Europe where they apply “they are seen more as a governance tool than as a funding instrument” although there is a direct link with funding in the majority of cases. The funding percentage is generally small and varies from around 1% to 7% with some of this associated with competitive elements and some include penalty related components (*ibid*, p.38).

**Competitive funds:** These tend to apply on a project-by-project basis and tend to be directed towards national policy goals. Examples would include promoting innovation, addressing skills deficits in the economy, addressing national goals, quality improvements.

**Funding for research:** Many countries fund research and instruction together via negotiated budgets or formulas, an alternative is a block grant for research based on demonstrated institute capacity but not designated for specific project. Increasingly, specific project proposals and centres of excellence are being funded through research prioritisation exercises that align research with state priorities for research and innovation. Matching funding requirements may apply in some of these instances.

(Atkinson-Grosjean and Grosjean 2000; Berdahl 2010; Boberg 2000; De Boer et al. 2015; de Jager 2011; Dougherty 2011; Fagerlind and Strömqvist 2004; Frølich 2008; Hazelkorn 2012; Herbst 2007; Jongbloed 2010; Jongbloed and Vossensteyn 2001; Jonkers and Zacharewicz 2015; Kirby 2007; Klumpp et al. 2014; Lewis et al. 2007; McGuinness 2011; Neumann and Guthrie 2006; Orr et al. 2007; Pruvot et al. 2015; Salmi 2009; Salmi and Hauptman 2006; Sharma 2004; Shin and Milton 2004; Strehl et al. 2007; Van Vught 2008)

## References

- Atkinson-Grosjean, J., and Grosjean, G. (2000). "The Use of Performance Models in Higher Education: A Comparative International Review." *Education Policy Analysis Archives*, 8(30), 1-34.
- Berdahl, R. (2010). "Thoughts About Academic Freedom, Autonomy and Accountability" *Prepared for the Magna Charta Observatory Seminar*. City: Magna Charta Observatory: Istanbul, Turkey.
- Boberg, A. (2000). "System-Wide Program Assessment with Performance Indicators: Alberta's Performance Funding Mechanism." *Canadian Journal of Program Evaluation*(Special Issue), 3-23.
- De Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossensteyn, H. (2015). *Performance-based funding and performance agreements in fourteen higher education systems*. European Commission, Available from: [www.utwente.nl/cheps](http://www.utwente.nl/cheps) [Accessed on 26 May 2017].
- de Jager, G. (2011). "Missions on the move: university systems in England, New York State and California." *Higher Education Management and Policy*, 23(1), 1-23.
- Dougherty, K. J. (2011). "State Performance Funding for Higher Education: Origins, Impacts, and Demise: Policy Implications" *Achieving the Dream State Policy Meeting City: Community College Research Centre*: Available from: [ccrc.tc.columbia.edu/media/.../state-performance-funding-implications.pdf](http://ccrc.tc.columbia.edu/media/.../state-performance-funding-implications.pdf) [Accessed on 21 January 2016].
- Fagerlind, I., and Strömquist, G. (2004). *Reforming higher education in the Nordic countries – studies of change in Denmark, Finland, Iceland, Norway and Sweden*. UNESCO International Institute for Educational Planning <http://www.unesco.org/iiep>, Available from: <http://www.unesco.org/iiep> [Accessed on 21 November 2015].
- Frølich, N. (2008). *The politics of steering by numbers: Debating performance-based funding in Europe*. NIFU/STEP, Available from: [www.nifustep.no](http://www.nifustep.no) [Accessed on 20 January 2016].
- Hazelkorn, E. (2012). "“Everyone Wants to Be Like Harvard” – Or Do They? Cherishing All Missions Equally", in A. Curaj, P. Scott, V. L., and L. Wilson, (eds.), *European Higher Education at the Crossroads: Between the Bologna Process and National Reforms*. Dordrecht: Springer, pp. 837-862.
- Herbst, M. (2007). *Financing Public Universities: The Case of Performance Funding*, Dordrecht: Springer.
- Jongbloed, B. (2010). *Funding Higher Education: A View Across Europe*. European Centre for Strategic Management of Universities, [www.highereducationmanagement.eu](http://www.highereducationmanagement.eu).
- Jongbloed, B., and Vossensteyn, H. (2001). "Keeping up Performances: An international survey of performance-based funding in higher education." *Journal of Higher Education Policy and Management*, 23(2), 127-145.
- Jonkers, K., and Zacharewicz, T. (2015). *Performance based funding: a comparative assessment of their use and nature in EU Member States*. European Commission, Available from: [publications.jrc.ec.europa.eu/repository/bitstream/.../jrc97684\\_pbf%20final%20.pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/.../jrc97684_pbf%20final%20.pdf) [Accessed on 24 May 2017].
- Kirby, D. (2007). "Reviewing Canadian Post-Secondary Education: Post-Secondary Education Policy in Post-Industrial Canada." *Canadian Journal of Educational Administration and Policy*(65), 1-24.
- Klumpp, M., de Boer, H., and Vossensteyn, H. (2014). "Comparing national policies on institutional profiling in Germany and the Netherlands." *Comparative Education*, 50(2), 156-176.
- Lewis, D. R., Hendel, D. D., and Kallsen, L. (2007). "Performance Indicators as a Foundation of Institutional Autonomy: Implications for Higher Education Institutions in Europe." *Tertiary Education & Management*, 13(3), 203-226.

## Appendix C

- McGuinness, A. (2011). "The States and Higher Education", in P. Altbach, P. J. Gumpert, and R. O. Berdahl, (eds.), *American Higher Education in the Twenty-First Century: Social, Political and Economic Challenges*. Baltimore: Johns Hopkins University Press, pp. 139-169.
- Neumann, R., and Guthrie, J. (2006). "Performance Indicators in Australian Universities: Establishment, Development and Issues" *EIASM 2nd Workshop on the Process of Reform of University Systems, 4-6 May 2006*. City: Venice, Italy.
- Orr, D., Jaeger, M., and Schwarzenberger, A. (2007). "Performance-based funding as an instrument of competition in German higher education." *Journal of Higher Education Policy & Management*, 29(1), 3-23.
- Privot, E. B., Claeys-Kulik, A.-L., and Estermann, T. (2015). *Designing Strategies for Efficient Funding of Universities in Europe*. EUA.
- Salmi, J. (2009). "The Growing Accountability Agenda: Progress or Mixed Blessing?" *Higher Education Management*, 21(1), 109-129.
- Salmi, J., and Hauptman, A. M. (2006). *Innovations in Tertiary Education Financing: A Comparative Evaluation of Allocation Mechanisms*. The World Bank, Available from: [www.theworldbank.org/education](http://www.theworldbank.org/education) [Accessed on 14 December 2015].
- Sharma, R. (2004). "Performance-based funding in the entrepreneurial North American and Australian universities." *Journal of Higher Education Policy & Management*, 26(1), 109-118.
- Shin, J.-c., and Milton, S. (2004). "The effects of performance budgeting and funding programs on graduation rate in public four-year colleges and universities." *Education Policy Analysis Archives*, 12(22).
- Strehl, F., Reisinger, S., and Kalatschan, M. (2007). *Funding Systems and their Effects on Higher Education Systems*. OECD Publishing, Available from: [www.oecd.org/edu/imhe](http://www.oecd.org/edu/imhe) [Accessed on 20 January 2016].
- Van Vught, F. (2008). "Mission Diversity and Reputation in Higher Education." *Higher Education Policy*, 21(2), 151-174.

## Appendix D Quantitative Analysis: Factor Data and Cross Tabulations

This appendix includes figures that provide the detailed data from SPSS analyses to support the findings reported in the main report. These data include factors, eigenvalues and variance explained arising from the factor analysis. It also provides cross tabulations between staff position and the variables that load on the relevant factors.

### Contents

<b>Appendix D Quantitative Analysis: Factor Data and Cross Tabulations</b> .....	1
<b>Table of Figures</b> .....	1
<b>Goals of HESPF</b> .....	3
<b>Influence of the HESPF</b> .....	11
<b>Institutional Capacity and the HESPF</b> .....	20
<b>Usefulness of the KPIs and the HESPF</b> .....	27
<b>Factor Analysis Combining All Variables</b> .....	34
<b>Multiple Discriminant Analysis (MDA) on the Five Factors for All Variables for Staff Position</b> .....	36

### Table of Figures

<b>Figure 1 Goals of HESPF: Factors, Eigenvalues and Variance Explained</b> .....	3
<b>Figure 2 Goals of HESPF: Factors Loadings</b> .....	4
<b>Figure 3 Staff Position and Autonomy &amp; Accountability Cross Tabulation</b> .....	5
<b>Figure 4 Staff Position and Visibility &amp; Steering Cross Tabulation</b> .....	8
<b>Figure 5 Influence of HESPF: Factors, Eigenvalues and Variance Explained</b> .....	11

Appendix D

<b>Figure 6 Influence of HESPF: Factors Loadings .....</b>	<b>12</b>
<b>Figure 7 Staff Position and Strategic Impact Cross Tabulation .....</b>	<b>13</b>
<b>Figure 8 Staff Position and Goal Displacement Cross Tabulation.....</b>	<b>17</b>
<b>Figure 9 Institutional Capacity and the HESPF: Factors, Eigenvalues and Variance Explained .....</b>	<b>20</b>
<b>Figure 10 Institutional Capacity and the HESPF: Factors Loadings.....</b>	<b>21</b>
<b>Figure 11 Staff Position and Institutional Capacity Cross Tabulation .....</b>	<b>22</b>
<b>Figure 12 Staff Position and Resource Constraints Cross Tabulation.....</b>	<b>25</b>
<b>Figure 13 Staff Position and Co-operation Cross Tabulation .....</b>	<b>26</b>
<b>Figure 14 Usefulness of the KPIs and the HESPF: Factors, Eigenvalues and Variance Explained .....</b>	<b>27</b>
<b>Figure 15 Usefulness of the KPIs and the HESPF: Factors Loadings.....</b>	<b>28</b>
<b>Figure 16 Staff Position and Long Term Effectiveness Cross Tabulation.....</b>	<b>29</b>
<b>Figure 17 Staff Position and KPI Impact Cross Tabulation .....</b>	<b>32</b>
<b>Figure 18 Factors, Eigenvalues and Variance Explained Using All Variables.....</b>	<b>34</b>
<b>Figure 19 Factors Loadings for Factor Solution Involving All Variables.....</b>	<b>35</b>
<b>Figure 20 Equality of Factor Group Means for Staff Positions.....</b>	<b>36</b>
<b>Figure 21 Group Means for the Five Factors .....</b>	<b>37</b>

Appendix D

Goals of HESPF

**Figure 1 Goals of HESPF: Factors, Eigenvalues and Variance Explained**

Factor	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.214	35.113	35.113	3.778	31.486	31.486	2.809	23.411	23.411
2	1.891	15.758	50.871	1.389	11.574	43.06	2.116	17.63	41.041
3	1.322	11.019	61.889	0.735	6.127	49.187	0.978	8.146	49.187
4	0.954	7.948	69.838						
5	0.816	6.8	76.638						
6	0.695	5.794	82.432						
7	0.609	5.078	87.51						
8	0.426	3.549	91.059						
9	0.377	3.14	94.2						
10	0.302	2.515	96.715						
11	0.229	1.906	98.621						
12	0.165	1.379	100						

Extraction Method: Principal Axis Factoring.

**Figure 2 Goals of HESPF: Factors Loadings**

**Rotated Factor Matrix<sup>a</sup>**

	Factor		
	1	2	3
C8 HESPF respects substantive autonomy of my HEI	0.82		
C9 HESPF balances accountability and co-ordination with autonomy	0.757	0.407	
C6 HESPF provides a rational basis for funding allocations	0.731		0.326
C7 HESPF improves ability to prove accountability for public funds	0.561		0.312
C5 Implementation of HESPF is supported by a sustainable funding model	0.556		
C13 Overall the HESPF is a useful concept	0.459	0.45	
C2 HESPF improves visibility of HE performance to stakeholders		0.693	
C1 HESPF clearly articulates government expectations across HE		0.655	
C4 Uncertainty in HE landscape is hindering development of HESPF		0.641	
C3 HESPF is effective in steering HE towards national priorities		0.49	0.393
C10 Susceptibility to changing political agendas is impacting adoption			0.535
C12 HESPF is improving co-operation between HEIs			0.414

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

**Figure 3 Staff Position and Autonomy & Accountability Cross Tabulation**

**Staff position \* C5 Implementation of HESPF is supported by a sustainable funding model Crosstabulation**

		C5 Implementation of HESPF is supported by a sustainable funding model					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	4	3	9	1	3	20
		% within Staff position	20.00%	15.00%	45.00%	5.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	16	7	2	3	1	29
		% within Staff position	55.20%	24.10%	6.90%	10.30%	3.40%	100.00%
	Senior Administrator	Count	11	2	6	3	0	22
		% within Staff position	50.00%	9.10%	27.30%	13.60%	0.00%	100.00%
Total	Count	31	12	17	7	4	71	
	% within Staff position	43.70%	16.90%	23.90%	9.90%	5.60%	100.00%	

Appendix D

**Staff position \* C6 HESPF provides a rational basis for funding allocations Crosstabulation**

		C6 HESPF provides a rational basis for funding allocations					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	0	10	7	1	20
		% within Staff position	10.00%	0.00%	50.00%	35.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	10	9	4	5	1	29
		% within Staff position	34.50%	31.00%	13.80%	17.20%	3.40%	100.00%
	Senior Administrator	Count	1	10	3	8	0	22
		% within Staff position	4.50%	45.50%	13.60%	36.40%	0.00%	100.00%
Total	Count	13	19	17	20	2	71	
	% within Staff position	18.30%	26.80%	23.90%	28.20%	2.80%	100.00%	

**Staff position \* C7 HESPF improves ability to prove accountability for public funds Crosstabulation**

		C7 HESPF improves ability to prove accountability for public funds					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	1	9	8	2	20
		% within Staff position	0.00%	5.00%	45.00%	40.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	2	8	5	10	4	29
		% within Staff position	6.90%	27.60%	17.20%	34.50%	13.80%	100.00%
	Senior Administrator	Count	1	4	6	8	3	22
		% within Staff position	4.50%	18.20%	27.30%	36.40%	13.60%	100.00%
Total	Count	3	13	20	26	9	71	
	% within Staff position	4.20%	18.30%	28.20%	36.60%	12.70%	100.00%	

**Staff position \* C8 HESPF respects substantive autonomy of my HEI Crosstabulation**

		C8 HESPF respects substantive autonomy of my HEI					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	1	9	6	2	20
		% within Staff position	10.00%	5.00%	45.00%	30.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	7	8	1	10	3	29
		% within Staff position	24.10%	27.60%	3.40%	34.50%	10.30%	100.00%
	Senior Administrator	Count	3	5	5	4	5	22
		% within Staff position	13.60%	22.70%	22.70%	18.20%	22.70%	100.00%
Total	Count	12	14	15	20	10	71	
	% within Staff position	16.90%	19.70%	21.10%	28.20%	14.10%	100.00%	

**Staff position \* C9 HESPF balances accountability and co-ordination with autonomy Crosstabulation**

		C9 HESPF balances accountability and co-ordination with autonomy					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	1	12	5	0	20
		% within Staff position	10.00%	5.00%	60.00%	25.00%	0.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	4	6	6	11	2	29
		% within Staff position	13.80%	20.70%	20.70%	37.90%	6.90%	100.00%
	Senior Administrator	Count	2	4	5	9	2	22
		% within Staff position	9.10%	18.20%	22.70%	40.90%	9.10%	100.00%
Total	Count	8	11	23	25	4	71	
	% within Staff position	11.30%	15.50%	32.40%	35.20%	5.60%	100.00%	

**Staff position \* C13 Overall the HESPF is a useful concept Crosstabulation**

			C13 Overall the HESPF is a useful concept					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	1	5	9	4	20
		% within Staff position	5.00%	5.00%	25.00%	45.00%	20.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	3	5	16	4	29
		% within Staff position	3.40%	10.30%	17.20%	55.20%	13.80%	100.00%
	Senior Administrator	Count	0	4	4	10	4	22
		% within Staff position	0.00%	18.20%	18.20%	45.50%	18.20%	100.00%
Total	Count	2	8	14	35	12	71	
	% within Staff position	2.80%	11.30%	19.70%	49.30%	16.90%	100.00%	

**Figure 4 Staff Position and Visibility & Steering Cross Tabulation**

**Staff position \* C1 HESPF clearly articulates government expectations across HE Crosstabulation**

			C1 HESPF clearly articulates government expectations across HE					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	0	10	6	3	20
		% within Staff position	5.00%	0.00%	50.00%	30.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	1	3	17	7	29
		% within Staff position	3.40%	3.40%	10.30%	58.60%	24.10%	100.00%
	Senior Administrator	Count	0	0	3	11	8	22
		% within Staff position	0.00%	0.00%	13.60%	50.00%	36.40%	100.00%
Total	Count	2	1	16	34	18	71	
	% within Staff position	2.80%	1.40%	22.50%	47.90%	25.40%	100.00%	

**Staff position \* C2 HESPF improves visibility of HE performance to stakeholders Crosstabulation**

			C2 HESPF improves visibility of HE performance to stakeholders					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	0	13	4	2	20
		% within Staff position	5.00%	0.00%	65.00%	20.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	4	7	9	8	29
		% within Staff position	3.40%	13.80%	24.10%	31.00%	27.60%	100.00%
	Senior Administrator	Count	2	0	2	15	3	22
		% within Staff position	9.10%	0.00%	9.10%	68.20%	13.60%	100.00%
Total	Count	4	4	22	28	13	71	
	% within Staff position	5.60%	5.60%	31.00%	39.40%	18.30%	100.00%	

**Staff position \* C3 HESPF is effective in steering HE towards national priorities Crosstabulation**

			C3 HESPF is effective in steering HE towards national priorities					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	1	10	7	1	20
		% within Staff position	5.00%	5.00%	50.00%	35.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	5	8	14	2	29
		% within Staff position	0.00%	17.20%	27.60%	48.30%	6.90%	100.00%
	Senior Administrator	Count	0	1	7	12	2	22
		% within Staff position	0.00%	4.50%	31.80%	54.50%	9.10%	100.00%
Total	Count	1	7	25	33	5	71	
	% within Staff position	1.40%	9.90%	35.20%	46.50%	7.00%	100.00%	

Appendix D

**Staff position \* C4 Uncertainty in HE landscape is hindering development of HESPF Crosstabulation**

		C4 Uncertainty in HE landscape is hindering development of HESPF					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	1	7	7	4	20
		% within Staff position	5.00%	5.00%	35.00%	35.00%	20.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	1	2	6	20	29
		% within Staff position	0.00%	3.40%	6.90%	20.70%	69.00%	100.00%
	Senior Administrator	Count	0	1	5	5	11	22
		% within Staff position	0.00%	4.50%	22.70%	22.70%	50.00%	100.00%
Total	Count	1	3	14	18	35	71	
	% within Staff position	1.40%	4.20%	19.70%	25.40%	49.30%	100.00%	

Appendix D

Influence of the HESPF

**Figure 5 Influence of HESPF: Factors, Eigenvalues and Variance Explained**

Total Variance Explained									
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.191	41.914	41.914	3.745	37.446	37.446	3.705	37.051	37.051
2	1.78	17.804	59.719	1.22	12.198	49.644	1.259	12.594	49.644
3	0.847	8.473	68.191						
4	0.708	7.078	75.269						
5	0.613	6.13	81.399						
6	0.539	5.388	86.786						
7	0.498	4.982	91.769						
8	0.38	3.799	95.568						
9	0.264	2.642	98.21						
10	0.179	1.79	100						

Extraction Method: Principal Axis Factoring.

**Figure 6 Influence of HESPF: Factors Loadings**

**Rotated Factor Matrix<sup>a</sup>**

	Factor	
	1	2
D5 HESPF is influencing my HEI to become more strategic	0.796	
D7 HESPF improves visibility of my work and connects it to the national agenda	0.788	
D6 HESPF is accelerating change processes in my HEI	0.749	
D8 HESPF is influencing my dept/faculty goals towards the national agenda	0.725	
D4 HESPF improves HEI's effectiveness by prioritising strengths	0.714	
D3 My HEI's co-operation with HESPF is influenced by social responsibility, public good	0.712	
D2 HESPF has priority and centrality in determining my HEI's goals	0.52	0.361
D10 HESPF influences avoidance of projects with uncertain outcomes		0.778
D1 HESPF is displacing HEI goals towards national agenda		0.506
D9 HESPF is impacting negatively on dept/faculty goals not aligned to national agenda		0.496

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

**Figure 7 Staff Position and Strategic Impact Cross Tabulation**

**Staff position \* D2 HESPF has priority and centrality in determining my HEI's goals Crosstabulation**

		D2 HESPF has priority and centrality in determining my HEI's goals					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	0	8	10	1	20
		% within Staff position	5.00%	0.00%	40.00%	50.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	5	0	18	6	29
		% within Staff position	0.00%	17.20%	0.00%	62.10%	20.70%	100.00%
	Senior Administrator	Count	0	5	3	12	2	22
		% within Staff position	0.00%	22.70%	13.60%	54.50%	9.10%	100.00%
Total	Count	1	10	11	40	9	71	
	% within Staff position	1.40%	14.10%	15.50%	56.30%	12.70%	100.00%	

**Staff position \* D3 My HEI's co-operation with HESPF is influenced by social responsibility, public good Crosstabulation**

		D3 My HEI's co-operation with HESPF is influenced by social responsibility, public good					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	1	12	5	0	20
		% within Staff position	10.00%	5.00%	60.00%	25.00%	0.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	2	6	8	8	5	29
		% within Staff position	6.90%	20.70%	27.60%	27.60%	17.20%	100.00%
	Senior Administrator	Count	1	3	8	9	1	22
		% within Staff position	4.50%	13.60%	36.40%	40.90%	4.50%	100.00%
Total	Count	5	10	28	22	6	71	
	% within Staff position	7.00%	14.10%	39.40%	31.00%	8.50%	100.00%	

**Staff position \* D4 HESPF improves HEI's effectiveness by prioritising strengths Crosstabulation**

			D4 HESPF improves HEI's effectiveness by prioritising strengths					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	0	10	9	0	20
		% within Staff position	5.00%	0.00%	50.00%	45.00%	0.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	7	4	14	4	29
		% within Staff position	0.00%	24.10%	13.80%	48.30%	13.80%	100.00%
	Senior Administrator	Count	0	5	4	12	1	22
		% within Staff position	0.00%	22.70%	18.20%	54.50%	4.50%	100.00%
Total	Count	1	12	18	35	5	71	
	% within Staff position	1.40%	16.90%	25.40%	49.30%	7.00%	100.00%	

**Staff position \* D5 HESPF is influencing my HEI to become more strategic Crosstabulation**

			D5 HESPF is influencing my HEI to become more strategic					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	0	7	9	3	20
		% within Staff position	5.00%	0.00%	35.00%	45.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	6	2	15	6	29
		% within Staff position	0.00%	20.70%	6.90%	51.70%	20.70%	100.00%
	Senior Administrator	Count	1	1	5	12	3	22
		% within Staff position	4.50%	4.50%	22.70%	54.50%	13.60%	100.00%
Total	Count	2	7	14	36	12	71	
	% within Staff position	2.80%	9.90%	19.70%	50.70%	16.90%	100.00%	

**Staff position \* D6 HESPF is accelerating change processes in my HEI Crosstabulation**

			D6 HESPF is accelerating change processes in my HEI					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	1	2	7	7	3	20
		% within Staff position	5.00%	10.00%	35.00%	35.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	3	8	8	5	5	29
		% within Staff position	10.30%	27.60%	27.60%	17.20%	17.20%	100.00%
	Senior Administrator	Count	3	6	7	4	2	22
		% within Staff position	13.60%	27.30%	31.80%	18.20%	9.10%	100.00%
Total	Count	7	16	22	16	10	71	
	% within Staff position	9.90%	22.50%	31.00%	22.50%	14.10%	100.00%	

**Staff position \* D7 HESPF improves visibility of my work and connects it to the national agenda Crosstabulation**

			D7 HESPF improves visibility of my work and connects it to the national agenda					Total
			Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree	
Staff position	Lecturer/Researcher	Count	3	1	10	4	2	20
		% within Staff position	15.00%	5.00%	50.00%	20.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	3	4	7	11	4	29
		% within Staff position	10.30%	13.80%	24.10%	37.90%	13.80%	100.00%
	Senior Administrator	Count	2	2	6	9	3	22
		% within Staff position	9.10%	9.10%	27.30%	40.90%	13.60%	100.00%
Total	Count	8	7	23	24	9	71	
	% within Staff position	11.30%	9.90%	32.40%	33.80%	12.70%	100.00%	

Appendix D

**Staff position \* D8 HESPF is influencing my dept/faculty goals towards the national agenda Crosstabulation**

		D8 HESPF is influencing my dept/faculty goals towards the national agenda					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	2	6	8	2	20
		% within Staff position	10.00%	10.00%	30.00%	40.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	2	2	1	18	6	29
		% within Staff position	6.90%	6.90%	3.40%	62.10%	20.70%	100.00%
	Senior Administrator	Count	1	3	5	9	4	22
		% within Staff position	4.50%	13.60%	22.70%	40.90%	18.20%	100.00%
Total		Count	5	7	12	35	12	71
		% within Staff position	7.00%	9.90%	16.90%	49.30%	16.90%	100.00%

**Figure 8 Staff Position and Goal Displacement Cross Tabulation**

**Staff position \* D1 HESPF is displacing HEI goals towards national agenda Crosstabulation**

		D1 HESPF is displacing HEI goals towards national agenda					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	4	8	4	2	20
		% within Staff position	10.00%	20.00%	40.00%	20.00%	10.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	5	5	16	2	29
		% within Staff position	3.40%	17.20%	17.20%	55.20%	6.90%	100.00%
	Senior Administrator	Count	1	7	2	11	1	22
		% within Staff position	4.50%	31.80%	9.10%	50.00%	4.50%	100.00%
Total		Count	4	16	15	31	5	71
		% within Staff position	5.60%	22.50%	21.10%	43.70%	7.00%	100.00%

Appendix D

**Staff position \* D9 HESPF is impacting negatively on dept/faculty goals not aligned to national agenda Crosstabulation**

		D9 HESPF is impacting negatively on dept/faculty goals not aligned to national agenda					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	3	9	6	1	20
		% within Staff position	5.00%	15.00%	45.00%	30.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	4	8	4	7	6	29
		% within Staff position	13.80%	27.60%	13.80%	24.10%	20.70%	100.00%
	Senior Administrator	Count	4	4	11	3	0	22
		% within Staff position	18.20%	18.20%	50.00%	13.60%	0.00%	100.00%
Total		Count	9	15	24	16	7	71
		% within Staff position	12.70%	21.10%	33.80%	22.50%	9.90%	100.00%

Appendix D

**Staff position \* D10 HESPF influences avoidance of projects with uncertain outcomes Crosstabulation**

		D10 HESPF influences avoidance of projects with uncertain outcomes					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	3	9	6	1	20
		% within Staff position	5.00%	15.00%	45.00%	30.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	5	10	8	5	29
		% within Staff position	3.40%	17.20%	34.50%	27.60%	17.20%	100.00%
	Senior Administrator	Count	3	7	5	5	2	22
		% within Staff position	13.60%	31.80%	22.70%	22.70%	9.10%	100.00%
Total		Count	5	15	24	19	8	71
		% within Staff position	7.00%	21.10%	33.80%	26.80%	11.30%	100.00%

Appendix D

Institutional Capacity and the HESPF

**Figure 9 Institutional Capacity and the HESPF: Factors, Eigenvalues and Variance Explained**

Total Variance Explained									
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.336	25.951	25.951	1.844	20.487	20.487	1.727	19.183	19.183
2	2.101	23.344	49.294	1.67	18.56	39.046	1.37	15.226	34.409
3	1.137	12.638	61.932	0.711	7.895	46.941	1.128	12.532	46.941
4	0.825	9.164	71.096						
5	0.758	8.421	79.517						
6	0.551	6.124	85.641						
7	0.505	5.61	91.251						
8	0.467	5.187	96.438						
9	0.321	3.562	100						

Extraction Method: Principal Axis Factoring.

**Figure 10 Institutional Capacity and the HESPF: Factors Loadings**

**Rotated Factor Matrix<sup>a</sup>**

	Factor		
	1	2	3
E5 HESPF has flexibility to allow my dept/faculty to play to its strengths	0.709		
E2 HESPF has improved goal attainment in my HEI	0.69		
E1 My HEI has the strategic capacity to compete in its priority areas	0.615		
E4 Results from my HEI's HESPF reports are visible at dept/faculty level	0.428		
E10 My HEI uses financial instruments to incentivise/reward performance	0.338		0.317
E7 My dept/faculty's capacity to contribute to national agenda is constrained by resources		0.948	
E3 My HEI's capacity to contribute to national agenda is constrained by resources		0.605	0.314
E9 My HEI's co-operation with HESPF is influenced by financial imperatives			0.815
E6 PIs not consistent with dept/faculty goals decrease potential for adoption			0.466

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

**Figure 11 Staff Position and Institutional Capacity Cross Tabulation**

**Staff position \* E1 My HEI has the strategic capacity to compete in its priority areas Crosstabulation**

		E1 My HEI has the strategic capacity to compete in its priority areas					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	0	5	7	6	20
		% within Staff position	10.00%	0.00%	25.00%	35.00%	30.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	5	4	2	10	8	29
		% within Staff position	17.20%	13.80%	6.90%	34.50%	27.60%	100.00%
	Senior Administrator	Count	2	1	1	10	8	22
		% within Staff position	9.10%	4.50%	4.50%	45.50%	36.40%	100.00%
Total	Count	9	5	8	27	22	71	
	% within Staff position	12.70%	7.00%	11.30%	38.00%	31.00%	100.00%	

**Staff position \* E2 HESPF has improved goal attainment in my HEI Crosstabulation**

		E2 HESPF has improved goal attainment in my HEI					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	2	9	5	3	20
		% within Staff position	5.00%	10.00%	45.00%	25.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	6	7	11	5	29
		% within Staff position	0.00%	20.70%	24.10%	37.90%	17.20%	100.00%
	Senior Administrator	Count	1	2	4	11	4	22
		% within Staff position	4.50%	9.10%	18.20%	50.00%	18.20%	100.00%
Total	Count	2	10	20	27	12	71	
	% within Staff position	2.80%	14.10%	28.20%	38.00%	16.90%	100.00%	

**Staff position \* E4 Results from my HEI's HESPF reports are visible at dept/faculty level Crosstabulation**

		E4 Results from my HEI's HESPF reports are visible at dept/faculty level					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	9	2	5	4	0	20
		% within Staff position	45.00%	10.00%	25.00%	20.00%	0.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	12	7	2	4	4	29
		% within Staff position	41.40%	24.10%	6.90%	13.80%	13.80%	100.00%
	Senior Administrator	Count	1	3	6	10	2	22
		% within Staff position	4.50%	13.60%	27.30%	45.50%	9.10%	100.00%
Total	Count	22	12	13	18	6	71	
	% within Staff position	31.00%	16.90%	18.30%	25.40%	8.50%	100.00%	

**Staff position \* E5 HESPF has flexibility to allow my dept/faculty to play to its strengths Crosstabulation**

		E5 HESPF has flexibility to allow my dept/faculty to play to its strengths					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	1	9	7	1	20
		% within Staff position	10.00%	5.00%	45.00%	35.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	3	7	5	11	3	29
		% within Staff position	10.30%	24.10%	17.20%	37.90%	10.30%	100.00%
	Senior Administrator	Count	4	2	6	9	1	22
		% within Staff position	18.20%	9.10%	27.30%	40.90%	4.50%	100.00%
Total	Count	9	10	20	27	5	71	
	% within Staff position	12.70%	14.10%	28.20%	38.00%	7.00%	100.00%	

Appendix D

**Staff position \* E10 My HEI uses financial instruments to incentivise/reward performance Crosstabulation**

		E10 My HEI uses financial instruments to incentivise/reward performance					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	7	6	5	2	0	20
		% within Staff position	35.00%	30.00%	25.00%	10.00%	0.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	11	7	3	6	2	29
		% within Staff position	37.90%	24.10%	10.30%	20.70%	6.90%	100.00%
	Senior Administrator	Count	10	5	4	3	0	22
		% within Staff position	45.50%	22.70%	18.20%	13.60%	0.00%	100.00%
Total	Count	28	18	12	11	2	71	
	% within Staff position	39.40%	25.40%	16.90%	15.50%	2.80%	100.00%	

**Figure 12 Staff Position and Resource Constraints Cross Tabulation**

**Staff position \* E3 My HEI's capacity to contribute to national agenda is constrained by resources Crosstabulation**

		E3 My HEI's capacity to contribute to national agenda is constrained by resources				Total	
		Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	2	8	9	20
		% within Staff position	5.00%	10.00%	40.00%	45.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	0	6	22	29
		% within Staff position	3.40%	0.00%	20.70%	75.90%	100.00%
	Senior Administrator	Count	0	0	7	15	22
		% within Staff position	0.00%	0.00%	31.80%	68.20%	100.00%
Total	Count	2	2	21	46	71	
	% within Staff position	2.80%	2.80%	29.60%	64.80%	100.00%	

**Staff position \* E7 My dept/faculty's capacity to contribute to national agenda is constrained by resources Crosstabulation**

		E7 My dept/faculty's capacity to contribute to national agenda is constrained by resources					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	1	2	9	6	20
		% within Staff position	10.00%	5.00%	10.00%	45.00%	30.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	2	0	7	20	29
		% within Staff position	0.00%	6.90%	0.00%	24.10%	69.00%	100.00%
	Senior Administrator	Count	1	1	1	6	13	22
		% within Staff position	4.50%	4.50%	4.50%	27.30%	59.10%	100.00%
Total	Count	3	4	3	22	39	71	
	% within Staff position	4.20%	5.60%	4.20%	31.00%	54.90%	100.00%	

**Figure 13 Staff Position and Co-operation Cross Tabulation**

**Staff position \* E6 PIs not consistent with dept/faculty goals decrease potential for adoption Crosstabulation**

		E6 PIs not consistent with dept/faculty goals decrease potential for adoption					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	1	10	6	3	20
		% within Staff position	0.00%	5.00%	50.00%	30.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	3	8	9	9	29
		% within Staff position	0.00%	10.30%	27.60%	31.00%	31.00%	100.00%
	Senior Administrator	Count	2	4	7	7	2	22
		% within Staff position	9.10%	18.20%	31.80%	31.80%	9.10%	100.00%
Total	Count	2	8	25	22	14	71	
	% within Staff position	2.80%	11.30%	35.20%	31.00%	19.70%	100.00%	

**Staff position \* E9 My HEI's co-operation with HESPF is influenced by financial imperatives Crosstabulation**

		E9 My HEI's co-operation with HESPF is influenced by financial imperatives					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	0	8	5	7	20
		% within Staff position	0.00%	0.00%	40.00%	25.00%	35.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	2	2	9	15	29
		% within Staff position	3.40%	6.90%	6.90%	31.00%	51.70%	100.00%
	Senior Administrator	Count	1	3	1	10	7	22
		% within Staff position	4.50%	13.60%	4.50%	45.50%	31.80%	100.00%
Total	Count	2	5	11	24	29	71	
	% within Staff position	2.80%	7.00%	15.50%	33.80%	40.80%	100.00%	

Appendix D

Usefulness of the KPIs and the HESPF

**Figure 14 Usefulness of the KPIs and the HESPF: Factors, Eigenvalues and Variance Explained**

Factor	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.7	37.002	37.002	3.268	32.676	32.676	2.714	27.141	27.141
2	1.774	17.745	54.747	1.249	12.489	45.165	1.689	16.89	44.031
3	1.052	10.521	65.268	0.513	5.132	50.297	0.627	6.266	50.297
4	0.795	7.953	73.221						
5	0.633	6.33	79.551						
6	0.616	6.163	85.715						
7	0.545	5.449	91.164						
8	0.388	3.878	95.042						
9	0.288	2.876	97.918						
10	0.208	2.082	100						

Extraction Method: Principal Axis Factoring.

**Figure 15 Usefulness of the KPIs and the HESPF: Factors Loadings**

**Rotated Factor Matrix<sup>a</sup>**

	Factor		
	1	2	3
F1 Effort expended on HESPF will produce long-term gains for Irish HE system	0.856		
F6 HESPF KPIs improve the responsiveness of my HEI to all stakeholders	0.769		
F3 Effort expended on HESPF will produce long-term gains for my HEI	0.737		
F7 Goals of my HEI most influenced by stakeholders are consistent with HESPF KPIs	0.644		
F9 HESPF KPIs enable my HEI to build a distinctive profile for itself	0.513		
F4 KPIs associated with HESPF lead to long-term goals being sacrificed	-0.312	0.817	
F5 HESPF is reducing diversity through a limited number of KPIs		0.763	
F8 HESPF KPIs result in prioritisation of some of my HEI's stakeholders		0.653	
F10 HESPF displaces resources towards activities that can be measured		0.613	
F11 HESPF KPIs are aspirational in the current HE funding environment		0.44	
F2 Government HE KPIs are shaping the issues my HEI is thinking about			0.621

Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 4 iterations.

**Figure 16 Staff Position and Long Term Effectiveness Cross Tabulation**

**Staff position \* F1 Effort expended on HESPF will produce long-term gains for Irish HE system Crosstabulation**

		F1 Effort expended on HESPF will produce long-term gains for Irish HE system					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	1	9	8	1	20
		% within Staff position	5.00%	5.00%	45.00%	40.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	2	0	12	11	4	29
		% within Staff position	6.90%	0.00%	41.40%	37.90%	13.80%	100.00%
	Senior Administrator	Count	1	1	7	10	3	22
		% within Staff position	4.50%	4.50%	31.80%	45.50%	13.60%	100.00%
Total	Count	4	2	28	29	8	71	
	% within Staff position	5.60%	2.80%	39.40%	40.80%	11.30%	100.00%	

**Staff position \* F3 Effort expended on HESPF will produce long-term gains for my HEI Crosstabulation**

		F3 Effort expended on HESPF will produce long-term gains for my HEI					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	2	9	7	1	20
		% within Staff position	5.00%	10.00%	45.00%	35.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	2	12	11	4	29
		% within Staff position	0.00%	6.90%	41.40%	37.90%	13.80%	100.00%
	Senior Administrator	Count	1	1	8	10	2	22
		% within Staff position	4.50%	4.50%	36.40%	45.50%	9.10%	100.00%
Total	Count	2	5	29	28	7	71	
	% within Staff position	2.80%	7.00%	40.80%	39.40%	9.90%	100.00%	

**Staff position \* F6 HESPF KPIs improve the responsiveness of my HEI to all stakeholders Crosstabulation**

		F6 HESPF KPIs improve the responsiveness of my HEI to all stakeholders					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	2	2	10	5	1	20
		% within Staff position	10.00%	10.00%	50.00%	25.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	6	14	4	4	29
		% within Staff position	3.40%	20.70%	48.30%	13.80%	13.80%	100.00%
	Senior Administrator	Count	1	2	11	8	0	22
		% within Staff position	4.50%	9.10%	50.00%	36.40%	0.00%	100.00%
Total	Count	4	10	35	17	5	71	
	% within Staff position	5.60%	14.10%	49.30%	23.90%	7.00%	100.00%	

**Staff position \* F7 Goals of my HEI most influenced by stakeholders are consistent with HESPF KPIs Crosstabulation**

		F7 Goals of my HEI most influenced by stakeholders are consistent with HESPF KPIs					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	2	10	6	1	20
		% within Staff position	5.00%	10.00%	50.00%	30.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	5	7	13	4	29
		% within Staff position	0.00%	17.20%	24.10%	44.80%	13.80%	100.00%
	Senior Administrator	Count	1	2	8	8	3	22
		% within Staff position	4.50%	9.10%	36.40%	36.40%	13.60%	100.00%
Total	Count	2	9	25	27	8	71	
	% within Staff position	2.80%	12.70%	35.20%	38.00%	11.30%	100.00%	

**Staff position \* F9 HESPF KPIs enable my HEI to build a distinctive profile for itself Crosstabulation**

		F9 HESPF KPIs enable my HEI to build a distinctive profile for itself					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	2	10	6	1	20
		% within Staff position	5.00%	10.00%	50.00%	30.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	10	8	9	1	29
		% within Staff position	3.40%	34.50%	27.60%	31.00%	3.40%	100.00%
	Senior Administrator	Count	2	5	6	7	2	22
		% within Staff position	9.10%	22.70%	27.30%	31.80%	9.10%	100.00%
Total		Count	4	17	24	22	4	71
		% within Staff position	5.60%	23.90%	33.80%	31.00%	5.60%	100.00%

**Figure 17 Staff Position and KPI Impact Cross Tabulation**

**Staff position \* F5 HESPF is reducing diversity through a limited number of KPIs Crosstabulation**

		F5 HESPF is reducing diversity through a limited number of KPIs					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	3	9	7	1	20
		% within Staff position	0.00%	15.00%	45.00%	35.00%	5.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	1	7	4	15	2	29
		% within Staff position	3.40%	24.10%	13.80%	51.70%	6.90%	100.00%
	Senior Administrator	Count	3	5	5	6	3	22
		% within Staff position	13.60%	22.70%	22.70%	27.30%	13.60%	100.00%
Total	Count	4	15	18	28	6	71	
	% within Staff position	5.60%	21.10%	25.40%	39.40%	8.50%	100.00%	

**Staff position \* F8 HESPF KPIs result in prioritisation of some of my HEI's stakeholders Crosstabulation**

		F8 HESPF KPIs result in prioritisation of some of my HEI's stakeholders					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	2	12	3	3	20
		% within Staff position	0.00%	10.00%	60.00%	15.00%	15.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	3	2	8	15	1	29
		% within Staff position	10.30%	6.90%	27.60%	51.70%	3.40%	100.00%
	Senior Administrator	Count	3	7	6	6	0	22
		% within Staff position	13.60%	31.80%	27.30%	27.30%	0.00%	100.00%
Total	Count	6	11	26	24	4	71	
	% within Staff position	8.50%	15.50%	36.60%	33.80%	5.60%	100.00%	

**Staff position \* F10 HESPF displaces resources towards activities that can be measured Crosstabulation**

		F10 HESPF displaces resources towards activities that can be measured					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	1	1	10	4	4	20
		% within Staff position	5.00%	5.00%	50.00%	20.00%	20.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	5	4	13	7	29
		% within Staff position	0.00%	17.20%	13.80%	44.80%	24.10%	100.00%
	Senior Administrator	Count	3	2	8	4	5	22
		% within Staff position	13.60%	9.10%	36.40%	18.20%	22.70%	100.00%
Total	Count	4	8	22	21	16	71	
	% within Staff position	5.60%	11.30%	31.00%	29.60%	22.50%	100.00%	

**Staff position \* F11 HESPF KPIs are aspirational in the current HE funding environment Crosstabulation**

		F11 HESPF KPIs are aspirational in the current HE funding environment					Total	
		Disagree	Somewhat Disagree	Unsure/Don't Know	Somewhat Agree	Agree		
Staff position	Lecturer/Researcher	Count	0	0	8	4	8	20
		% within Staff position	0.00%	0.00%	40.00%	20.00%	40.00%	100.00%
	Professor/Head of Faculty/Head of Department	Count	0	3	4	7	15	29
		% within Staff position	0.00%	10.30%	13.80%	24.10%	51.70%	100.00%
	Senior Administrator	Count	1	6	4	5	6	22
		% within Staff position	4.50%	27.30%	18.20%	22.70%	27.30%	100.00%
Total	Count	1	9	16	16	29	71	
	% within Staff position	1.40%	12.70%	22.50%	22.50%	40.80%	100.00%	

Appendix D

Factor Analysis Combining All Variables

**Figure 18 Factors, Eigenvalues and Variance Explained Using All Variables**

Factor	Total Variance Explained (Extract)								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.28	25.067	25.067	10.96	24.355	24.355	5.036	11.192	11.192
2	5.395	11.988	37.055	5.011	11.136	35.491	4.14	9.199	20.391
3	3.186	7.08	44.134	2.778	6.173	41.663	3.972	8.827	29.218
4	2.131	4.736	48.871	1.767	3.927	45.59	3.485	7.744	36.962
5	1.853	4.119	52.989	1.486	3.302	48.892	2.089	4.643	41.605
6	1.615	3.588	56.577	1.235	2.744	51.636	1.813	4.029	45.633
7	1.562	3.47	60.048	1.163	2.585	54.221	1.794	3.987	49.62
8	1.358	3.018	63.065	0.964	2.143	56.364	1.648	3.661	53.281
9	1.275	2.833	65.898	0.867	1.926	58.29	1.44	3.199	56.481
10	1.166	2.591	68.489	0.816	1.814	60.104	1.277	2.838	59.319
11	1.077	2.393	70.882	0.76	1.689	61.792	1.113	2.474	61.792

Extraction Method: Principal Axis Factoring.

**Figure 19 Factors Loadings for Factor Solution Involving All Variables**

Rotated Factor Matrix (Extraction Method: Principal Axis Factoring, Rotation Method: Varimax with Kaiser Normalization, Rotation converged in 13 iterations)	Factor				
	1	2	3	4	5
D5 HESPF is influencing my HEI to become more strategic	0.767				0.305
D7 HESPF improves visibility of my work and connects it to the national agenda	0.764				
E2 HESPF has improved goal attainment in my HEI	0.728				
D8 HESPF is influencing my dept/faculty goals towards the national agenda	0.687			0.391	
D6 HESPF is accelerating change processes in my HEI	0.679				
D4 HESPF improves HEI's effectiveness by prioritising strengths	0.499		0.393		
F6 HESPF KPIs improve the responsiveness of my HEI to all stakeholders	0.492			0.458	
D3 My HEI's co-operation with HESPF is influenced by social responsibility, public good	0.492			0.344	
E5 HESPF has flexibility to allow my dept/faculty to play to its strengths	0.387		0.384		
D10 HESPF influences avoidance of projects with uncertain outcomes		0.738			
F10 HESPF displaces resources towards activities that can be measured		0.635			
F8 HESPF KPIs result in prioritisation of some of my HEI's stakeholders		0.626			
D9 HESPF is impacting negatively on dept/faculty goals not aligned to national agenda		0.621			
F4 KPIs associated with HESPF lead to long-term goals being sacrificed		0.617			
E9 My HEI's co-operation with HESPF is influenced by financial imperatives		0.555			
E6 PIs not consistent with dept/faculty goals decrease potential for adoption		0.535			
D1 HESPF is displacing HEI goals towards national agenda		0.439			0.376
F11 HESPF KPIs are aspirational in the current HE funding environment		0.438			
C8 HESPF respects substantive autonomy of my HEI			0.796		
C9 HESPF balances accountability and co-ordination with autonomy			0.642	0.315	
C6 HESPF provides a rational basis for funding allocations			0.622		
C7 HESPF improves ability to prove accountability for public funds			0.609		
F9 HESPF KPIs enable my HEI to build a distinctive profile for itself	0.302		0.547		
C5 Implementation of HESPF is supported by a sustainable funding model			0.482		
E1 My HEI has the strategic capacity to compete in its priority areas	0.324		0.325		
F1 Effort expended on HESPF will produce long-term gains for Irish HE system			0.35	0.769	
F3 Effort expended on HESPF will produce long-term gains for my HEI	0.418			0.658	
C13 Overall the HESPF is a useful concept			0.357	0.638	
F7 Goals of my HEI most influenced by stakeholders are consistent with HESPF KPIs	0.307			0.536	
C4 Uncertainty in HE landscape is hindering development of HESPF				0.39	0.326
C1 HESPF clearly articulates government expectations across HE					0.629
C3 HESPF is effective in steering HE towards national priorities	0.326				0.605
C2 HESPF improves visibility of HE performance to stakeholders				0.33	0.555

Appendix D

Multiple Discriminant Analysis (MDA) on the Five Factors for All Variables for Staff Position

*Figure 20 Equality of Factor Group Means for Staff Positions*

**Tests of Equality of Group Means**

	Wilks' Lambda	F	df1	df2	Sig.
Strategic Orientation	0.996	0.13	2	68	0.88
Goal Impact	0.895	4.01	2	68	0.02
Autonomy and Accountability	0.919	3	2	68	0.06
HESPF Benefits	0.958	1.49	2	68	0.23
Steering and Visibility	0.907	3.49	2	68	0.04

**Figure 21 Group Means for the Five Factors**

<b>Group Statistics</b>					
Staff position		Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
Lecturer/Researcher	Strategic Orientation	-0.041517	0.8962204	20	20
	Goal Impact	0.1152833	0.7722583	20	20
	Autonomy and Accountability	0.3976092	0.6505425	20	20
	HESPF Benefits	-0.169256	0.8625585	20	20
	Steering and Visibility	-0.175681	0.8399089	20	20
Professor/Head of Faculty/Head of Department	Strategic Orientation	0.1096697	1.1262063	29	29
	Goal Impact	0.3029106	1.0091483	29	29
	Autonomy and Accountability	-0.303517	1.1720572	29	29
	HESPF Benefits	0.3029297	0.8361553	29	29
	Steering and Visibility	0.1435238	0.964088	29	29
Senior Administrator	Strategic Orientation	0.0547032	0.9547019	22	22
	Goal Impact	-0.467889	1.1082583	22	22
	Autonomy and Accountability	-0.07717	0.9749466	22	22
	HESPF Benefits	-0.024737	1.2489804	22	22
	Steering and Visibility	0.5220902	0.7106735	22	22
Total	Strategic Orientation	0.05005	1.0013303	71	71
	Goal Impact	0.0112186	1.0238086	71	71
	Autonomy and Accountability	-0.035881	1.0165697	71	71
	HESPF Benefits	0.0683892	0.9956122	71	71
	Steering and Visibility	0.1709093	0.8877917	71	71

## Appendix E Interview Schedule

### Interview Protocol

Commence with introductions, thank the interviewee for taking the time to participate. Re-state the purpose of the interview and ask the interviewee if there are any issues he/she would like clarification on, including those covered in the plain language statement. Request permission to record the interview – if not given, then accurate notes will have to be taken. Restate the undertaking that information provided will only be used for this research study. Explain that the interviewee may decline to answer some questions and may choose to retract comments made on reviewing the interview transcript. Highlight that the interview transcript will be provided for member checking prior to being used for the research, and recording of the interview will be erased once member checking is complete. Request the interviewee to sign the consent form if he/she is happy to proceed with the interview on the undertakings given in the plain language statement and the informed consent form, and note any additional restrictions he/she may wish to include. The interviewer will then counter sign the consent form and a copy will be provided to the interviewee. Close the interview by asking the interviewee if there is anything else he/she would like to add. Thank the interviewee.

### Post-interview Protocol

'Thank you' correspondence will be sent to the interviewee. A copy of the transcript will be sent to the interviewee for member checking. On completion of the research study a copy of the findings will be sent to the interviewee.

### Research Question

The overall objective (i.e. main research question) of this study is to explore the extent to which institutions of higher education are responding to state policies to develop strategic responses to support the policy goals envisaged in the new Irish higher education system performance framework.

There are four sub-questions arising from the main research question and the interviewer will focus on gathering information to answer these question. The environmental factors impacting on the higher education institution will also be explored.

These sub-questions are:

1. To what extent does the higher education policy/performance framework aid or inhibit institutional planning towards the related policy initiatives?
2. Have institutional goals been displaced towards the national agenda?

## Appendix E

3. Is institutional capacity being developed to support the national policy objectives, including at sub-unit level?
4. How meaningful or useful are the key performance indicators (KPIs) set by the Irish government in terms of incentivising behaviour?

The questions to be asked of interviewees are derived from these sub-questions and are preceded by 'RQ' in the text that follows. The question sequence follows the same order as the numbering of the sub-questions above.

## Interview Questions

Institutional Antecedent Factor	Research Question
Cause	<b>RQ1 To what extent does the higher education policy/performance framework aid or inhibit institutional planning towards the related policy initiatives?</b>
	RQ1.1 What do you see as Ireland's higher education (HE) system objectives? What do you see as the primary drivers or rationale underpinning Ireland's HE system objectives?
	RQ1.2 How is your institution responding to Ireland's HE system objectives?
	SO1 (System Objective 1) Meeting Ireland's Human Capital Needs
	SO2 Equity of Access and Student Pathways
	SO3 Excellence in Teaching and Learning
	SO4 Excellent Public Research and Knowledge Exchange
	SO5 Globally Competitive and Internationally Oriented Institutions
	SO6 Restructuring for Quality and Diversity
	SO7 Accountability for Public Funding and Public Service Reform
	RQ1.2 What are the primary drivers or rationale underpinning your institution's response to Ireland's HE system objectives?
	RQ1.3 What key environmental factors have impacted on your responses?
	RQ1.4 How would you categorise your institution's responses overall and within the individual system objectives (e.g. compliance, compromise/negotiated, somewhat resistant, other)?
	RQ1.5 Have your institution's responses varied over the three implementation cycles (i.e. 2014 to 2016) of the performance framework? If so, what have been the key changes and key reasons underpinning those changes?
	RQ1.6 To what extent has the performance framework process (i.e. strategic compact negotiation cycles) aided or inhibited institutional planning? Has the level of effort expended been reflected in the rewards/outcomes?
	RQ1.7 Have you made proposals for adjustment of HE policy or the performance framework in the light of your experience and institutional agenda?

Constituents	<b>RQ4: How meaningful or useful are the key performance indicators (KPIs) set by the Irish government in terms of incentivising behaviour?</b>
	RQ4.1 What are the key factors that drive the mission and goals of your institution?
	RQ4.2 To what extent do international rankings impact on institutional strategies and processes?
	RQ4.3 Please describe the range of stakeholder demands/ expectations being placed on your institution?
	RQ4.4 Who are the stakeholders that exert the greatest influence on the goals and activities of the organisation? How does this influence manifest itself? How is this influence reflected in your institution's KPIs? How do you balance/prioritise the multiplicity of (sometimes conflicting) expectations? What has been the feedback from stakeholders arising from any changes resulting from the performance management framework? Has the new system performance framework improved visibility on performance to stakeholders?
	RQ4.5 Who are the stakeholders on whom you are most dependent? What is the nature of this dependence?
	RQ4.6 To what extent are the goals most influenced by stakeholders consistent with the KPIs set by the Irish government?
	RQ4.7 To what extent has your institution included KPIs in your strategic compact that are not aligned to the KPIs set by the Irish government?
	RQ4.8 To what extent do the KPIs established by the Irish government incentivise institutional behaviour, including stakeholder engagement?
	RQ4.9 What have been the key implications for your institution arising from the KPIs established by the Irish government?
	RQ4.10 How meaningful and realistic are the KPIs set by the Irish government in the current environmental context?
	RQ4.11 To what extent (if any) does the new system performance framework encourage isomorphic behaviour through conformance to a limited number of indicators?
	RQ4.12 Have the performance mechanisms inherent in the national higher education system objectives and related institutional contracts helped to raise the profile of particular activities? Has there been a marginalisation of other activities?

Content	<b>RQ2 Have institutional goals been displaced towards the national agenda?</b>
	RQ2.1 What process is followed in formulating the goals and KPIs for your institution?
	RQ2.2 How much priority and centrality does the new system performance framework have in influencing your strategic plan?
	RQ2.3 To what extent are your institution's goals consistent with Ireland's HE system objectives?
	SO1 Meeting Ireland's Human Capital Needs
	SO2 Equity of Access and Student Pathways
	SO3 Excellence in Teaching and Learning
	SO4 Excellent Public Research and Knowledge Exchange
	SO5 Globally Competitive and Internationally Oriented Institutions
	SO6 Restructuring for Quality and Diversity
	SO7 Accountability for Public Funding and Public Service Reform
	RQ2.4 Has your institution adjusted its goals to align them with Ireland's HE system objectives? If so, how? Does the system performance framework help (re)align the institution to national objectives?
	RQ2.5 Has the HE system performance framework impacted on your institution's capacity to pursue goals that are not directly aligned with Ireland's HE system objectives? If so, to what extent? Has your institution's attention been deflected away from some of its own goals? If so, how? How much of your institution's strategic plan is represented in the strategic compact with the HEA? Examples?
	RQ2.6 Has there been a loss of decision-making discretion at your institution arising from the introduction of Ireland's HE system performance objectives? If so, how significant has it been?
	RQ2.7 Has the new system performance framework accelerated change processes in your institution?
	RQ2.8 What changes, if any, have taken place in your strategic planning processes since the introduction of the HE system performance framework?
	RQ2.9 Is there any evidence linking the new system performance framework to performance improvements at institution, department or faculty level?
	RQ2.10 How has the HE system performance framework impacted on your institution's approach to risk taking?
	RQ2.11 What have been the most significant implications (positive and negative) of the HE system performance framework for your institution?
	RQ2.12 What would you consider to be an indicator(s) of success for the new system performance framework (locally and at system level)?
	RQ2.13 How are the new system performance framework and related policies impacting on the global positioning of Ireland's HE system and that of your institution?

Control	<b>RQ3 Is institutional capacity being developed to support the national policy objectives, including at sub-unit level?</b>
	RQ3.1 How has the linking of funding to engagement with the HE system performance framework influenced your institution's co-operation with the process?
	RQ3.2 Should high performing institutions receive more funding than lower performing institutions?
	RQ3.3 To what extent is the notion of performance based funding consistent with the culture of your institution?
	RQ3.4 To what extent has the strategic compact with the HEA affected the focus of your institution on achievement of its goals and objectives? Has it improved goal attainment? Has it facilitated differentiation and positioning of your institution in the national and global market place?
	RQ3.5 To what extent does your institution have the capacity to respond to the national policy implementation? How is your institution addressing any major challenges (e.g. strategic capacity, institutional research capacity, MIS capacity, gaps in leadership capacity arising from employment control framework)? Has your institution sought, received or been offered support in building its capacity to respond to the national HE agenda? How long will it take to assimilate the new system performance framework into the routine of the university? What obstacles need to be overcome along the way?
	RQ3.6 At what level is your institution responding? Is there priority setting? Are resources being aligned to support plans? Are you using financial and budgetary instruments to incentivise/reward performance? How have faculty responded? What reward systems are faculty most likely to respond to? Are structural changes taking place to support strategy and to respond to emerging needs and opportunities? How are (autonomous) faculties and departments engaging with the new system performance framework? How are their perspectives catered for? How are you managing policy diffusion at various levels of the organisation?
	RQ3.7 Have there been unanticipated consequences from implementation of the system performance framework?

Context	<b>What are the environmental factors impacting on your institution?</b>
	RQ5.1 What is the environmental context within which your institution is operating and competing at present and what level of certainty or change do you foresee in this environment in the short to medium term? How is this impacting on planning and decision-making?
	RQ5.2 What is the level of interconnectedness between your institution and peer institutions operating in your field (i.e. HE)? How does the density of these inter-organisational relations impact on your organisation's planning and decision making?
	RQ5.3 Has the new system framework improved the relationship between your institution and the state? Is it constructive for both?
	RQ5.4 What is the impact of the performance framework and related state policies on the autonomy of your institution (in practice), with particular reference to: Organisational autonomy (executive leadership, academic structures, creating legal entities, governing body, other)? Staffing autonomy (recruitment, staff salaries, promotions, other)? Financial mobilisation and utilisation (allocation of public funding, retaining surpluses, endowments, borrowing, setting level of fees, other)? Academic autonomy (institutional strategy, academic profile, student admission policy, quality assurance, other)?
	RQ 5.5 How is your current level of autonomy impacting on your institution's capacity to respond to: The national policy agenda for HE? The mission and goals of your organisation?
	RQ5.6 To what extent does the new performance framework strike an appropriate balance between the need for accountability and system co-ordination, while respecting institutional autonomy?
	RQ5.7 Is the new system performance framework appropriate for supporting the level of change expected in complex HE institutions in the fast-moving environments of the twenty-first century?
	RQ5.8 Is the current method and blend of resource allocation likely to affect the long-term success or viability of your institution? How?

## Appendix F New Higher Education System Performance Framework Questionnaire

I consent to participating in this research (please tick one):  Yes  No

### A. Background Information

Please tick one box for each statement below.	
A1	What is the type of your institution under statute? <input type="checkbox"/> University <input type="checkbox"/> Institute of Technology or DIT
A2	How many full-time equivalent students in your institution, including undergraduates and postgraduates? <input type="checkbox"/> Up to 5,000 <input type="checkbox"/> Between 5,000 and 10,000 <input type="checkbox"/> Between 10,000 and 15,000 <input type="checkbox"/> 15,000 or more
A3	Which of the following best describes your position? <input type="checkbox"/> Lecturer/Senior Lecturer <input type="checkbox"/> Assistant Lecturer/College Lecturer <input type="checkbox"/> Professor/Head of Faculty/Head of Department <input type="checkbox"/> Senior Administrator <input type="checkbox"/> Researcher <input type="checkbox"/> Other (please specify):
A4	How long have you worked in higher education? <input type="checkbox"/> 1 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> more than 20 years
A5	How long have you worked in your current higher education institution? <input type="checkbox"/> 1 to 5 years <input type="checkbox"/> 6 to 10 years <input type="checkbox"/> 11 to 20 years <input type="checkbox"/> more than 20 years

### B. Visibility of Higher Education System Performance Framework

Please tick one box for each statement below.		To a Great Extent	Somewhat	Very Little	Not at all
B1	To what extent are you aware of Ireland's higher education system performance framework?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B2	To what extent are you aware of the key system level objectives in Ireland's higher education (HE) system performance framework?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B3	To what extent are you aware of the key performance indicators established under Ireland's HE system performance framework for each of the following?	To a Great Extent	Somewhat	Very Little	Not at all

	a. Meeting Ireland's Human Capital Needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	b. Equity of Access and Student Pathways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	c. Excellence in Teaching and Learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	d. Excellent Public Research and Knowledge Exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	e. Globally Competitive and Internationally Oriented Institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	f. Restructuring for Quality and Diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	g. Accountability for Public Funding and Public Service Reform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B4	To what extent are you aware of the content of <b>your institution's strategic compact</b> with the HEA?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B5	To what extent are you aware of <b>the key performance indicators established by your institution</b> in its strategic compact with the HEA for each of the following?	<b>To a Great Extent</b>	<b>Somewhat</b>	<b>Very Little</b>	<b>Not at all</b>	
	a. Meeting Ireland's Human Capital Needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	b. Equity of Access and Student Pathways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	c. Excellence in Teaching and Learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	d. Excellent Public Research and Knowledge Exchange	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	e. Globally Competitive and Internationally Oriented Institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	f. Restructuring for Quality and Diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	g. Accountability for Public Funding and Public Service Reform	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<b>To a Great Extent</b>	<b>Somewhat</b>	<b>Very Little</b>	<b>Not at all</b>	<b>Unsure/ Don't Know</b>
B6	To what extent were your <b>institution's goals</b> already broadly aligned with the national agenda, or would have been aligned anyway, regardless of the new system performance framework?	<input type="checkbox"/>				
B7	To what extent were your <b>department/faculty's</b> goals already broadly aligned with the national agenda, or would have been aligned anyway, regardless of the new system performance framework?	<input type="checkbox"/>				

B8	a. Is there internal dissemination of your institution's strategic compact with the HEA?	Yes <input type="checkbox"/>	Unsure <input type="checkbox"/>	No <input type="checkbox"/>
	b. If so, how (please comment)?			

### C. Goals of Higher Education System Performance Framework

	Please tick one box for each statement below.	Disagree	Somewhat Disagree	Unsure/ Don't Know	Somewhat Agree	Agree
C1	The new system performance framework is clearly articulating the expectations of government across higher education activities.	<input type="checkbox"/>				
C2	The new system performance framework is improving the visibility of higher education system performance to stakeholders.	<input type="checkbox"/>				
C3	The new system performance framework is proving effective in steering Ireland's higher education system towards national priorities.	<input type="checkbox"/>				
C4	Uncertainty in the higher education landscape in Ireland is hindering the development of the new system performance framework.	<input type="checkbox"/>				
C5	Implementation of the new system performance framework is supported by a sustainable funding model.	<input type="checkbox"/>				
C6	The new system performance framework is providing a rational basis for funding decisions and appropriate justifications for funding of higher education.	<input type="checkbox"/>				
C7	The new system performance framework is improving the ability to prove accountability for public funds.	<input type="checkbox"/>				
C8	The new system performance framework respects the substantive autonomy (i.e. the authority to determine academic and research policy) of my institution.	<input type="checkbox"/>				
C9	The new system performance framework strikes an appropriate balance between the need for accountability and system co-ordination, while respecting institutional autonomy.	<input type="checkbox"/>				
C10	Susceptibility/sensitivity of performance measures in the new system framework to changing political agendas is impacting on their adoption.	<input type="checkbox"/>				

C11	International standing, as measured by global rankings, has a greater influence on my institution's goals than the new system performance framework.	<input type="checkbox"/>				
C12	The new system performance framework is improving co-operation between higher education institutions.	<input type="checkbox"/>				
C13	Overall, the new system performance framework is a useful concept.	<input type="checkbox"/>				

#### D. Influence of Higher Education System Performance Framework

	<b>Please tick one box for each statement below.</b>	<b>Disagree</b>	<b>Somewhat Disagree</b>	<b>Unsure/ Don't Know</b>	<b>Somewhat Agree</b>	<b>Agree</b>
D1	The new system performance framework is influencing the displacement of my institution's goals towards the national agenda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D2	The new system performance framework has priority and centrality in determining my institution's goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D3	My institution's co-operation with the new system performance framework is significantly influenced by its social responsibility and the public good.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D4	The new system performance framework is improving the effectiveness of individual higher education institutions through focusing on priorities and identification of key strengths.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D5	The new system performance framework is influencing my institution to become more strategic.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D6	The new system performance framework is accelerating change processes in my institution.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D7	The new system performance framework improves the visibility of my work and connects it to the national agenda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D8	The new system performance framework is influencing my department/faculty's goals towards the national agenda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D9	The new system performance framework is impacting negatively on my department/faculty's capacity to pursue goals that are not directly aligned with the national agenda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D10	The new system performance framework is influencing a tendency to avoid projects with uncertain outcomes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## E. Institutional Capacity &amp; Higher Education System Performance Framework

	Please tick one box for each statement below.	Disagree	Somewhat Disagree	Unsure/ Don't Know	Somewhat Agree	Agree
E1	My <b>institution</b> has the strategic capacity to operate in a competitive environment in the priority areas that it has identified in its strategic plan.	<input type="checkbox"/>				
E2	The new system performance framework has influenced improvements in goal attainment at my <b>institution</b> .	<input type="checkbox"/>				
E3	My <b>institution's</b> capacity to maximise its contribution to the national agenda is constrained by lack of resources.	<input type="checkbox"/>				
E4	Results from the new system performance reports for my institution are visible at <b>department/faculty</b> level.	<input type="checkbox"/>				
E5	The new system performance framework has the flexibility to allow my <b>department/faculty</b> to play to its strengths in supporting institutional goals.	<input type="checkbox"/>				
E6	Performance measures that are not consistent with <b>department/faculty</b> goals decrease their potential for adoption.	<input type="checkbox"/>				
E7	My <b>department/faculty's</b> capacity to maximise its contribution to the national agenda is constrained by lack of resources.	<input type="checkbox"/>				
E8	It is appropriate to use funding incentives to align the goals of individual higher education <b>institutions</b> with the national agenda.	<input type="checkbox"/>				
E9	My <b>institution's</b> co-operation with the new system performance framework is significantly influenced by financial necessity.	<input type="checkbox"/>				
E10	My <b>institution</b> uses financial and budgetary instruments to incentivise/reward performance.	<input type="checkbox"/>				
E11	My <b>institution</b> has the institutional research capacity (i.e. management information systems) to monitor its own performance and benchmark it against peer institutions nationally and internationally.	<input type="checkbox"/>				

F. Usefulness of the Key Performance Indicators (KPIs) & HE System Performance Framework

	Please tick one box for each statement below.	Disagree	Somewhat Disagree	Unsure/ Don't Know	Somewhat Agree	Agree
F1	The effort expended on the new system performance framework and the related KPIs will produce long-term gains for Ireland's higher education system.	<input type="checkbox"/>				
F2	The key performance indicators established for higher education, by the Irish government, are shaping the issues my institution is thinking about.	<input type="checkbox"/>				
F3	The effort expended by my institution on the new system performance framework, and associated KPIs, will produce long-term gains for my institution.	<input type="checkbox"/>				
F4	The KPIs associated with the new system performance framework are leading to long-term goals being sacrificed for short-term gains, at my institution.	<input type="checkbox"/>				
F5	The new system performance framework is reducing diversity as valid institutional differences are being erased through conformance to a limited number of performance indicators.	<input type="checkbox"/>				
F6	The KPIs associated with the new system performance framework are improving the responsiveness of my institution to the needs of all its stakeholders.	<input type="checkbox"/>				
F7	The KPIs set by the Irish government are consistent with the needs of my institution's most influential stakeholders (as reflected in my HEI's KPIs).	<input type="checkbox"/>				
F8	The KPIs associated with the new system performance framework are resulting in the prioritisation of some of my institution's stakeholders at the expense of others.	<input type="checkbox"/>				
F9	The new system performance framework has the flexibility to enable my institution to build a distinctive profile for itself.	<input type="checkbox"/>				
F10	The new system performance framework is resulting in a displacement of resources towards activities that can be measured at the expense of activities that are difficult to measure.	<input type="checkbox"/>				
F11	The KPIs set by the Irish government are more aspirational than realistic in the current funding environment for higher education.	<input type="checkbox"/>				

G. HE System Performance Framework – Any Other Comments

G1	Please use this field for any further comment on how you think Ireland's HE system performance framework is impacting on your institution?
G2	Has this questionnaire addressed the main topics of concern around Ireland's HE system performance framework for you and your institution? Please comment.

Appendix G

## Appendix G Nodes List

Appendix G

Strategic Response Framework					
	Cause				
		Efficiency or Economic Fitness			
			Comply - Efficiency	6	16
			Negotiate - Efficiency	4	4
			Resist - Efficiency	0	0
		Legitimacy or Social Fitness			
			Comply - Legitimacy	55	384
			Negotiate - Legitimacy	6	12
			Resist - Legitimacy	0	0
		x_HESPF Aids to Planning			
			Change	1	3
			Other_Multidimensional_International_Awareness	1	3
			Potential linked to Resourcing	1	6
			Relationship Building	3	25
			Self Reflective & Institutional Learning	2	9
			Strategic Planning Capacity Building	2	27
			Visibility on Performance	2	15
		x_HESPF Inhibitors to Planning			
			Evaluation Criteria	1	2
			Feedback	4	21
			Funding	5	28
			Strategic_Developmental_Level	3	24
			Structural Flaw_Categories	4	35
			Symbolic_Political	3	14
			Unintended consequences_Managing to metrics	2	18

Appendix G

	Constituents				
		Dependence on Institutional Constituents			
			Comply - Constituent Dependence	8	8
			Negotiate - Constituent Dependence	1	2
			Resist - Constituent Dependence	0	0
		Multiplicity of Constituent Demands			
			Comply - Constituent Multiplicity	53	314
			Negotiate - Constituent Multiplicity	8	22
			Resist - Constituent Multiplicity	0	0
		Scale of Expectation			
			Cosmetic and Political	2	4
			Prioritisation of KSOs	4	26
			Relevance and Realism	2	24
		X_Behavioural Influence			
			Incentivisation of Behaviour	2	46
			Inter-organisational Relations	1	15
			Isomorphism or Differentiation	4	22
			Visibility and Articulation of National KPIs	1	12

Appendix G

	Content			
		Consistency with Organisational Goals		
			Comply - Consistent with Goals	61 572
			Negotiate - Consistent with Goals	28 127
			Resist- Consistent with Goals	0 0
		Discretionary Constraints Imposed on the Organization		
			Comply - Constraints	0 0
			Negotiate - Constraints	2 5
			Resist - Constraints	0 0
		HESPF Strategic Influence		
			Autonomy_Steering	4 33
			Clusters	5 33
			Focus	2 9
			Infrastructure_Capacity	2 30
			Reputation_Compliance	2 24
			Success Indicators	2 16
			Visibility and alignment	2 31

Appendix G

	Context				
		Environmental Interconnectedness.			
			Comply - Environmental Interconnectedness	9	15
			Negotiate - Environmental Interconnectedness	4	5
			Resist - Environmental Interconnectedness	1	2
		Environmental Uncertainty			
			Comply - Environmental Uncertainty	41	128
			Negotiate - Environmental Uncertainty	25	79
			Resist - Environmental Uncertainty	2	4

Appendix G

	Control				
		Legal Coercion or Enforcement			
			Comply - Coercion	60	357
			Negotiate - Coercion	17	50
			Resist - Coercion	0	0
		Voluntary Diffusion of Norms			
			Comply - Diffusion	6	9
			Negotiate - Diffusion	0	0
			Resist - Diffusion	0	0
		x_HESPF Institutional Capacity			
			Diffusion	1	19
			Funding	0	0
			HR_IR	3	24
			Institutional Research	5	21

## Appendix H

### Appendix H Word Frequency Query

#### AH.1 Word Count

Word	Length	Count	Weighted Percentage (%)
research	8	4462	1.25
education	9	3084	0.86
academic	8	2292	0.64
performance	11	2267	0.63
students	8	2231	0.62
higher	6	2198	0.61
time	4	2156	0.60
level	5	2016	0.56
student	7	1761	0.49
institute	9	1718	0.48
staff	4	1696	0.47
system	6	1653	0.46
strategic	9	1578	0.44
total	5	1552	0.43
target	6	1522	0.43
international	13	1401	0.39
learning	8	1376	0.38
national	8	1337	0.37
entrants	8	1329	0.37
full	4	1315	0.37
funding	7	1285	0.36
2014	4	1231	0.34
development	11	1176	0.33
institution	11	1170	0.33
year	4	1146	0.32
programmes	10	1105	0.31
institutions	12	1103	0.31
staff	5	1098	0.31
graduates	9	1093	0.31
science	7	1088	0.30
undergraduate	13	1062	0.30
enrolments	10	1052	0.29
university	10	1011	0.28
support	7	963	0.27
plan	4	959	0.27
technology	10	957	0.27
2016	4	889	0.25
part	4	883	0.25
objectives	10	876	0.25
number	6	860	0.24
process	7	853	0.24
think	5	842	0.24
framework	9	836	0.23
targets	7	825	0.23
compact	7	822	0.23
ireland	7	791	0.22
quality	7	791	0.22
programme	9	777	0.22

## Appendix H

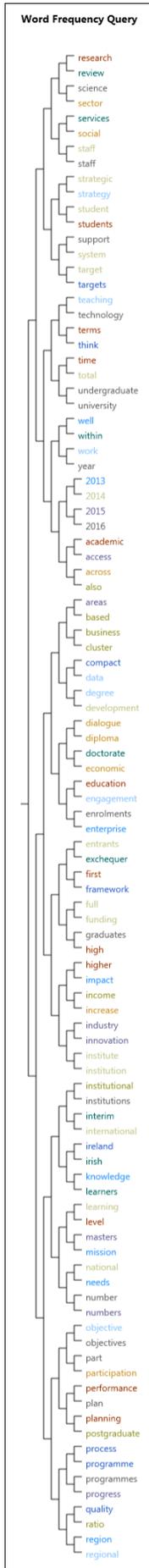
data	4	776	0.22
strategy	8	757	0.21
objective	9	745	0.21
degree	6	742	0.21
teaching	8	722	0.20
work	4	717	0.20
regional	8	696	0.19
engagement	10	685	0.19
cluster	7	678	0.19
income	6	664	0.19
also	4	659	0.18
institutional	13	643	0.18
postgraduate	12	641	0.18
based	5	639	0.18
ratio	5	639	0.18
business	8	628	0.18
2015	4	625	0.17
innovation	10	625	0.17
progress	8	612	0.17
areas	5	584	0.16
access	6	583	0.16
numbers	7	577	0.16
masters	7	553	0.15
industry	8	548	0.15
sector	6	543	0.15
dialogue	8	541	0.15
increase	8	539	0.15
economic	8	533	0.15
social	6	532	0.15
participation	13	528	0.15
across	6	526	0.15
diploma	7	506	0.14
irish	5	506	0.14
doctorate	9	504	0.14
interim	7	504	0.14
exchequer	9	495	0.14
review	6	492	0.14
within	6	487	0.14
learners	8	484	0.14
services	8	481	0.13
mission	7	480	0.13
well	4	477	0.13
impact	6	476	0.13
needs	5	473	0.13
enterprise	10	468	0.13
knowledge	9	463	0.13
region	6	456	0.13
2013	4	451	0.13
planning	8	451	0.13
terms	5	449	0.13
first	5	443	0.12
high	4	443	0.12

## Appendix H

### AH.2 Tag Cloud, Clusters

2013 2014 2015 2016 **academic** access across also areas  
based business cluster compact data degree **development** dialogue  
diploma doctorate economic **education** engagement  
enrolments enterprise **entrants** exchequer first framework full  
**funding** graduates high **higher** impact income increase industry  
innovation **institute** institution institutional institutions interim  
**international** ireland irish knowledge learners **learning level**  
masters mission **national** needs number numbers objective objectives  
part participation **performance** plan planning postgraduate  
process programme **programmes** progress quality ratio region regional  
**research** review science sector services  
social **sta?** staff strategic strategy **student**  
**students** support system target targets teaching  
technology terms think **time** total undergraduate  
university well within work year

# Appendix H



# Appendix H

## AH.3 Key Word in Context

The screenshot displays a software application window titled "Main Research Project SOS.nvp - NVivo". The interface includes a ribbon menu with tabs for File, Home, Create, External Data, Analyze, Query, Explore, Layout, and View. Below the ribbon is a search bar with the text "Look for:" and a dropdown menu set to "Internals". The main area shows a search results table with columns for Name, Nodes, References, Created On, Created By, and Modified On. The table lists various documents and their associated statistics.

Name	Nodes	References	Created On	Created By	Modified On
Action Plan for Education 2016-2019	Internals\Fieldwork\De&S	404			
CIT Profile 2010_11	Internals\Fieldwork\CIT\CIT Cycle 1	6			
CIT Projected Profile 2016	Internals\Fieldwork\CIT\CIT Cycle 1	2			
CIT Research and Innovation Strategy 2015_16	Internals\Fieldwork\CIT\CIT Cycle Zero	11			
CIT Strategic Dialogue Cycle 2 Assessment of Performance	Internals\Fieldwork\CIT\CIT Cycle 2	4			
<b>CIT Strategic Dialogue Cycle 2 Bilateral Meeting Minutes 7 Septem</b>	<b>Internals\Fieldwork\CIT\CIT Cycle 2</b>	<b>1</b>			
CIT Strategic Dialogue Cycle 2 HEI Self Evaluation Report	Internals\Fieldwork\CIT\CIT Cycle 2	48			
CIT Strategic Dialogue Cycle 2 Reflections on Performance	Internals\Fieldwork\CIT\CIT Cycle 2	9			
CIT Strategic Plan 2012 - 2016 Knowledge at Work	Internals\Fieldwork\CIT\CIT Cycle Zero	25			
Cork Institute of Technology Minute of Strategic Dialogue Meeting	Internals\Fieldwork\CIT\CIT Cycle 1	3			
HEA 2016 Higher Education System Performance Institutional and	Internals\Fieldwork\HEA\HEA Publications	213			
HEA. (2014) - 341 Higher Education System Performance 2014-2	Internals\Fieldwork\HEA\HEA Publications	654			
HEA. (2014) - 945 UCC Strategic Dialogue Cycle 1 Bilateral Meeti	Internals\Fieldwork\UCC\UCC Cycle 1	2			
HEA. (2015) - 683 Higher Education System Performance Instituti	Internals\Fieldwork\HEA\HEA Publications	212			
HEA. (2016) - 1054 Higher Education System Performance 2014-	Internals\Fieldwork\HEA\HEA Publications	475			
HEI101 Interview Transcript Final v1	Internals\Fieldwork\UCC\UCC Interviews	20			
HEI102 Interview Transcript Final v2	Internals\Fieldwork\UCC\UCC Interviews	1			
HEI103 Interview Transcript Final v1	Internals\Fieldwork\UCC\UCC Interviews	5			

## Appendix I Qualitative Analysis Documentation Form Sample

Organisati on/Cycle	Data Set	Aim, Procedural Steps	Decision Rules Followed During Analysis Operations	Analysis Operation: Reading data for analysis; Analysis; Drawing Conclusions; Confirming Conclusions	Conclusions Drawn from these specific analysis operations	Research Comments, reflections, remarks on any of the preceding	Date	Pgs
IT Tralee/Inte rview data	IT Tralee Interview Data	Imported into NVivo. Coded in NVivo	Coded onto strategic response framework	R, A	The conclusions are captured in an analytical memo across the research question headings. These have been merged with the findings from document analysis in a further analytical memo.	There are common themes emerging that have been captured in the analytical memo.	201612 to 201704	41
CIT/Cycle Zero	CIT Strategic Plan 2012-2016 (CIT 2012)	Imported into NVivo from EndNote. Created as case node. Coded in NVivo.	Coded onto the strategic response framework.	R, A	It does not include detailed targets in the manner that UCC does. It refers to executive units' strategic plans for details, e.g. Research and Innovation Strategy.	I have included an interview question regarding the availability of the executive units' strategic plans.	201410	

Source: Adapted from Miles et al. (2014, p.318)

## Appendix J Plain Language Statement

Dear Sir/Madam,

My name is Seamus O Shea<sup>1</sup> and I am currently a part-time research student on the Professional Doctoral in Education programme at the DCU Institute of Education, under the supervision of Professor Joe O Hara<sup>2</sup>. In my professional capacity, **I am Head of School of Health & Social Sciences at IT Tralee<sup>3</sup>. The title of my research study is ‘An Exploration of the Implementation of Ireland’s New Higher Education System Performance Framework in a Sample of Higher Education Institutions’.** The framework was introduced by the higher education authority (HEA) in 2014. It focuses on identifying national priority goals for higher education, and provides a context for the ongoing evaluation of performance of Ireland’s higher education system and that of individual higher education institutions (HEIs).

**The main aim of my research is to explore the extent to which HEIs are responding to the policy goals envisaged in Ireland’s new higher education system performance framework.** In particular, I am exploring the extent to which the framework aids or inhibits institutional planning and whether institutional goals are being aligned with the national agenda. I am also exploring if the national performance indicators for the higher education sector are incentivising behaviour at institute/faculty/department level, along with capacity/resource and visibility issues. These performance indicators relate to graduate profiles, access for underrepresented groups, teaching & learning, research & knowledge exchange, international activity, restructuring in the sector, and accountability for public funding.

**I am seeking your assistance in this research through participation in a one-hour semi-structured interview,** a copy of the schedule for which is attached. Please find attached a consent form to be filled out at the interview, should you agree to participate. A copy of the interview transcript will be provided post-interview, at which point you will be able to amend or retract any elements of the transcript. Recommendations arising from the research (which also includes other data collection sources) have the potential to improve the implementation of the system performance framework, to the benefit of stakeholders. Findings from the study will be made available to all participants.

---

<sup>1</sup> email: [seamus.oshea22@mail.dcu.ie](mailto:seamus.oshea22@mail.dcu.ie)

<sup>2</sup> email: [joe.ohara@dcu.ie](mailto:joe.ohara@dcu.ie)

<sup>3</sup> email: [seamus.oshea@staff.ittralee.ie](mailto:seamus.oshea@staff.ittralee.ie); phone 087 2357805

**In order to respect confidentiality of contributions, no data will be stored in the research database or reported that could identify any individual** (confidentiality is subject to legal limitations<sup>4</sup>). The sample size takes account of this important factor. All data will be stored electronically on a password-protected, data-encrypted computer and will be destroyed using a commercial security product on project completion (not later than December 2020). The information provided will be used solely for the purpose of this research project and related academic publications. Participation in this survey is entirely voluntary and there are no risks involved. Participants may withdraw from the study at any point by emailing or phoning me, at which point all their contributions will be destroyed with immediate effect.

**I thank you most sincerely** for considering this request. Please email or phone if you wish to discuss anything.

**Ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. If participants have concerns about this study and wish to contact an independent person, please contact:**

*The Secretary, Dublin City University Research Ethics Committee, c/o Research and Innovation Support, Dublin City University, Dublin 9. Tel 01-7008000.*

Yours sincerely,

Seamus O Shea

---

<sup>4</sup> I will not disclose to anyone what you have told me unless I am concerned about a risk of harm to an individual or unless there is a judicial order compelling me to provide information. I will seek to discuss any such event with interviewees in the first instance.

## Appendix K Informed Consent Form

**Research Study Title:** *An Examination of the Implementation of the New Irish Higher Education System Performance Framework in a Sample of Higher Education Institutions*

Principal Investigator: Seamus O Shea (seamus.oshea22@mail.dcu.ie), professional doctoral student at DCU

Supervisor: Professor Joe O Hara (email: joe.ohara@dcu.ie), DCU Institute of Education

**Purpose of the Research:** The main aim of this research is to explore the extent to which higher education institutes are responding to the policy goals envisaged in the new Irish higher education system performance framework.

**Please circle Yes or No or NA (not applicable) for each question.**

I have read the information in the Plain Language Statement.	Yes / No
I understand the information provided.	Yes / No
I have had the opportunity to ask questions and discuss this study.	Yes / No
I have received satisfactory answers to all my questions.	Yes / No
I have been assured that all data will be held in the strictest confidence as described in the Plain Language Statement.	Yes / No
I understand that I may decline to answer some of the interview questions.	Yes / No
I understand that I will be provided with a copy of the transcript of the interview for checking prior to it being used for the purposes of this study.	Yes / No
I give permission for my interview to be recorded.	Yes / No
I understand that the interview recording (where applicable) will be destroyed once the interview transcript has been agreed by me.	Yes / No/ NA
I understand that involvement in this research is voluntary and that I may withdraw from the research study at any point.	Yes / No
I agree to take part in this study.	Yes / No
I agree to allow the information provided by me to be used solely for the purpose of this research study and related academic publications.	Yes / No

I have read and understood the information in this form. My questions and concerns have been answered by the researcher, and I have a copy of this consent form. Therefore, I consent to take part in this research project.

Participant's Signature: \_\_\_\_\_ Witness: \_\_\_\_\_

Block Capitals: \_\_\_\_\_ Date: \_\_\_\_\_

Appendix L

## Appendix L Framework Matrix Sample

Appendix L

	A : Comply - Consistent with Goals	B : Negotiate - Consistent with Goals	C : Resist - Consistent with Goals	D : Comply - Constraints	E : Negotiate - Constraints	F : Resist - Constraints
1 : HEI101	<p>Am I correct in saying that the mission and goals of the university are consistent with national policy? HEI101: Yes, absolutely.</p> <p>It is very important for us, in that, it is the shop window and it does provide an independently adjudicated view of our performance....so it is important for us. We do have ambitious targets as you mentioned, in terms of internationalisation. Internationalisation is not just about student recruitment, there are other dimensions to it....the student and staff exchange programmes, internationalisation of our curriculum. But, rankings are an important shop window and they are important in terms of being able to attract the best available talent, whether students or staff.</p> <p>We put our institution forward for the pilot of UMultirank initially and said, yeah, we are going to do it because of its different aspects....it is a broader, more holistic view of how a university performs across all the dimensions. Contribution to the community is reflected strongly in UMultirank, so it just resonated with us from that aspect.</p> <p>The framework hasn't caused us to change our behaviours fundamentally in any way. This is the stuff we were doing anyway. We meet as a university management team every six weeks to review where we are....this is a formal meeting dedicated to: Where are we at? What barriers are there now?...How can we help to remove the barriers....we have a KPI review meeting twice a year.....it is in-built into the way we do things. So, it is part of what we do.</p> <p>Has there been a loss of decision-making discretion at your institution arising from the introduction of Ireland's HE system performance framework? HEI101: No.</p> <p>How has the HE system performance framework impacted on your institution's approach to risk taking? HEI101: No, the HEA has given us feedback on our ambitious targets, as you mentioned earlier. We didn't back off from the targets because of the compact....it didn't change our approach to risk taking. We do have stretch targets in the strategic plan, we have to, it has to be ambitious, there may be some that we won't fully hit but we will get close.</p> <p>we didn't have a national plan for equity of access to higher education for two years, there was a gap of two years there.</p>	<p>I would say is that our planning processes are dynamic, they have to be to the extent that despite what our strategic plan says, in terms of what we set out for five years, every year we spend a day in September taking stock, reviewing what is new in terms of the external environment, for example the report on gender equality. That is one that we are responding to because we are now building that into the annual plan for this year. That will result in priorities for the next twelve months that didn't appear, let's say, 24 months ago. The performance compact process does need to have this flexibility built into it....and we fed this back to the HEA as well.</p>				
3 : HEI103	<p>I find the framework incredibly useful, actually. The strategic plan, our operational plan and the framework are all aligned, so when I have my management team meetings here, a number of times a year, they are foregrounded to ensure that we are on track, that we are measuring without being slavish....it keeps the momentum up on projects.</p> <p>Actually, I think it is a very helpful tool, personally I found it very helpful in managing and driving change.</p> <p>So I think, for the most part, the performance framework isn't influencing right now, would be my assessment....for the reason we said, 'you don't really get anything extra for performance'.</p> <p>Anything that is driven by money....if the framework impacts on that....then that influences us, there is no question about that.</p> <p>I guess, right now, if we started climbing back up the rankings, would be one....because, certainly, we are going in the opposite direction now.</p>	<p>I think the cluster can provide a good framework through mutual respect, more than competition....it would work better.</p>				

Appendix L

	A : Comply - Consistent with Goals	B : Negotiate - Consistent with Goals	C : Resist - Consistent with Goals	D : Comply - Constraints	E : Negotiate - Constraints	F : Resist - Constraints
4 : HE104	<p>It's not that they were displaced but we tried to line up as best we could, repackaging for alignment where possible.</p> <p>Autonomy is a big issue, alright. There seems to be less autonomy, I would say....arising from the fact of having to go and talk to the HEA and account for our performance. I think it is a good thing but others would argue that the fact that we didn't have to do that before is, kind of, an invasion or less discretion over what we could do.</p> <p>I know that we have the national objectives and all that but for us, in some ways, being here in five years' time without a big deficit would be a success because we are under so much pressure moneywise....I know ye are in the thick of it like everyone else....but, just hanging in there is a success, I would say, in the current climate. I'm trying to make sure that we don't go bankrupt. Whether you are a small or large institution the percentage hit is similar when the deficit is compared to the overall budget.</p>	<p>We lead the clustering but it is, kind of, a perverse incentive for the likes of yourselves where ye might be working with CIT to become a technological university and ye are also trying to work with UCC....some of those things....we find them tokenism. It's a bit of ticking a box....those meetings, you know, we're doing it, they are going through the motions but....</p>				
5 : HE105	<p>These are global expectations of universities and all that's happening in this exercise here is that it is codifying them, but not actually requiring any dramatic changes in our behaviours....that was my sense of it.</p>					
7 : UCC, (	<p>UCC Strategic Plan 2013-2017</p> <p>Vision Statement To be a world-class university connecting our region to the globe.</p> <p>Mission Statement</p> <p>University College Cork inspires creativity and independent thinking in a research-led teaching and learning environment. Our students are our highest priority.</p> <p>Through our research excellence we create and communicate knowledge to enhance the intellectual, cultural, social and economic life regionally, nationally and internationally.</p> <p>Our essential values are those of leadership, excellence, accountability and collaboration. We aim to work to the highest standards and encourage initiative, creativity and innovation in all of our activities.</p> <p>Since 1849 University College Cork is the comprehensive university of the South of Ireland. It is a globally oriented research-led university providing the full range of disciplines to serve regional, national and international needs. UCC is differentiated nationally as the comprehensive, research-intensive, international top tier university in the South of Ireland, and internationally by its regional connectedness together with a global orientation in all of its activities.</p> <p>UCC offers a broad range of disciplines in Arts, Humanities, Social Sciences, Business, Law, Engineering, Architecture, Science, Food Science, Medicine, Dentistry, Pharmacy, Nursing and the Clinical Therapies. Degree programmes cover the full range of NQF levels from 7-10 and include level 6 programmes through its adult and continuing education portfolio.</p> <p>UCC and CIT, and UCC and the Colleges of Further Education, have a strong track-record, over a decade, of demonstrating effective partnerships and alliances to the benefit of the student. Established in 1999, UCC's collaboration with CIT is a unique model nationally and is an exemplar of the higher education partnerships envisaged in the National Strategy for Higher Education.</p>	<p>The Compact recognises that University College Cork is an autonomous institution with a distinctive mission, operating within a regional, national and international higher education environment.</p> <p>The Compact recognises that there is a tension between providing a transparent framework of public accountability for performance in relation to funding, and risks of unintended behaviours related to measurements. It addresses this tension by requiring higher education institutions themselves to propose the qualitative and quantitative indicators against which their performance should be assessed by the Higher Education Authority.</p> <p>The purpose of this Compact is to provide a strategic framework for the relationship between the Higher Education Authority and University College Cork. It sets out how University College Cork's mission and goals align with national goals for higher education.</p> <p>University College Cork and the Higher Education Authority recognise that University College Cork is an autonomous institution that is responsible for determining its mission, its aspirations and its</p>			<p>Institutional consolidation</p> <p>: Strategy Summary:</p> <p>UCC recognises the need for rationalised provision of higher education programmes across the sector on the basis of clear criteria and agreed standards.</p> <p>UCC is committed to participating in a well-designed process for the rationalisation of provision</p>	

Appendix L

	A : Comply - Consistent with Goals	B : Negotiate - Consistent with Goals	C : Resist - Consistent with Goals	D : Comply - Constraints	E : Negotiate - Constraints	F : Resist - Constraints
11 : UCC S	<p>UCC has chosen EU Multi-rank as a source of benchmarking as it is non-commercial and more inclusive in terms of the stated mission of UCC. In addition, the research quality is open to review and external scrutiny in such matters is welcome. QS, on the other hand is commercial and somewhat narrower.</p> <p>HEA commends the strong research performance. In the context of benchmarking, it is noted that UCC undertook a research review in 2009 and they are looking to update on performance since then. 115 international experts across 15 panels were engaged. The results showed that 18% of research output was deemed to be 'outstanding'; 36% 'excellent'; 22% 'very good'. Also, 43% of UCC staff were deemed to have 'outstanding reputations'.</p> <p>The HEA queried the strategy and policy around research centres and units and how this will develop. SFI centres are an extensive part of UCC's research domain, so there is a strong relationship from the centre but micromanagement is a difficulty. As it stands, the Strategy for Science, Technology and Innovation is a threat to universities insofar as it includes a move towards developing green field research centres. In UCC's view, there is a need to embed centres in the university. Otherwise there is a risk in terms of governance of research and how agencies behave and universities need to be more robust in responding to that. In the case of the APC, for example, it has accepted the university relationship.</p> <p>In relation to mapping excellent teaching and learning and ensuring a quality student experience, the Teaching &amp; Learning strategy is broadly strong. UCC's ambition is to bring in research experience from first year down, this is a real stretch goal. It was noted that in the UK, teaching and learning is a core requirement and is funded and worked into promotion criteria. The NAIRTL project was the top ranked SIF Project, yet funding was moved away which caused some damage. As it stands the centre to deliver this is under resourced and the activity is voluntary. A 60% target was ambitious in this regard, but there are infrastructural constraints such as future proofing infrastructure and ICT capability. It is estimated that €15M will be required to bring the infrastructure up to standard or €25M to make it first class.</p> <p>UCC has chosen EU Multi-rank as a source of benchmarking as it is non-commercial and more inclusive in terms of the stated</p>	<p>funding it would be put towards ICT in the first instance, followed by targeted recruitment and lastly, enhancing quality of space.</p> <p>In terms of the Transitions reform agenda,</p> <p>UCC will not necessarily follow the UCD path, but it was noted that UCC holds a different position in its region and serves as a regional comprehensive university function.</p> <p>The offering to international markets is important too, they are discerning. There are also logistical issues as it is necessary to have the resources to realign to offer bigger lecture halls for common delivery. UCC also cautioned on pursuing an agenda such as this when there is a sector-wide commitment to diversity.</p> <p>funding it would be put towards ICT in the first instance, followed by targeted recruitment and lastly, enhancing quality of space.</p> <p>In terms of the Transitions reform agenda,</p> <p>UCC will not necessarily follow the UCD path, but</p>				

Appendix L

	A : Comply - Consistent with Goals	B : Negotiate - Consistent with Goals	C : Resist - Consistent with Goals	D : Comply - Constraints	E : Negotiate - Constraints	F : Resist - Constraints
12 : UCC S	<p>Overall the report is reflective of University College Cork's strategic aims and well aligned. UCC are progressing well on the agreed compact targets.</p>	<p>In the areas of research and enterprise engagement significant progress is being made and current targets are being surpassed. There may be scope for UCC to extend and be more ambitious around the 2015/16 targets in these areas.</p> <p>While the self-evaluation report (SER) provides significant detail of progress on what could be classed as day to day activities, perhaps more focused could be placed on strategic long-term objectives. The SER and UCC would probably benefit from a little less on process and more on outcomes and outputs. This might better reflect what it all meant to UCC and if seemed worth the effort.</p> <p>All this aside, it is true that UCC has made strong progress. Indeed, UCC has exceeded a number of its 2016 targets and should probably re-consider these in light of the progress to date. Without intending to be overcritical, it should be noted that where targets are being significantly exceeded there might be questions over the appropriateness of the levels of ambition displayed in setting the targets. The benchmarking data was certainly interesting, UCC</p>				

## Appendix M System KSOs/HLIs Addressed in HEIs' Objectives/KPIs

This appendix includes tables that illustrate the system level KSOs/HLIs addressed in each HEI's strategic compact for each of the years 2014, 2015 and 2016. Take table 1 (UCC) as an example for illustration purposes. In 2016 UCC's strategic compact addressed 32 of the system KSOs/HLIs and somewhat addressed 2 further KSOs/HLIs. Three KSOs/HLIs were not addressed and three were not applicable, each being in the domain of the HEA (e.g. international benchmarks). Five of the KSOs/HLIs addressed by UCC were each in the domain of 'Meet Human Capital Needs', 'Equity of Access' and 'Excellence in Teaching & Learning'; seven addressed 'Research & Knowledge Exchange'; six addressed 'Internationalisation'; and three each addressed 'Reform & Restructure' and 'Accountability'. This format applies for each of the five tables set out in this appendix.

### Table of Tables

Table 1 System KSOs/HLIs Addressed in UCC's Objectives/KPIs.....	2
Table 2 System KSOs/HLIs Addressed in CIT's Objectives/KPIs .....	3
Table 3 System KSOs/HLIs Addressed in WIT's Objectives/KPIs .....	4
Table 4 System KSOs/HLIs Addressed in IT Carlow's Objectives/KPIs .....	5
Table 5 System KSOs/HLIs Addressed in ITT's Objectives/KPIs.....	6

Table 1 System KSOs/HLIs Addressed in UCC's Objectives/KPIs

System KSO/HLI Addressed in HEI Strategies 	Yes	Somewhat	Dropped/ Not		Grand Total
			No	Applicable	
<b>2014</b>	<b>32</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	3		1	2	6
<b>2015</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2016</b>	<b>32</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	3		1	2	6

Table 2 System KSOs/HLIs Addressed in CIT's Objectives/KPIs

System KSO/HLI Addressed in HEI Strategies 	Dropped/ Not				Grand Total
	Yes	Somewhat	No	Applicable	
<b>2014</b>	<b>30</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	4		3		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2015</b>	<b>30</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	4		3		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2016</b>	<b>30</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	4		3		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6

Table 3 System KSOs/HLIs Addressed in WIT's Objectives/KPIs

System KSO/HLI Addressed in HEI Strategies 	Yes	Somewhat	No	Dropped/ Not	Grand Total
				Applicable	
<b>2014</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2015</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2016</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6

Table 4 System KSOs/HLIs Addressed in IT Carlow's Objectives/KPIs

System KSO/HLI Addressed in HEI Strategies 	Yes	Somewhat	No	Dropped/ Not	Grand Total
				Applicable	
<b>2014</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2015</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6
<b>2016</b>	<b>31</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>40</b>
Meet Human Capital Needs	5		2		7
Equity of Access	5				5
Excellence in Teaching & Learning	4	1			5
Research & Knowledge Exchange	7				7
Internationalisation	6				6
Reform & Restructure	2	1		1	4
Accountability	2	1	1	2	6

Table 5 System KSOs/HLIs Addressed in ITT's Objectives/KPIs

System KSO/HLI Addressed in HEI Strategies 	Yes	Somewhat	No	Dropped/ Not Applicable	Grand Total
<b>2014</b>	<b>25</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>40</b>
Meet Human Capital Needs	5	1	1		7
Equity of Access	5				5
Excellence in Teaching & Learning	3	1	1		5
Research & Knowledge Exchange	5			2	7
Internationalisation	3	1	1	1	6
Reform & Restructure	2	1		1	4
Accountability	2		2	2	6
<b>2015</b>	<b>25</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>40</b>
Meet Human Capital Needs	5	1	1		7
Equity of Access	5				5
Excellence in Teaching & Learning	3	1	1		5
Research & Knowledge Exchange	5			2	7
Internationalisation	3	1	1	1	6
Reform & Restructure	2	1		1	4
Accountability	2		2	2	6
<b>2016</b>	<b>25</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>40</b>
Meet Human Capital Needs	5	1	1		7
Equity of Access	5				5
Excellence in Teaching & Learning	3	1	1		5
Research & Knowledge Exchange	5			2	7
Internationalisation	3	1	1	1	6
Reform & Restructure	2	1		1	4
Accountability	2		2	2	6