

**Free Movement of Scientists within the European Research Area (ERA):  
An Analysis of the Cypriot Research Market**

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## ABSTRACT

This thesis examines the ‘scientific mobility/migration’ of EU and non-EU scientists, researchers and doctoral candidates within the European Research Area (ERA), focusing on the legal and policy framework of Cyprus. This work is at the intersection of the ERA framework, the Area of Freedom Security and Justice and the free movement of workers. The ERA is defined as ‘*a unified European research area in which researchers, scientific knowledge and technology circulate freely and through which the Union and Member States strengthen their science, technology, their competitiveness and their capacity to collectively address challenges*’.<sup>1</sup> This thesis analyses scientific migration in its holistic dimension, which also includes a study of the impact of EU/national policies, laws and domestic research culture on the migrants themselves. Employing a socio-legal approach for conducting a qualitative study, the work explores the perceptions and experiences of two different samples of scientists: non-EU researchers in Cyprus, as a country of origin, and Cypriot scholars in the UK, as a destination country. The overall aim is to identify strengths and weaknesses in terms of attracting and retaining scientists and the culture encountered in the national research environment and propose recommendations.

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<sup>1</sup> Commission Communication, ‘A Reinforced European Research Area Partnership for Excellence and Growth’, COM (2012) 392, (17 July 2012)

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I would like to dedicate this Thesis to my father, Paul Borg, who sadly passed away before he could see me graduate.

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## LIST OF ABBREVIATIONS

AFSJ: Area of Freedom, Security and Justice  
BERD: Business Enterprise Expenditure on Research and Development  
BIS: Department for Business, Innovation and Skills  
BCD: Blue Card Directive  
C&C: European Charter for Researchers and Code of Conduct for the Recruitment of  
Researchers  
CIHE: Council for Industry and Higher Education  
CING: Cyprus Institute of Neurology and Genetics  
CJEU: Court of Justice of the European Union  
CRD: Citizenship Rights Directive  
CSC: Cyprus Scientific Council  
CYSC: Cyprus Supreme Court  
CST: Council for Science and Technology  
DGEPD: Directorate General for European Programmes, Coordination and Development  
ECRI: European Commission against Racism and Intolerance  
ECSC: European Coal and Steel Community  
EMN: European Migration Network  
ENAR: European Network against Racism  
EPRS: European Parliamentary Research Service  
ERA: European Research Area  
ERG: European Reintegration Grants  
ESIF: European Structural and Investment Funds  
ESFRI: European Strategy Forum on Research Infrastructure  
ESRC: Economic and Social Research Council  
EU: European Union  
EC: European Communities  
FP: European Framework Programme for Research and Technology Development  
GDP: Gross Domestic Product  
GERD: Gross Expenditure on Research and Development  
GRECO: Council of Europe's Group of States against Corruption  
GSIF: Global Science and Innovation Forum  
HE: Higher Education  
HEI: Higher Education Institutions

HERD: Higher Education Expenditure on Research and Development  
HRS4R: Human Resources Strategy for Researchers  
HRST: Human Resources in Science and Technology  
HSM: Highly Skilled Migration  
IOF: International Outgoing Fellowships  
IOM: International Organization for Migration  
ISCO: International Standard Classification of Occupations  
LTR: Long Term Residence  
LTRD: Long Term Residence Directive  
MSCA: Marie Skłodowska-Curie Actions  
MTA: Hungarian Academy of Sciences- Magyar Tudományos Akadémia  
MoF: Ministry of Finance  
MSs: Member States  
NCRI: National Council for Research and Innovation  
NCRITD: National Committee on Research, Innovation and Technological Development  
NHRI: National Institution for the Protection of Human Rights  
NIS: National Innovation System  
NIP: National Innovation Policy  
NRP: National Reform Programme  
OECD: Organisation for Economic Co-operation & Development  
OMC: Open Method of Coordination  
ONS: Office for National Statistics  
PRO: Public Research Organisation  
R&D: Research and Development  
RDI: Research, Development and Innovation  
R&I: Research and Innovation  
REF: Research Excellence Framework  
RoC: Republic of Cyprus  
RPF: Research Promotion Foundation  
RTD: Research Technology Development  
RTDI: Research Technology Development and Innovation  
S&T: Science and Technology  
SMEs: Small and Medium-sized Enterprises  
STEM: Science, Technology, Engineering & Mathematics  
TCNs: Third Country Nationals  
TFEU: Treaty of the Functioning of the European Union



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## Introduction

Any detailed description of the European Research landscape including its legal and policy instruments and its effect would not be complete without references to the migration phenomenon in particular to scientific migration which represents one of the most important<sup>1</sup> and unconventional<sup>2</sup> types of migration. Migration has been a subject of study by many disciplines such as law, economics, geography and sociology to mention a few<sup>3</sup> with different theoretical perspectives informed by different understandings of the meaning and purpose of theorising.<sup>4</sup>

In particular, explanations on the migration phenomenon based on economics have been dominant in the migration literature amidst which two might be of relevance to this study of scientific mobility.<sup>5</sup> One is the neoclassical theory which elaborates on migration on a macro-level, based on the assumption that rational economic consideration of financial and psychological benefits and costs provide the migration incentive.<sup>6</sup> The second is the human capital theory which elaborates on migration on a micro-level explaining its causes on an individual choice based on socio-demographic features of the individuals such as factors including skills, age, gender, occupation and expectations.<sup>7</sup>

In the European context an increase in the geographical mobility of scientists has been promoted as a strong instrument to foster faster economic adjustment, growth and competitiveness.<sup>8</sup> In terms of numbers, Europe taken as a block and compared to the United States represents the greatest scientific entity in the world. This argument is at the core of the European Research Area (ERA) a concept initially conceived back in 1973<sup>9</sup>,

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<sup>1</sup> M'hamed Aisati, et al., 'International Scientific Migration Balances', in Eric Archambault, Yves Gingras and Vincent Larivière, *Proceedings of 17th International Conference on Science and Technology Indicators*, (Science-Metrix and OST, 2012), 33-45 p33

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<sup>6</sup> Michael Todaro and Stephen Smith, *Economic Development* (12<sup>th</sup> ed. Pearson 2014) p137

<sup>7</sup> Thomas Bauer and Klaus F. Zimmermann 'Assessment of Possible Migration Pressure and its Labor Market Impact following EU Enlargement to Central and Eastern Europe' (1999) A study for the Department of Education and Employment UK IZ, 15

<sup>8</sup> Vincent Reillon 'The European Research Area, Evolving Concept, Implementation Challenges' In-depth Analysis, Research Policy, European Parliamentary Research Service (EPRS) (2016) PE 579.097. See also Klaus F. Zimmermann 'The Mobility Challenge for Growth and Integration in Europe' (2013) IZA Policy Paper No. 69

<sup>9</sup> Commission of the EC, 'Working Programme in the Field of Research, Science and Education', SEC(73) 2000/2, (23 May 1973)

and becoming an integral part of the so called Lisbon Agenda formulated in 2000, a new strategy adopted for the establishment of the ERA.<sup>10</sup>

Underlying this argument and the main Lisbon Agenda objectives is the idea that Member States' (MSs) national research systems should not be isolated but that they should become more interoperable creating and establishing a common scientific area with an integrated European system for research irrespective of national borders.<sup>11</sup> Thus, growth and competitiveness can be boosted for the benefit of the whole block through intra-Union scientific mobility and attraction of non-EU researchers in order for the EU to become the premier knowledge economy worldwide through the promotion of research, innovation, education and scientific mobility.<sup>12</sup>

From the theoretical stand point, the ERA plan has probably found inspiration from the neoclassical theory which has also motivated actions in relation to the internal market such as enlarging the territorial scope of market exchange and allowing more efficient forms of taxation.<sup>13</sup> Additionally the human capital approach could facilitate understanding of the extent to which individual mobile actors contribute to the ERA and reflect on the impact of such a macro-level model on individual migrant scientists and their families.

However, the above theoretical models have difficulties in explaining migration from home countries in the absence of non-economic incentives such as social, cultural and environmental factors which strongly influence scientific migration.<sup>14</sup> Migration theoretical models based on economics also remain silent about the role of states and the impact of law and immigration policies on migrants.<sup>15</sup>

In reality in this type of movement the attention of this research shifts back to the crucial role MSs, institutions and stakeholders play in the shaping of conditions – favourable or not- for this type of migration to occur within the ERA. The interest of the EU and countries across the world in researchers' mobility is justified by two crucial facts.

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<sup>10</sup> European Council, 'Presidency Conclusions' Lisbon 23 and 24 March 2000 (2000) at: [http://www.europarl.europa.eu/summits/lis1\\_en.htm](http://www.europarl.europa.eu/summits/lis1_en.htm) ,

<sup>11</sup> Commission of the EC, SEC (73) 2000/2, (n.9)

<sup>12</sup> Commission Communication, 'Towards a European Research Area', COM (2000) 6, (18 January 2000), Commission of the EC, 'A Mobility Strategy for the European Research Area', COM (2001) 331, (20 June 2001), See Article 45 TFEU on the freedom of movement of workers and Articles 179-181 TFEU on research and technological development and space. See Commission Communication 'European Research Area Progress Report 2014' COM(2014) 575 final

<sup>13</sup> Gary Marks and Liesbet Hooghe 'Optimality and Authority A Critique of Neoclassical Theory' (2000) *Journal of Common Market Studies* 38 (5): 795-816

<sup>14</sup> Ibid. See also Jeffrey C Alexander *Action and Its Environments* (Columbia University Press,1988); Stefano H. Baruffaldi and Paolo Landoni 'Mobility Intentions of Foreign Researchers: The Role of Non-economic Motivations' (2016) *Industry and Innovation*, 23 (1): 87-111

<sup>15</sup> Hein de Haas 'The Determinants of International Migration, Conceptualizing Policy, Origin and Destination Effects' (2011) IMI Working Paper 32 (DEMIG Project Paper 2), University of Oxford, International Migration Institute, p7

One is that this involves a considerable increase in the exchange of information, knowledge and as a result innovation.<sup>16</sup> The second is that innovation is transformed into more ability to move into international markets and greater supply of jobs and revenues.<sup>17</sup>

Apart from scientific migration, another dimension of developing and implementing the broad ERA project is the promotion of a scientific culture in Europe bringing policies closer to the citizens, and placing responsible science at the heart of policy-making.<sup>18</sup> To achieve this goal the Commission called on MSs to develop and implement strategies in compliance with the European dimension and common ethical rules, in the formulation of responsible policies, thus increasing synergies between national and European level regarding research, education, scientific and technological culture.<sup>19</sup>

In order to create and establish an environment where ‘research culture’ is shared among MSs the EU Commission has launched several landmark programmes and initiatives<sup>20</sup> running through the EU funding to maximize the return on investment in research while increasing its effectiveness at both the national and EU level.<sup>21</sup> At the same time the purpose of promoting and attracting scientific mobility led to the evolution of the EU free movement provisions regarding EU and non-EU Researchers and Scientists through the EU Migration law Directives.

Ideally the right to free movement for EU nationals through the Citizenship Rights Directive (CRD)<sup>22</sup> and the regulation of Third Country National (TCN) protection and free movement rights for non-EU nationals result in a *seamless mobility of researchers across institutions, sectors and countries*.<sup>23</sup> Thus mobility of EU scientists and EU citizenship are linked<sup>24</sup> since EU citizenship rights are derivative from MS national citizenship. Likewise, mobility of TCN scientists is connected to the EU legislation that governs it, however, on condition they meet its requirements and on accessing EU citizenship which depends on

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<sup>16</sup> Commission Communication, ‘Better Careers and More Mobility: A European Partnership for Researchers’, COM (2008) 317 final

<sup>17</sup> ESPON Territorial Impact of Globalization for Europe and its Regions (TIGER) ‘European FP7 Research Project: Hard and Soft Mobility of Higher Education Sector (HES) researchers out and in the ESPON Space’ (2012) Working paper 14b, p.1, at:

[https://www.espon.eu/sites/default/files/attachments/TIGER\\_DFR\\_scientific\\_report-wp14b.pdf](https://www.espon.eu/sites/default/files/attachments/TIGER_DFR_scientific_report-wp14b.pdf)

<sup>18</sup> Commission Communication, ‘Science and Society Action Plan’ COM (2001) 714, (4 December 2001)

<sup>19</sup> Ibid

<sup>20</sup> See for example: Commission Communication, ‘EUROPE 2020 A Strategy for Smart, Sustainable and Inclusive Growth’, COM (2010) 2020, (3 March 2010), Council of the EU ‘Council Conclusions on the European Research Area Roadmap 2015-2020’, ST 9351 2015 INIT, (29 May 2015), and Chapter 2

<sup>21</sup> See Chapter 2

<sup>22</sup> Directive 2004/38/EE of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States

<sup>23</sup> Commission Communication, ‘The European Research Area: New Perspectives’ Brussels, 4.4.2007 COM (2007) 161 final

<sup>24</sup> Sonia Morano-Foadi ‘Citizenship and Migration within the European Research Area: The Italian Example’ in Martínez Arranz, Alfonso Pascaline Winand and Natalie Doyle (eds.) ‘New Europe, New World?: The European Union, Europe and the Challenges of the 21<sup>st</sup>’ (P.I.E.-Peterlang, 2010) p.98

the national citizenship policies of the MS they are in. Consequently, without doubt states and policies play a significant role in shaping migration processes.<sup>25</sup>

About 45 years after the first steps to establish a common research policy, and 16 years after the framing and adoption of the ERA project, the creation of an effective area for European research and science remains a work in progress. As a result, the need to gain a better insight into its dimensions: scientific migration and the research policy in promoting research culture is highlighted by academic scholars and emphasized in key EU policy documents.<sup>26</sup>

Academic researchers have responded to this challenge by producing a substantial body of literature on the topic<sup>27</sup> which reveals that scientific mobility involves more than a physical movement of relocating from one place to another<sup>28</sup> and that unlike the typical case of HS workforce migration<sup>29</sup> it is one of the most important and fairly newest types of migration<sup>30</sup> not driven solely by economic reasons as other professions are.<sup>31</sup>

Additionally a portion of scholarship research has concentrated on the characteristics, motivational dynamics and location factors behind mobility decisions of scientists and research professionals of different EU nationalities with the questions of losses and gains in attracting HS migration, becoming familiar features in scholarly work.<sup>32</sup>

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<sup>25</sup> Stephen Castles, et al., *The Age of Migration, International Population Movements in the Modern World* (5th ed Palgrave Macmillan 2014), p.5 See also de Haas (n. 15), p.4

<sup>26</sup> See for example: Council of the European Union, 'Council Conclusions on European Research Area Progress' (25 February 2014) Doc. 6945/14, at: [http://era.gv.at/object/document/1198/attach/ST06945\\_EN14.PDF](http://era.gv.at/object/document/1198/attach/ST06945_EN14.PDF).

European Research Area and Innovation Committee, 'European Research Area (ERA) Roadmap 2015- 2020' (20 April 2015) ERAC 1208/15, at: <http://data.consilium.europa.eu/doc/document/ST-1208-2015-INIT/en/pdf> Martin Kahanec and Klaus Zimmermann, 'International Migration, Ethnicity and Economic Inequality', in: W. Salverda, B. Nolan and T. M. Smeeding (eds.), *The Oxford Handbook of Economic Inequality*, (Oxford University Press, Oxford 2009), 455-490, Commission Communication, COM (2001) 714 (n.18)

<sup>27</sup> See: Susan Robertson 'Critical Response to Special Section: International Academic Mobility' (2010) *Discourse* 31, (5): 641-647, Brendan Cantwell, 'Transnational Mobility and International Academic Employment: Gatekeeping in an Academic Competition Arena', (2011) *Minerva* 49 (4): 425-445, Louise Ackers 'Promoting Scientific Mobility and Balanced Growth in the European Research Area', (2005) *Innovation: The European Journal of Social Science Research* 18(3): 301-17.

<sup>28</sup> Tim Cresswell, 'Towards a Politics of Mobility', (2010) *Environment and Planning D: Society and Space* 28 (1): 17-31.

<sup>29</sup> Ludmila Ivancheva and Elissaveta Gourova, 'Challenges for Career and Mobility of Researchers in Europe' (2011) *Science and Public Policy* 38 (3): 185-198

<sup>30</sup> Aisati, (n.1)

<sup>31</sup> Baruffaldi and Landoni (n14) p96, Kristian Thorn and Lauritz B. Holm-Nielsen 'International Mobility of Researchers and Scientists: Policy Options for Turning a Drain into a Gain', (2006) UNU World Institute for Development Economics Research Paper No. 2006/83 pp2-3

<sup>32</sup> See for example Bernhard Kurka et al., 'Understanding Scientific Mobility: Characteristics, Location Decisions, and Knowledge Circulation. A Case Study of Internationally Mobile Austrian Scientists and Researchers' *Dynamic Regions in a Knowledge-Driven Global Economy (DYNREG)* (2008), Louise Ackers, Bryony Gill *Moving People And Knowledge Scientific Mobility in an Enlarging European Union* (Edward Elgar 2008), and Grit Laudel, 'Migration Currents Among the Scientific Elite' *Minerva* (2005) 43: 377-395 (Springer 2005)

Concern about the impact of migration on the welfare state<sup>33</sup> and generally about the political dimensions of migration and consequently the role of migration policies prompted the relatively recent attention of political scientists and legal scholars to migration.<sup>34</sup> However, scholarly research shows that it is hard to measure the effectiveness of the role states and migration policies play in migration processes.<sup>35</sup> This could be attributed to studying migration in terms of policy outcomes and outputs which portrays migrants as ‘passive pawns’ without any active or inactive role or ability to change structure,<sup>36</sup> leaving social, cultural and environmental factors which have a strong influence on scientific migration<sup>37</sup> unaccounted for.

Against this background in an attempt to fill in the above identified gaps it is necessary to look at scientific migration as a phenomenon instigated and directed by the behaviour, objectives and policies of many actors involved in it both at a supranational and national level.

This study examines the “migration” of EU and non-EU scientists, researchers and doctoral candidates within the ERA focusing on the legal and policy framework of Cyprus. Compared to previous contributions which concentrate mostly on the consequences and driving forces of the scientific migration phenomenon,<sup>38</sup> this approach offers a comprehensive analysis of ‘scientific’ migration with its scope on the effect of the role MSs and migration policies play in migration processes. Although scholarly research shows that it is hard to measure the effectiveness of policies and laws<sup>39</sup>, the present work aims at studying migration measuring the impact of the effectiveness of policy and laws on the migrants themselves. In this perspective, the focus of this study is on the Cyprus research environment as impacting on native EU and non-EU scientists and researchers, rather than merely focusing on their migration determinants. In order to do this, the present

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<sup>33</sup> Grete Brochmann Anniken Hagelund, *Immigration Policy and the Scandinavian Welfare State 1945-2010 (Migration, Diasporas and Citizenship)* Palgrave Macmillan (2012) p3

<sup>34</sup> James F. Hollifield and Toom K. Wong, ‘The Politics of International Migration, How Can We Bring the State Back In?’ in Caroline B. Brettell and James F Hollifield (eds.) *Migration Theory Talking Across Disciplines* (3<sup>rd</sup> ed. Routledge 2015)

<sup>35</sup> de Haas (n.15)

<sup>36</sup> Hein de Haas, ‘Migration Transitions: a Theoretical and Empirical Inquiry into the Developmental Drivers of International Migration’, IMI WP 24 DEMIG Project Paper 1 Oxford University: IMI (2010)

<sup>37</sup> Alexander (n.14) Marks and Hooghe (n.13)

<sup>38</sup> Jacques Gaillard and Anne Marie Gaillard, ‘The International Mobility of Brains: Exodus or Circulation?’ (1997) *Science, Technology and Society*, 2(2):195-228, p198 p218. Jagdish N. Bhagwati and Koichi Hamada, ‘The Brain Drain International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis’ (1974) 1 *Journal of Development Economics*, 19-42. See also Siew-Ean Khoo et al., ‘Which Skilled Temporary Migrants Become Permanent Residents and Why?’ (2008) *International Migration Review* 42 (1): 193–226 and Stefano H. Baruffaldi and Paolo Landoni, ‘Effects and Determinants of the Scientific International Mobility: The Cases of Foreign Researchers in Italy and Portugal’ (2010) Triple Helix VIII Conference, at:

[https://www.leydesdorff.net/th8/TRIPLE%20HELIX%20%20VIII%20CONFERENCE/PROCEEDINGS/0008\\_Baruffaldi\\_Stefano\\_O-103/3Helix\\_Paper\\_Baruffaldi\\_Landoni.pdf](https://www.leydesdorff.net/th8/TRIPLE%20HELIX%20%20VIII%20CONFERENCE/PROCEEDINGS/0008_Baruffaldi_Stefano_O-103/3Helix_Paper_Baruffaldi_Landoni.pdf)

<sup>39</sup> de Haas (n. 15) p5

research employs Schein's organizational culture model,<sup>40</sup> one of the most influential models in organizational culture and leadership management literature, to explain the role of the State and the impact of law and immigration policies on migrants, the role of research culture and the management of the national research environment and the consequences for the free movement of scientists. More specifically, the analysis focuses on the key actors involved in the creation of the ERA: the scientists and researchers irrespective of nationality, the European institutions which promote the ERA concept through the supranational law and policy initiatives and the MSs' contribution to the shared vision of establishing the ERA by their endorsement and cooperation. This analysis aims at an understanding of the challenges facing the EU as a supranational 'organization' and which impede the achievement of a coherent European research system, and an attractive research environment. The approach of considering culture as inseparably linked to law<sup>41</sup> and that law as a product of a country's history and culture that shapes people's identity and social practices<sup>42</sup> can be very well accounted for by Schein's organizational culture theory through its extension and application within the broader dimensions of the EU and that of the State (Cyprus).

A socio-legal approach was chosen for this qualitative study which consisted of two overlapping phases: a theoretical and an empirical based on two rounds of semi-structured interviews with a sample of 20 EU and non-EU scientists, researchers and 8 key informants in Cyprus and 15 Cypriot scientists, researchers and doctoral candidates in the UK with Cyprus as a country of origin, and the UK, as a destination country for Cypriot scientists and researchers. This empirical work covers a period of study between September 2012 and December 2016.

Through the perceptions and experiences of these two different empirical samples the overall aim is to identify strengths and weaknesses in terms of attracting and retaining scientists, and the culture encountered in the national research environment, and to propose recommendations. The specific aim is to provide answers to the research question related to the goals of the present study which seeks to address the effectiveness and impact of the research landscape and policy in the field of research and free movement for the migration/mobility of EU and non-EU scientists and researchers in Cyprus. Evidence of what really happens between law-policy and actual practices will potentially bring to

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<sup>40</sup> Edgar Schein *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass, 2004)

<sup>41</sup> Austin Sarat and Thomas R. Kearns, 'The Cultural Lives of Law', in Austin Sarat and Thomas R. Kearns (eds.), *Law in the Domains of Culture* (University of Michigan Press, 1998) p.10; Naomi Mezey, 'Law as Culture' (2001) *The Yale Journal of Law & the Humanities*, 13(1): 35-67.

<sup>42</sup> Iris Varner and Katrin Varner, 'The Relationship between Culture and Legal Systems and the Impact on Intercultural Business Communication' (2014) 3(1) *Global Advances in Business Communication* p.3

surface undiscovered problematic dimensions and address hot policy issues such as brain drain versus brain gain and circulation, emigration and return migration. This thesis covers a period of study between September 2012 and July 2018 including the two phases of empirical research conducted in Cyprus and the UK and thus, stating the law as of 7 January 2019.

This study is organized into seven chapters according to the five-fold objectives of this research:

Chapter 1 focuses on the methodological aspects and theoretical dimension of the free movement of scientists within the ERA.

Chapter 2 analyses the legislative and policy framework of the ERA and EU free movement provisions regarding EU and non-EU scientists. The aim is to map out the existing interplay between these intertwined areas demonstrating their impact in creating an effective research environment and the mobility of EU and non-EU scientists.

Chapter 3 appraises the Cypriot national research environment in the field of research and free movement to provide evidence of what really happens between law-policy and practices and to understand the differences.

Through empirical evidence Chapters 4 and 5 demonstrate the extent of the influence/impact of the domestic research culture and environment, on the free movement of scientists in Cyprus and how this affects their mobility.

Through empirical evidence Chapter 6 demonstrates the extent of the influence/impact of the domestic and hosting research culture and environment on the Cypriot scientists who are presently in the UK.

Drawing on this research results, Chapter 7 provides recommendations that can assist legislators and policy makers in introducing effective policy and law on scientific migration.

While this is by no means the only research into migration within the EU, it is certainly a very influential one in that it is a comprehensive study of migration, reflecting the extent of the impact of policy, laws, the domestic research culture and environment on the migrants themselves, aspiring at the same time to contribute to an understanding of EU Migration law, and the role EU institutions play in the creation of those conditions that encourage scientific migration to occur. The role of the State in introducing and accommodating EU law and research policy in the country is analysed through Schein's organizational culture theory<sup>43</sup> to demonstrate the external, internal and leadership

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<sup>43</sup> Schein (n.40)



organizational culture effects that influence the setting up of an attractive research environment in the country.

The following chapter will explore these ideas further and will lay down the theoretical and methodological premises upon which this thesis is based.

## Chapter 1: Methodology and Theoretical Framework

### 1.1. Introduction

This chapter divided in two parts focuses on the methodological aspects and theoretical dimension of the free movement of scientists within the European Research Area (ERA).

The chapter begins with an overview of the methodological premises of this socio-legal study outlining the research design and the methods adopted: the literature review and a small-scale qualitative study using Cyprus as a country of origin, and the UK, as a destination country for Cypriot scientists and researchers.

The Theoretical Framework part of this chapter introduces the theoretical model adopted in this thesis namely Schein's organizational culture theory,<sup>1</sup> which is one of the most cited organizational culture models.<sup>2</sup> First there is a brief examination on the development of such models to the study of research culture followed by a discussion of the key common theoretical premises between research culture and organizational culture as well as their relationship and relevance for the understanding of the proposed model and its applicability to this study.

By extending Schein's propositions on organizational culture and its key dimensions: external adaptation<sup>3</sup>, internal integration<sup>4</sup> and leadership<sup>5</sup> this thesis then applies this model to the study of research culture within much broader boundaries those of the EU and the State dimensions. The key dimensions are used as a reference frame to assess the strength and desired impact such a culture should have for the EU at a supranational level and Cyprus at a national level, their leaders, members and their operating environments.

By embracing her own understanding of the organizational culture concept, this researcher seeks to explain research culture and its consequences for the national research environment and free movement of scientists. The formulation of the researcher's own framework of indicators of research culture dimensions applicable to a country's research culture will be used throughout the thesis to explore the impact of the domestic research culture and environment on scientists and researchers, who move to Cyprus and those

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<sup>1</sup> Edgar Schein, *Organizational Culture and Leadership* (3rd ed. Jossey Bass, 2004)

<sup>2</sup> See Daniel Dauber, et al., 'A Configuration Model of Organizational Culture' (2012) SAGE Open, 2 (1):1-16, Robin Hill, 'Revisiting the Term Research Culture:' HERDSA Annual International Conference, Melbourne, 12-15 July 1999 (1999), at: <http://www.reconstrue.co.nz/RevisitCult.pdf>

<sup>3</sup> Schein pp10-23, (n.1)

<sup>4</sup> Ibid

<sup>5</sup> Ibid

Cypriot scientists and researchers who have returned home or intend to return and are presently in the UK.

## 1.2 Overview of Methodological Aspects

This study examines the “migration” of EU and non-EU scientists, researchers and doctoral candidates within the ERA focusing on the legal and policy framework of Cyprus.

The ERA which is a unified research area, an open space for knowledge, research and innovation (R&I) enabling researchers, research institutions and businesses to work and co-operate freely across borders is still an ongoing project since its 1973 conception.<sup>6</sup> Two dimensions are of particular importance for the development and implementation of the broad ERA vision and the scope of examination in this research. The first is the promotion of scientific culture in Europe.<sup>7</sup> The second is unhindered scientific mobility.<sup>8</sup>

For the purposes of this research the term of scientific migration/mobility is employed to describe the event of an EU scientist moving from one European MS to the other as well as the event of a Third Country National (TCN) scientist moving to an EU MS to increase career prospects. The focus is on all types of stays whether these are long or short study visits, or post doc periods in the course of a scientist’s scientific career.

As for the category of people defined as scientists the term is used as inspired by the Frascati definition<sup>9</sup> because it is broad enough to include researchers and doctoral candidates as well. The reason for opting for this definition in favour of others<sup>10</sup> is that research studies so far have indicated that migration occurs more among prospective, rather than among established researchers.<sup>11</sup>

Based on this research’s purpose and the existing literature on the European policy and legislative framework of the ERA which applies to EU and non-EU scientists at a European and national level (Cyprus) two specific research questions related to the study’s objectives have been formulated as follows:

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<sup>6</sup> See Commission of the EC, ‘Working Programme in the Field of Research, Science and Education’, SEC (73) 2000/2, (23 May 1973), p12 for the first outlining of the idea of a European Research Area. See Chapter 2 for a more detailed analysis of the European legislative and policy framework of the ERA which applies to EU and non-EU scientists, researchers and doctoral candidates at a European level.

<sup>7</sup> Commission Communication, ‘Towards a European Research Area’, COM (2000) 6, (18 January 2000), p.8

<sup>8</sup> Ibid, see also Vincent Reillon, ‘The European Research Area, Evolving Concept, Implementation Challenges’, European Parliamentary Research Service (EPRS) (2016) PE 579.097. p.12

<sup>9</sup> Frascati Manual, *Proposed Standard Practice for Surveys on Research and Experimental Development*, (6<sup>th</sup> ed, OECD, 2002) p.3, as provided in the Commission Communication ‘Researchers in the European Research Area: One Profession, Multiple Careers’ COM (2003) 436, p.6

<sup>10</sup> See, for example, OECD/Eurostat *Measurement of Scientific and Technological Activities: Manual on the Measurement of Human Resources Devoted to S&T - Canberra Manual*, (OECD, 1995), pp.27-28

<sup>11</sup> Grit Laudel ‘Migration Currents Among the Scientific Elite’ (2005) *Minerva* 43, 377–395, p.394.

1. *How attractive is the EU research landscape and policy as linked to ‘research culture for the migration/mobility for EU and non-EU scientists, and researchers at any career level in Cyprus?’*
2. *How effective is the EU migration law acquis for the migration/mobility for EU and non-EU scientists, and researchers in Cyprus?’*

These questions will be answered by using *Schein’s organizational culture theory*<sup>12</sup>

In order to assess the attractiveness and impact of ERA on scientists the focus was split on three particular features intertwined in this thesis: the supranational (EU law and research policy), the national (Cyprus law and research policy), and the interface of supranational and national (the impact of EU law and research policy on Cyprus law and research policy).

A socio-legal approach was chosen, consisting of two overlapping phases: a theoretical and an empirical based on qualitative methods and primary and secondary data. The first phase involved a theoretical analysis of the European and national legal and policy framework. Being an inter-disciplinary study, it incorporated a legal analysis of the EU migration law and research policy and their implementation at the national level, using Cyprus as a case study. Firstly, an in-depth examination of the policy and legal framework of the ERA was conducted (Chapter 2). Secondly, a review of theoretical literature relating to the legal framework dealing with EU and non-EU scientists and researchers which lies at the intersection of two areas of law (the free movement of workers and the Area of Freedom Security and Justice) was undertaken (Chapter 2). Thirdly a contextual research on the Cypriot migration policies, law and research environment was conducted, investigating how the country has mirrored the ERA reflecting on the policy regarding the promotion of research culture (Chapter 3). This facilitated the assessment of the differences between the letter of the law and its actual application at national level identifying gaps that affect the mobility of scientists and MSs directly.

The second phase was intended to test the theoretical framework employed, by exploring the extent of the influence/impact of the domestic research culture and environment on scientists and researchers, moving to Cyprus and their Cypriot counterparts who had returned home or were planning to return and were in the UK at the time of the interviews. This small-scale qualitative empirical research in Cyprus, as a country of origin, and the UK, as a destination country for Cypriot scientists and researchers, aims to identify strengths and weaknesses in terms of attracting and retaining this category of people and propose recommendations. An extended model of Schein’s organisational culture theory<sup>13</sup>

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<sup>12</sup> Schein (n.1)

<sup>13</sup> Ibid

is employed to examine the impact of EU law and policy on research and scientific migration at national level, taking Cyprus as an example and the law and policy of the State on the national research environment and scientific mobility.

This stage comprised questionnaires and two rounds of semi-structured interviews. The first round was conducted with 20 EU and non-EU scientists, researchers and 8 policy-makers, government officials and other stakeholders in Cyprus. The second round was conducted with 15 Cypriot scientists, researchers and doctoral candidates in the UK.

### 1.2.1 Methodology

Following the introductory overview of the present research methodological aspect in this section there is a more detailed description of the methodology adopted.

A description of the research approach, research design, the empirical sample and the nature of the research instruments is provided along with the data collection and a discussion of the difficulties encountered during this stage. Limitations of this study and ethical considerations involved are presented next. Finally, this section concludes with the sample characteristics of the empirical research in Cyprus and the UK. The sample characteristics are summarised in Tables 1 – 4, so as to provide an overall impression and general mobility background on the interviewees.

### 1.2.2 Research Approach

It has been observed that there are no clear and universal parameters for qualitative research methods and that even the most prescriptive-looking sets of rules and definitions are mere guidelines for conducting good qualitative research.<sup>14</sup> What is of importance is that the choice of methodology should be driven by the research question and the inquiry objectives which can then be conducted within a suitable paradigm.<sup>15</sup>

Two particular phenomena are linked with the research question which this study seeks to answer. The first is the free movement of scientists within the ERA, which links the legal to the sociological, political and economic dimensions of this human activity. The second is the formation of a ‘research culture’ shared among MSs through the ERA, its promotion on a national level through the State’s policies and its potential impact on scientific mobility. The analysis of the application of EU migration law and ERA research policy at the national level was used to research policy at this level in relation to scientists’ experiences, attitudes and knowledge. Social science methods were employed to capture

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<sup>14</sup>Gary Shank and Orlando Vilella, ‘Building on New Foundations: Core Principles and New Directions for Qualitative Research’, (2004) *The Journal of Educational Research*, 98(1):46-55; p.48

<sup>15</sup> Richard Coll and Richard Chapman, ‘Choices of Methodology for Cooperative Education Researchers’ (2000) *Asia-Pacific Journal of Cooperative Education*, 1(1):1-8; p4 See also Michael Quinn Patton, *Qualitative Evaluation and Research Methods*, (4<sup>th</sup> ed. Sage, 2015).

the impact of this research sociological dimension. The depth of inquiry and richness in meaning in the context of human experience<sup>16</sup> were also considered.

The empirical research was based on two qualitative methods: questionnaires and in-depth, semi-structured interviews. These interactive data collection methods allowed meeting interviewees personally and understanding how they construct their own ideas about their experiences within their social setting. Understanding this social setting from the scientists' point of view, unfolding the meaning of and interpreting their experiences would be unlikely to achieve with the adoption of quantitative methods.<sup>17</sup>

Thus, this qualitative approach<sup>18</sup> brings this study to the constructivist paradigm<sup>19</sup> which enables the exploration of people and society<sup>20</sup> and the uncovering of new issues and concepts.<sup>21</sup>

The central idea of the theory of constructivism, a most influential approach in social sciences,<sup>22</sup> is that human learning is constructed, that people construct new knowledge and understanding of the world through their experiences and their reflection on them.<sup>23</sup>

Although there is a variety of theoretical stances that have developed in the paradigm of constructivism<sup>24</sup> this research draws on ideas that are most common among them.<sup>25</sup> The epistemological basis of constructivism lies on a transactional and subjectivist assumption that views knowledge as created in interaction between researcher and respondent.<sup>26</sup> In the course of the research, the researcher and the respondent are interactively linked to enable the creation of new research discoveries.

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<sup>16</sup> Steven Eric Krauss, 'Research Paradigms and Meaning Making: A Primer' (2005) *Qualitative Report* 10(4), 758-770, p765 See also Thomas Schwandt, 'Constructivist, Interpretivist Approaches to Human Inquiry' in N.K. Denzin & Y.S. Lincoln (eds.), *Handbook of Qualitative Research*, (Sage, 1994) 118-137.

<sup>17</sup> Steinar Kvale, *Interviews: An Introduction to Qualitative Research Interviewing* (Sage, 1996), p. 9

<sup>18</sup> Dawn Snape and Liz Spencer, 'The Foundations of Qualitative Research' in Jane Ritchie and Jane Lewis (eds) *Qualitative Research Practice: A Guide for Social Science Students and Researchers* (Sage, 2003)

<sup>19</sup> Krauss (n16) p.760

<sup>20</sup> Efremova Galina Ivanovna et al., 'Constructivist Approach to the Problem of Social Psychological Adaptation of Migrants' (2015) *Asian Social Science* 11(1):112-118; p. 116

<sup>21</sup> Piergiorgio Corbetta, *Social Research: Theory, Methods and Techniques* (Sage, 2003) p26, Joseph Maxwell, *Qualitative Research Design: An Interactive Approach* (3<sup>rd</sup> ed. Sage 2013)

<sup>22</sup> Ivanovna et al., (n20) p116 Schwandt (n. 16), p.235

<sup>23</sup> Bada Steve Olusegun, 'Constructivism Learning Theory: A Paradigm for Teaching and Learning' (2015) *IOSR Journal of Research & Method in Education (IOSR-JRME)* 5, (6) Ver. I: 66-70; pp 66-67. See also Carl Bereiter, 'Constructivism, Socioculturalism, and Popper's World 3' (1994) *Educational Researcher*, 23 (7):21-23

<sup>24</sup> Schwandt (n. 16), p. 237

<sup>25</sup> For example, see Ernst von Glasersfeld, 'Problem of Constructivism' in L. P. Steffe, & P. W. Thompson (eds.), *Radical Constructivism in Action Building on the Pioneering Work of Ernst von Glasersfeld*, (Routledge Falmer 2000), 105-133.

<sup>26</sup> Richard Coll and Richard Chapman, (n15) p2, p3. See also Egon Cuba and Yvonna Lincoln, 'Competing Paradigms in Qualitative Research' in N. K. Denzin & Y. S. Lincoln (eds.), *Handbook of Qualitative Research* (Sage, 1994) 105-117

In this paradigm the methodology employed is hermeneutical and dialectical.<sup>27</sup> This implies that the individual knowledge constructions can be elicited and elaborated on only through this interaction between and among the researcher and the respondent. Knowledge transfer from respondent to researcher allows the latter to explore how respondents assign meaning to the topic under investigation. At the same time this methodological process takes into consideration the socio-cultural and historical contexts that condition and enable such meaning.<sup>28</sup> The description and interpretation of respondents' authentic experiences is possible without predispositions based on past events or suppositions from existing theories about the phenomenon being studied.<sup>29</sup> The constructivist framework of inquiry enabled this researcher to develop a deeper understanding of what migrant scientists and key informants think or believe about the scientific mobility phenomenon, and research culture in Cyprus and their approaches towards the application of EU migration law and research policy in the Cypriot national environment. Thus, in this researcher's view a constructivist position recognising both the complexity and the many dimensions of the social world<sup>30</sup> was the most suitable and flexible method to adopt.

### 1.2.3: Research Design and Tools

A variety of research methodological tools have been adopted for this socio-legal project structured in two overlapping stages: a theoretical and an empirical exploring three particular intertwined features: the supranational (EU law and policy), the national (Cyprus law and policy), and the interface between supranational and national.

The first stage employed a documentary or doctrinal research to examine the supranational level: the policy regarding the ERA development; the EU legal provisions pertaining to the free movement of EU and non-EU researchers within the ERA; the nexus between the three intertwined areas EU Free Movement, Area of Freedom, Security and Justice, ERA and the CJEU Case law on free movement rights. Documentary or doctrinal research of the law in context was used for the national level. Cyprus was the country selected to represent the national level as a case study.

The second stage intended to test the theoretical framework elaborated in the first stage of the research by investigating the impact of the domestic research culture and environment through the implementation of EU policies and law on research and free

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<sup>27</sup> Schwandt (n. 16) p.222, p.224

<sup>28</sup> Ivanovna et al., (n. 20) p.116

<sup>29</sup> Sharan B. Merriam, *Qualitative Research: A Guide to Design and Implementation*, (Wiley and Sons 2009), p.14. Stephen Castles 'Understanding the Relationship between Methodology and Methods' in Carlos Vargas-Silva (ed.) *Handbook of Research Methods in Migration* (Edward Elgar 2012) p.7

<sup>30</sup> Jennifer Mason, *Qualitative Researching* (2<sup>nd</sup> ed. Sage 2002) p.20

movement on two different empirical samples. The first sample comprised scientists and researchers, moving to Cyprus and Cypriot scientists, researchers who have returned home and other stakeholders. The second sample comprised only Cypriot scientists and researchers who having migrated to the UK from Cyprus, have incorporated part of their own culture into the new research environment and have received the impact of the latter. The empirical sample's perceptions on the research environment and the implementation of EU law and research policies are used as indicators measuring research culture. Those indicators refer to the three dimensions of research culture: external adaptation, internal integration and leadership adopted in the theoretical framework.

For this purpose, a qualitative research design was used. Cyprus was the country where the first phase of the empirical research took place being conducted from August 2014 to January 2015 while the second phase of the empirical research was carried out in the UK (particularly in Oxford as a representative area) being conducted from October 2015 to October 2016.

The sampling frame for the empirical research in Cyprus was specifically targeting two category respondents with research instruments designed for each category. Country-specific conditions and aspects pertaining to each country are considered when drawing conclusions.

The data has been gathered through questionnaires and in-depth, structured (semi-standardized) interviews most of them conducted in person with two groups of interviewees. There was also use of the snowballing technique<sup>31</sup> with care taken to include both the public and private sectors of the research community.

One group consisted of EU and non-EU scientists, researchers and doctoral candidates from the private (private universities, privately owned R&D laboratories, research organizations) and public sectors (public universities and independent state-owned research institutes and organizations) recruited from the sample of questionnaires. The second group comprised policy-makers, government officials, key informants and other stakeholders in Cyprus accessed through email, letter and telephone communication. Before commencing the empirical research, there was piloting and then revising the timing of the information sheet. For the second phase of the empirical research the sampling frame was specifically targeting one category respondents consisting of Cypriot scientists, researchers and doctoral candidates having left Cyprus and migrated to the UK.

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<sup>31</sup> With snowball sampling participants refer the researcher on to other potential participants, see Martyn Denscombe, *The Good Research Guide: For Small Scale Research Projects* (5<sup>th</sup> ed. OUP 2014) p.42



### 1.2.4 Why Cyprus and England?

Cyprus and the UK provide suitable settings to study various phases of the migration process, the dynamics of its determinants and the impact of ‘research culture’ on scientists and researchers whether Cypriot or not, on the basis of several significant reasons. Firstly, long historical ties link the two countries dating back to the 19th century. As the colonial power present in Cyprus from 1878 until 1960, the UK has heavily influenced language and education in Cyprus causing English to be widely used for social and professional exchange.<sup>32</sup>

Secondly, the UK was the preferred choice for Cypriots during all emigration waves that occurred at the beginning of the 20<sup>th</sup> century, the early 1950s and after the island’s partition in 1974.<sup>33</sup> This enabled the creation of one of the largest Cypriot immigrant communities worldwide to be located in the UK and the development of the Cyprus diaspora with around 270,000 Cypriots living there.<sup>34</sup>

Thirdly, the above reasons have long established the UK as the main destination for many students, researchers and scientists coming from Cyprus.<sup>35</sup> Apart from the historical links both countries are members of the Commonwealth and the EU until the UK referendum for an exit from the EU of June 2016. This joined membership established additional strong bonds of friendship and partnership, with the two countries planning to use their educational links to prepare the next generation for the challenges of tomorrow.<sup>36</sup> Undoubtedly Cyprus and the UK share a dynamic and complex relationship with migration, both past and present, beginning with Cyprus as a sending country for purely economic reasons. However, the emigration of the HS and research professional Cypriots occurring in the last few years presents yet another migration dimension and research culture that this research seeks to explain. Cypriot scientists and researchers migrating to the UK incorporate part of their own culture into the new research environment and receive the impact of the latter. This research culture experience is then carried back to Cyprus when these people return home.

Regarding the number of repatriated researchers and scientists no information could be located by this researcher. This is because the Statistical Service of Cyprus<sup>37</sup>, the competent

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<sup>32</sup> Janine Teerling and Russell King, ‘Of Hubs and Hinterlands: Cyprus as an Insular Space of Overlapping Diasporas’ (2012) *Island Studies Journal*, 7, (1): 19-48, p.24

<sup>33</sup> Floya Anthias, *Ethnicity, Class, Gender and Migration: Greek-Cypriots in Britain* (Aldershot, 1992), p.6. See also Janine Teerling, ‘The Development of New “Third-Cultural Spaces of Belonging”: British-Born Cypriot “Return” Migrants in Cyprus’, (2011) *Journal of Ethnic and Migration Studies*, 37, (7):1079-1099.

<sup>34</sup> Ministry of Foreign Affairs of the RoC, at: [http://www.mfa.gov.cy/mfa/mfa2006.nsf/ministry03\\_en/ministry03\\_en?OpenDocument](http://www.mfa.gov.cy/mfa/mfa2006.nsf/ministry03_en/ministry03_en?OpenDocument),

<sup>35</sup> For the year 2008-2009 the UK was the destination for 7.598 Cypriot high school graduates. See ‘Mapping EU Member States Higher Education, External Education Policies: Cyprus’ (2010), at: [http://www.mapping-he.eu/docs/Chapter%20CY\\_915725725.pdf](http://www.mapping-he.eu/docs/Chapter%20CY_915725725.pdf)

<sup>36</sup> Gov. UK ‘News story UK-Cyprus joint communiqué’ Gov. UK 15 January 2014, at: <https://www.gov.uk/government/news/uk-cyprus-joint-communiqué>

<sup>37</sup> Statistical Service of the RoC (CYSTAT), at: [http://www.mof.gov.cy/Mof/cystaT/STATisTiCS.nsf/index\\_en/index\\_en](http://www.mof.gov.cy/Mof/cystaT/STATisTiCS.nsf/index_en/index_en)

authority responsible for providing statistical information, reports only on numbers of short term (less than a year) and long term (more than a year) immigrants. Although these statistics include repatriates, they also include people of various nationalities who chose to reside in Cyprus for a longer period. The Overseas and Repatriated Cypriots Service of the Ministry of Foreign Affairs of the Republic of Cyprus (RoC)<sup>38</sup> is another source that could provide such vital data. However, it only provides information concerning repatriates which is of a general nature.

### 1.2.5 The Empirical Sample in Cyprus and the UK

The reference population of the empirical research instruments in Cyprus is composed of two categories of respondents:

- (a) EU and non-EU scientists, researchers, doctoral candidates and HS migrants
- (b) Policy officers, government officials, key informants and other stakeholders in Cyprus.

Initially, the selection of interview candidates focused on particular scientific disciplines due to this research scope. However, data collection from the targeted population sample, given the small number of respondents available in these disciplines in Cyprus was impossible. Additionally, due to a non-availability of HS migrants, interview candidates were selected regardless of the scientific discipline (e.g. humanities, social sciences, natural and engineering sciences).

The search for and selection of potential interviewees of the first group was significantly facilitated through the use of publicly available mailing lists of organizations, organizations engaged in Research, Research Centres and private research companies. First category respondents were first asked to fill in a questionnaire. In total 50 questionnaires were sent through email with a return rate of 13. The second category respondents were identified using the gov.cy. website. The use of personal network and other networking tools as well as the technique of Snowball sampling<sup>39</sup> were also employed for the identification of respondents in both categories. One category respondents was the focus of the UK empirical sample consisting of Cypriot scientists, researchers and doctoral candidates, who intended or would like to return to Cyprus and were at the time of the interviews working or studying in the UK.

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<sup>38</sup> Ministry of Foreign Affairs of the RoC, at: <http://www.mfa.gov.cy/mfa/mfa2016.nsf/All/9AB7CFDB13E4727AC2257F9C00461A5C?OpenDocument>

<sup>39</sup> See Denscombe (n. 31), p.42

### 1.2.6 The Research Instruments

The interviews were conducted according to interview templates, prepared in advance. Although this partly means that there was a standard framework for interview conducting, each interview was allowed to be open in the sense that the interviewer could choose the focus according to the natural development of the conversation.

Different question templates were prepared for each category interviewees. The interview templates for EU and non-EU scientists, researchers, doctoral candidates in Cyprus and the UK (see Appendix I) contained questions which broadly corresponded to the three dimensions of research culture: external adaptation, internal integration and leadership. Some questions, however, measured more than one dimension. For example, a question regarding the extent of integration a respondent felt he had within the workplace/research environment could relate to two characteristics: external adaptation (identity) and internal integration (who is a member of the group and who is not).

The interview templates for policy officers, government officials, key informants and other stakeholders in Cyprus, the second category of interviewees, (see Appendix I) asked for people's expert opinions on the relevant EU and national policies and practices regarding scientific mobility and support of responsible conduct of research. Questions broadly corresponded to the three dimensions of research culture with emphasis on the State as the leader and initiator of a culture of research across the national research environment through the public sector and its collaboration with other private sector research stakeholders.

### 1.2.7 Data Collection

Scientists, researchers and doctoral candidates comprising the first category of potential interviewees were identified through organizations such as the European Association of Erasmus Coordinators, the EURAXESS-Voice of the Researchers, the European Council of Doctoral Candidates and Junior Researchers (Eurodoc) of Cyprus and the UK. Universities in Cyprus, and the UK (England) as well as centres of excellence and institutions around Oxford, such as the University of Oxford<sup>40</sup>, the Harwell Laboratories in South Oxfordshire<sup>41</sup> and the Diamond Light Source<sup>42</sup> were also contacted for potential recruiting. Finally, potential participants were also identified through personal networking established within the period the candidate has undertaken this research project. Policy

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<sup>40</sup> See <http://www.ox.ac.uk/>

<sup>41</sup> See <http://www.rc-harwell.ac.uk/>

<sup>42</sup> See <http://www.diamond.ac.uk/Home/ContactUs.html>

officers, government officials and other stakeholders in Cyprus were identified using the gov.cy.website.

Potential participants were also approached through personal contact such as university professors, email or telephone communication to inform them about the project informally in order to assess their interest and willingness to participate. Where appropriate these key contacts gave their permission to act as Gatekeepers and circulated the questionnaires.

Next, the recruitment poster with a participatory invitation to this research project (see Appendix II) was emailed to them. Policy officers, government officials and other stakeholders in Cyprus were given the invitation either personally at a meeting arranged by the candidate or sent by email after a telephone communication. As soon as first category potential participants contacted the researcher with an interest expression in participation, a participant's information sheet was provided via email (see Appendix II), a consent form (see Appendix II) and a questionnaire (one for Cyprus' potential participants and one for the UK's see Appendix III). They were also invited to contact the researcher if they were willing to participate in an interview. The time given for a reply was 30 days. Interviewees were selected depending on whether they belonged to the category of EU/non-EU scientists, researchers, doctoral candidates and had been or were mobile. These participants were informed about this selection once they contacted the researcher.

Potential second category candidates were given the participatory invitation either personally at a pre-arranged meeting or through email following a telephone communication. A participant's information sheet was also provided (see Appendix II). They were only sent a questionnaire if they were unavailable for an interview for any reason.

### **1.2.8 Time framework**

For the empirical research in Cyprus the researcher conducted 20 interviews with EU and non-EU scientists, researchers, doctoral candidates and 8 interviews with policy-makers, government officials and other stakeholders, during the period from the end of August 2014 to the end of January 2015. Although each interview was scheduled to take about an hour, a few took less than an hour. The interviews were mostly conducted face to face. Returnees were located in Cyprus. However, 2 out of 28 interviews were performed via Skype. In order to guarantee the availability of complete and detailed data, each interview was audio taped, while written notes were taken during the interviews. All 28 of the interviews were conducted in the English language.

For the empirical research in the UK 15 interviews were conducted with Cypriot scientists, researchers and doctoral candidates who left Cyprus choosing the UK as their destination. This took place during the period from February 2015 to October 2016. Seven interviews were conducted face to face while 8 interviews were performed via Skype. All interviews were conducted in the English language.

### 1.2.9 Data Analysis

The data analysis consisted of: examining, categorizing, tabulating, and recombining the raw data obtained from the empirical research. For this type of qualitative data analysis, the grounded theory approach was adopted which involves the process of searching out the concepts behind the actualities by looking for codes, then concepts and finally categories. In this way making sense of the essential meanings of a phenomenon<sup>43</sup> social relationships and behaviours of groups<sup>44</sup> is possible without any pre-existing conceptualisations.<sup>45</sup> Thus through the systematic analysis of the phenomenon concerned, an inductively derived theory grounded in the participants' views in a study based on this phenomenon is developed from the data.<sup>46</sup> This approach fitted well with this research purpose which sought to explore and explain participants' experiences of the actual impact of migration law and research policy on scientists and researchers at the national level.

In the grounded theory methodology after the data are collected and in the process of their examination and re-examination, patterns of actions, meanings, and ideas are discovered which are then noted and described in a short phrase called code. Codes are then analysed and those that relate to a common theme are grouped together as concepts. Concepts are then grouped and regrouped to form categories which then may lead to a new theory. For the transcription process the software tool 'InqScribe' was used which provided a flexible way for annotating, transcribing, and analyzing the digital media files prepared<sup>47</sup>. The same tool was used to export plain text files containing the exact transcript contents.

Thus, the analysis began with transcription since the transcribing process is not a mechanical task<sup>48</sup> but a window to the evidence provided. The researcher worked from the

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<sup>43</sup> Denscombe (n. 31) p.110, p.112

<sup>44</sup> Elizabeth Cummings and Elizabeth Borycki, 'Grounded Theory Evolution and its Application in Health Informatics' (2011) *Studies in health technology and informatics* 164:286-92, p.288.

<sup>45</sup> Anselm Strauss and Juliet Corbin 'Grounded Theory Methodology: An Overview', in N. K. Denzin, and Y.S. Lincoln (eds.) *Handbook of Qualitative Research*, (Sage,1994), p.278

<sup>46</sup> Anselm Strauss and Juliet Corbin, *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* (4<sup>th</sup> ed. Sage Publications 2015), p.6. See also John Creswell, *Research Design: Qualitative, Quantitative, and Mixed Approaches* (3<sup>rd</sup> ed. Sage, 2009), p.229

<sup>47</sup> Judith Lapadat and Anne Lindsay, 'Transcription in Research and Practice: From Standardization of Technique to Interpretive Positionings' (1999) *Qualitative Inquiry*, 5(1): 64-86, p.67

<sup>48</sup> Christina Davidson, 'Transcription: Imperatives for Qualitative Research' (2009) *International Journal of Qualitative Methods*, 8(2):36-52, p.38.

recordings, the transcriptions and the interview notes. In this way the data management quality was enhanced.<sup>49</sup> Creating the transcripts with the software tool 'InqScribe' may have been more laborious but it brought the researcher closer to her data enabling her to create and organize the nodes before starting coding of the transcribed data.

#### 1.2.10 Constraints during Data Collection

In total 50 questionnaires were sent through email with a return rate of 13 respondents. This method did not generate the anticipated outcome and was initially a constraint. Consequently, the use of personal network and other networking tools as well as the technique of Snowball sampling<sup>50</sup> was also employed for identification of both category respondents. This proved to be more effective.

A second constraint was the lack of interest and response on the part of certain public sector departments in Cyprus to provide information or set up a meeting to enable the researcher access necessary information. This was very frustrating since the researcher's phone calls and emails were not answered. This researcher got access to some of these particular sources through enlisting the help of personal contacts.

A third constraint was the inability to recruit TCN HS migrants, since their admission on the basis of the Blue Card Directive has been set to zero. Consequently, this category of people was not included in the empirical sample. A fourth constraint was the inability to recruit participants from particular scientific disciplines due to the small number of respondents available in these disciplines in Cyprus. A fifth obstacle concerned the availability of certain governmental websites. While these sources were set up on line when attempting to access them they were either not found or under construction.

A sixth constraint is the data gap issue. The main source for overall statistical data and general related information on TCN researchers, scientists and the HS, in the RoC is the Cyprus Statistical Service. Some of the relevant information required for a comprehensive representation and scrutiny of patterns of migration or emigration of TCN scientists, researchers, and the HS, to and from the country is not always readily available in the RoC. For example, there has been no attempt to analyse and formally account for Cypriot researcher number fluctuations, generally or on a country specific basis. Although the data gap issue could be considered a country limitation, it did surface as constrain for the researcher's work. Thus, the use of statistical data was approached cautiously, with

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<sup>49</sup> Sophie Tessier, 'From Field Notes, to Transcripts, to Tape Recordings: Evolution or Combination?' (2012) *International Journal of Qualitative Methods* 11(4): 446-460, p.447

<sup>50</sup> Denscombe, (n.31), p.42

frequent reference to the lack of official data whenever it was necessary whilst every effort was made to cross-reference and triangulate all pertinent information.

### 1.2.11 Limitations of the Research

The application of a qualitative research to this study is not without certain limitations. Perhaps the strongest criticism to qualitative research is that the research quality depends too greatly on the researcher. Consequently, it is viewed as subjective and not being able to produce verifiable truth statements. By focusing on gathering a lot of data from a small number of people it is also criticised for not producing statistically generalizable findings since the different elements of the original study cannot be repeated.<sup>51</sup> However, the types of situations and phenomena that qualitative research investigates depend on human experience, are complex and multidimensional and as such require the researcher's involvement and immersion in terms of direct contact with the subjects and the phenomenon in question.<sup>52</sup>

Additionally to respond to the challenges associated with scientific migration in the light of the diversity of national regimes, research environments and migration streams, qualitative approaches to migration have acquired a special importance in recent years, also in view of the paucity of qualitative studies aiming at an understanding this complex contemporary phenomenon.<sup>53</sup>

This thesis attempted to capture scientists' and researchers' perceptions and understandings 'from within' so as to better understand how they make sense of their mobility and the national, research, political, and cultural environment in which they act and work and the issues they face.<sup>54</sup> The researcher's use of scientific literature and statistics were a means of overcoming the limitation of researching a complex and multidimensional phenomenon such as migration. Although it may not be possible for all the findings of this study to be generalizable, results regarding national conceptions of policies and practices and their impact on scientific mobility may be relevant to other small countries with small economies, such as Cyprus. In addition, observations which may not be generalizable apply to particulars<sup>55</sup> and thus constitute unique national perspectives which may be critically important for understanding the variations that develop and the possibilities that exist in migration policy and practice. Emerging constraints that operate

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<sup>51</sup> Norman Denzin and Yvonna Lincoln, 'The Discipline and Practice of Qualitative Research', in N.K. Denzin and Y.S. Lincoln (eds.), *Handbook of Qualitative Research*, (2<sup>nd</sup> ed. Sage, 2000), 1-28, p.9

<sup>52</sup> Ibid, p.3, p.6

<sup>53</sup> Maren Borkert, et al., 'Introduction: Understanding Migration Research (Across National and Academic Boundaries) in Europe', (2006), Forum: Qualitative Social Research 7, (3), Art. 3, at: [http://www.qualitative-research.net/index.php/fqs/article/view/132/281#footnoteanchor\\_7](http://www.qualitative-research.net/index.php/fqs/article/view/132/281#footnoteanchor_7)

<sup>54</sup> Matthew Miles et al., *An Expanded Sourcebook: Qualitative Data Analysis*, (3<sup>rd</sup> ed. Sage 2014), p.11

<sup>55</sup> Yvonna Lincoln and Egon Guba, *Naturalistic Inquiry* (Beverly Hills, CA: Sage, 1985) p.110



against policy changes and adaptation of the existing organizational culture in national settings may potentially inform and instigate change.

### **1.2.12 Ethical Considerations**

The researcher applied for ethical approval from the Oxford Brookes University Research Ethics Committee in June 2014, receiving final approval in August 2014. The following section discusses ethical issues relevant to this empirical research, including those identified as a concern by the Committee.

### **1.2.13 Recruitment Methods**

Recruitment methods from various institutions in the UK were a concern for the Ethics Committee during the ethics approval process. However, this researcher enquired whether these institutions such as the University of Oxford and the Diamond Light Source needed separate research ethics review and approval from their respective RECs. However, the review from Oxford Brooks UREC was considered adequate by them.

### **1.2.14 Safety, Confidentiality, Anonymity and Informed Consent**

The location for where interviews were to take place was an issue raised in terms of the interests of researcher safety. This researcher made it clear on the information sheet that face-to-face interviews would take place either at a place of work or an appropriate public space. Regarding the issue of confidentiality and anonymity it was explained on both types of the participant information sheet that due to the small empirical sample size it might be possible for participants' identification. This researcher re-assured the participants that the data they provided would be anonymised and confidential and that there would be use of a coded number instead of names during recording, taking notes, transcribing the recordings and labelling the data for storage purposes.<sup>56</sup> Participants were informed that they were free to withdraw from the project at any time after the doctoral candidate explained as clearly as possible how their transcripts would be used. They were also informed that were free to refrain from answering any questions if they wished so before the interview commenced.

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<sup>56</sup> For example, a participant of the 1<sup>st</sup> category was coded as Interview 1. A participant of the 2<sup>nd</sup> category was coded Interview KI 1.



## 1.2.15 Sample Characteristics in Cyprus and the UK

### 1.2.15. A. Sample Characteristics in Cyprus

Prior the description of the general characteristics of the “sample” in Cyprus, Table 1 below provides an overall impression of the background and work on the respondents of both categories while Table 2 that follows summarizes the mobility path of respondents of the 1<sup>st</sup> category. It should be born in mind however that this is a qualitative research and the quantifications given in the table are only of minor importance.

**TABLE 1: OVERVIEW ON SAMPLE CHARACTERISTICS IN CYPRUS  
BACKGROUND AND WORK**

<b>Sample characteristics</b>	<b>Researchers, scientists, doctoral candidates: RS</b>	<b>Key informants: KI</b>
<b>Number of interviews</b>	20 out of 28	8 out of 28 in total
<b>Gender</b>	Female (6) Male (14)	Female (-) Male (8)
<b>Nationality</b>	British 2, Greek 2, German 1, Cypriot 15	Cypriot 8
<b>Occupational Position</b>	PhD Candidate (1)	Cyprus RPF (1), Founder and Council President of a Private HEI (1)
	Junior Scientist/Post Doc/Junior R&D-related Manager (4)	Migration Law Expert (1), Private Migration Consultant (1)
	Senior Scientist /Associate Professor/ Senior R&D-related Manager (12)	European Law Expert (1)
	Top Scientist / Professor / Senior R&D-related Manager (3)	Corporate Governance Law Expert (1)
		Former Deputy AG, former Judge ECHR (1) Supreme Court Judge (1)
<b>Institution /Sector (public/private)</b>	University: public (7) private (7)	Sector: public (4) private (4)
	Independent research institution (3) Firm private (3)	<b>Scientific Disciplines of KI</b>
<b>Scientific disciplines</b>	Economics (2)	Crisis Management (1)
	Medicine (3) Chemistry (2) Psychology (1)	Law (5)
	Computer Sciences/ IT (1)	European Affairs (1)
	International Relations (1) Cross Cultural Studies (1) History (1)	Sociology (1)
	Sociology (2) Law (1) Political Science (1) Music Education (1)	
	Engineering: Mechanical (1), Structural (1), Electrical (2), Electronics (1)	

Source: Own compilation

**TABLE 2: OVERVIEW ON MOBILITY PATH** (approximate duration of staying abroad: 3 years)

<b>Researchers, scientists, doctoral candidates: RS</b>
RS1 RS5 UK Cyprus
RS2 RS9 Cyprus Greece UK Cyprus
RS3 RS4 RS10 RS11 RS14 RS17 RS18 Cyprus UK Cyprus
RS12 Cyprus UK Cyprus UK
RS6 Cyprus Bulgaria Greece South Africa Cyprus
RS7 Greece UK Cyprus
RS8 Germany Cyprus
RS13 Cyprus Germany Cyprus
RS15 Cyprus Finland Cyprus
RS16 Cyprus Greece USA, Greece Cyprus
RS19 Cyprus USA Cyprus
RS20 Greece Cyprus

Source: Own compilation

In total 20 scientists and researchers and 8 key informants volunteered for an interview, as already stated above. A considerable majority of interviewees was male (14 out of 20) while all key informants were male too, reflecting the well-known under-representation of women in science and research as well as in top positions.

First category respondents, who had been interviewed, were attributable to a variety of disciplines and not predominantly attributable to Science or R&D related disciplines. Of these individuals there were 4 Junior Researchers/Post Doc, 12 Senior Scientists or Associate Professors, only 3 Top Scientist s/ Professors / Senior R&D-related Managers and one doctoral candidate. All first category interviewees had been geographically mobile during mostly the early and middle stages of their professional lives and with an excellent command of the English language.

As far as locations are concerned the UK was most highly represented as most of the interviewees had completed or began their studies or worked after completing their studies in the UK. This is a pattern observed generally in Cyprus and not limited to this population sample. Most interviewees had either spent up to 3 or even more years abroad before deciding to return to Cyprus with the exception of one interviewee who at the time of the interviews was in the UK on a two- year Marie Curie scholarship. Regarding nationality 14 were Cypriots who chose to return to Cyprus, 2 were British (1 was Cypriot, who acquired British Citizenship, 1 was of Iranian origin, who became a British subject) 3 were of Greek nationality and 1 was German.

Consequently, out of this sample 13 researchers had obtained degrees and/or a PhD and even worked for a time in the UK during their mobility years which makes the UK the first recipient country. The second recipient country is Greece, however, not as a single educational destination while the USA and Germany are the third recipient countries. This can be explained based on previous research findings which show that skilled migrants are likely to determine their migration decisions partly on the presence of common links with potential destination countries.<sup>57</sup> Added to this, it could also be the existing ties between country of origin and destination country as demonstrated.<sup>58</sup>

Interestingly, from the sample's mobility path it is observed that first category interviewees are top quality professionals, with excellent language skills in foreign languages predominantly English. This could also be attributed to the fact that Cypriot researchers and scientists come from a country where English is widely spoken and where people's expenditure on tertiary education is high for their children.<sup>59</sup> This argument is in line with other research findings which imply that immigrants from countries where English is a common language and expenditure on tertiary education is high perform better in developed labour markets such as the USA.<sup>60</sup>

#### **1.2.15. B. Sample Characteristics in the UK**

Prior the description of the general characteristics of the "sample" in the UK, Table 3 below provides an overall impression of the background and work on the respondents while Table 4 that follows summarizes their mobility path.

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<sup>57</sup>John Gibson and David McKenzie, 'Eight Questions about Brain Drain' (Summer 2011) *Journal of Economic Perspectives* 25(3): 107-128, p.115

<sup>58</sup>See section 1.2.4

<sup>59</sup> See Chapter 3 section 3.4

<sup>60</sup>Aaditya Mattoo et al., 'Brain Waste? Educated Immigrants in the US Labor Market', (2008) *Journal of Development Economics*, 87(2): 255-269, p.255

**TABLE 3: OVERVIEW ON SAMPLE CHARACTERISTICS IN THE UK  
BACKGROUND AND WORK**

<b>Sample characteristics</b>	<b>Researchers, scientists, doctoral candidates (RS)</b>
<b>Number of interviews</b>	15 (15 in total)
<b>Gender</b>	Female (8) Male (7)
<b>Nationality</b>	Cypriot 15
<b>Occupational Position</b>	PhD Candidate (2)
	Junior Scientist/Post Doc/Junior R&D-related Manager 5
	Senior Scientist /Associate Professor/ Senior R&D-related Manager 5
	Top Scientist / Professor / Senior R&D-related Manager 3
<b>Institution /Sector (public/private)</b>	University: (9)
	Independent research institution (6)
<b>Scientific disciplines</b>	Education (1) Philosophies (2)
	Health Psychology (3)
	Law (3)
	Cross Cultural Studies (1)
	Genetics (1), Bio-informatics (1) Chemistry (1)
	Theoretical Physics (1) Engineering: Structural (1),

Source: Own compilation

**TABLE 4: OVERVIEW ON MOBILITY PATH**

<b>Researchers, scientists, doctoral candidates (RS)</b>
RS1, RS2, RS5 RS12 Cyprus UK
RS3, RS13 Cyprus Greece UK
RS4 RS9 RS10 RS11 Cyprus UK Cyprus UK
RS6 Cyprus UK France Cyprus UK
RS7 Cyprus UK Cyprus Belgium UK
RS8 Cyprus USA UK Germany Cyprus UK
RS14 Cyprus USA UK
RS15 Cyprus UK Sweden UK

Source: Own compilation

In total, 15 Cypriot scientists and researchers based in the UK volunteered for an interview. Interviewed respondents were attributable to a variety of disciplines. Of these individuals there were 5 Junior Researchers/Post Doc, 5 Senior Scientists or Associate Professors, 3 Top Scientist s/ Professors / Senior R&D-related Managers and two doctoral candidates. All interviewees had an excellent command of the English language, had completed or began their HE studies in the UK and were at the time of the interviews working in the UK.

The sample's mobility path has been characterized by the following patterns<sup>61</sup>: The first pattern is described as a return migration to Cyprus from the UK with 7 out of the 15 respondents, returning to their home country on their own initiative at some stage in their careers for employment purposes. Circular migrants who regularly move between two countries for work<sup>62</sup> were excluded from the present sample. The second pattern describes the sample's re-emigration to the UK. The third pattern relates to those Cypriot scientists, researchers and doctoral candidates who had previously migrated to the UK and never opted to return to Cyprus. Out of the 15 participants interviewed, 8 decided to remain in the UK following completion of their studies whether in the UK or in other countries. 12 out of the 15 respondents wished to return to their country one day irrespective of financial gains while one interviewee had applied for a job in Cyprus repeatedly but unsuccessfully.

The following section outlines Schein's organizational culture theory<sup>63</sup>, the theoretical model adopted in this thesis and analyses it in respect of the EU dimension and the national dimension of Cyprus to demonstrate the external, internal and leadership organizational culture effects that influence the setting up of an attractive research environment in the country.

### 1.3. Theoretical Framework

#### 1.3.1. A. Common Theoretical Premises in Defining Research and Organizational Culture

In analysing organizations in various contexts organisational culture has been acknowledged as an essential and influential factor.<sup>64</sup> This increased interest in culture led to the development of different theories, aiming to explain how research culture develops in HEIs based or influenced by organizational culture models.<sup>65</sup> For example, in terms of measuring research culture, academic scholarship offers several choices and options on the

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<sup>61</sup> See Chapter 6

<sup>62</sup> Stephen J Sills, 'Return Migration' in R.T. Schaefer (ed.), *Encyclopedia of Race, Ethnicity, and Society*, (Sage, 2008), 1158-1159.

<sup>63</sup> Schein (n1)

<sup>64</sup> Daniel Dauber et al., (n.2) p1, Geert Hofstede et al., *Cultures and Organizations: Software of the Mind: Intercultural Cooperation and its importance for Survival* (3<sup>rd</sup> ed. McGraw-Hill, 2010) and Susan Schneider, et al., *Managing Across Cultures* (3<sup>rd</sup> ed. Pearson, 2014).

<sup>65</sup> See Hill (n.2) Colin Eden, 'Operational Research and Organisational Development' (1978) *Human Relations* (31): 657-674, Linda Evans, 'Developing Research Cultures and Researchers in HE: The Role of Leadership', Presentation at the Annual Conference of the Society for Research into Higher Education (SPHE), (December 11 2007), at: <http://www.education.leeds.ac.uk/assets/files/staff/papers/SRHE-paper-submission-0132.do>, Ellen Hazelkorn, *University Research Management: Developing Research in New Institutions*, (OECD, 2005), Carole Bland, et al., 'A Theoretical, Practical, Predictive Model of Faculty and Department Research Productivity' (2005) *Academic Medicine*, 80(3):225-237, Teresa Marchant, 'Developing Research Culture – Overcoming Regional and Historical Obstacles' in P. Miller & T. Marchant (eds.) *Professional Doctorate Research in Australia: Commentary and Case Studies from Business, Education and Indigenous Studies* (Southern Cross University Press 2009)

basis of what the object of measurement is. Consequently, there has been use of the ‘Value Laddering’ procedure to measure research culture values<sup>66</sup>, a specific design to measure a culture of ‘extended’ researcher professionalism<sup>67</sup>, a set of predictors to measure research productivity<sup>68</sup> and a tool to quantitatively measure the effectiveness of research capacity building at individual, team and organization levels.<sup>69</sup> However, most of these models are often tied within a specific context in which research culture or more accurately ‘aspects’ of research culture such as values, productivity and development are often treated as variables along with or related to other variables.

In terms of defining research culture, literature indicates that it is difficult to provide a single definition that addresses all research culture aspects in a unified and satisfying way.<sup>70</sup> However, a definition shared among many scholars<sup>71</sup>, interprets research culture as: *“a system of widely shared and strongly held values whose structure gives research behaviour significance, allowing understanding, acceptance, recognition and evaluation of the research activity/practice within a community, institution, organization or group”*.<sup>72</sup>

Schein defines ‘organizational culture’ as *“a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration and taught by the founders/leaders to new members”*.<sup>73</sup> Schein’s proposed definition in his theory of organizational culture is accommodated in this research on the basis that both Schein’s and the ‘research culture’ definitions above imply that research culture and organizational culture have similar cognitive components in their contents which consist of mutual assumptions, beliefs, and attitudes that the organization’s members share, and which also determine the way members perceive their tasks.<sup>74</sup>

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<sup>66</sup> Hill, (n.2). See also Robert Hill, ‘Content Analysis for Creating and Depicting Aggregated Personal Construct Derived Cognitive Maps’ in R.A. Neimeyer & G.J. Neimeyer (eds.) *Advances in Personal Construct Psychology*, Vol 3 (JAI Press 1995), 101-132.

<sup>67</sup> Evans (n. 65) p.2

<sup>68</sup> Bland et al., (n. 65) p.225

<sup>69</sup> Libby Holden et al., ‘Validation of the Research Capacity and Culture (RCC) Tool: Measuring RCC at Individual, Team and Organisation Levels’ (2011) *Australian Journal of Primary Health* 18(1): 62-67

<sup>70</sup> Hanover Research ‘Building a Culture of Research: Recommended Practices’ (May 2014), at: <http://www.uprm.edu/cms/index.php?a=file&fid=10251>, Marchant, (n. 65), p.6 and Evans (n. 65)

<sup>71</sup> See among others Stephen Robbins et al., *Organizational Behavior: Concepts, Controversies & Applications*, (7<sup>th</sup> ed. Prentice Hall, 1996), p. 681. See also Darwin Don Dacles et al., ‘Cultivating Research Culture: An Analysis of Contributing Factors, the Institution’s Research Initiatives, and Collaboration among the HEI’s Trifocal Functions’ (2016) *American Journal of Educational Research* 4(6):439-449, p.439 and Hill, (n. 2)

<sup>72</sup> Based on Hill, (n.2), and Andrew Cheetham, ‘Growing a Research Culture’ Address to the Academic Senate – University of Western Sydney, (May, 2007), 5, at: [http://www.uws.edu.au/data/assets/pdf\\_file/0018/7119/Item\\_3.6\\_Building\\_a\\_Research\\_Culture\\_Tabled\\_Doc.pdf](http://www.uws.edu.au/data/assets/pdf_file/0018/7119/Item_3.6_Building_a_Research_Culture_Tabled_Doc.pdf). See also Janet Hauter, *The Smart Woman’s Guide to Career Success*. (Career Press 1993)

<sup>73</sup> Schein (n. 1), p.17

<sup>74</sup> Linda Smircich, ‘Organizations as Shared Meanings’ in L. Pondy, P. Frost, G. Morgan and T. Dandridge (eds.), *Organizational Symbolism*, (JAI 1983), 55-65,

Additionally both definitions above suggest common themes and centre on three core components: the institution, leadership and individual members/stakeholders.<sup>75</sup>

From the literature on research cultures in HE organizations, scholars also support the idea that there is no single institutional university/research culture.<sup>76</sup> In the same line of reasoning, Schein advanced the idea that organizations have their ‘own unique powerful culture’ with new sub-culture groups emerging during the organization’s growth and evolution.<sup>77</sup> This factor might potentially account for the disparity found in research activity and output and might be attributable to failings in the research culture leadership dimension<sup>78</sup> especially in those institutions where research is new or not strong.<sup>79</sup> Undoubtedly developing such a culture is not a simple or straightforward process based on any prescribed formula.<sup>80</sup>

In the light of the above, the existing commonalities that underlie the concepts of organisational and research culture in the definitions above serve well as a starting point, because they allow this study to adopt Schein’s definition in order to treat research culture as an essential determining variable in assessing the management of research and education which are presently taking the form of a proper business organization. For example, particularly in the UK the Research Excellence Framework (REF)<sup>81</sup> is the country’s system for assessing the excellence of research in Higher Education Institutions (HEI). Arguably there has been a move from education and research as services completely financed by the State to commodities that students buy. Presently many governments are reviewing the organizational structure of their higher educational and research systems, as well as institutional missions and funding to address the new challenges arising from this new socio-economic plan linked to national HE and research.<sup>82</sup> Consequently the organizational structure has changed, demonstrating the importance of assessing or measuring research culture and its impact on HEI and beyond academia that is the environment that supports research.<sup>83</sup> The Cyprus reality is quite different from the UK’s. As it will be shown in sections 1.3.1.D- 1.3.1.F that follow, in the ‘governance model’ of the Cyprus Research

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<sup>75</sup> Bland et al., (n.65) p.225, p.236

<sup>76</sup> Rosemary Deem and Kevin Brehony, ‘Doctoral Students’ Access to Research Cultures - Are Some More Unequal than Others?’ (2000) *Studies in Higher Education* 25(2): 149-165, p.158

<sup>77</sup> Schein (n. 1), p.20

<sup>78</sup> Evans (n. 65) p. 1

<sup>79</sup> Hazelkorn (n. 65) p. 65

<sup>80</sup> Evans (n65)

<sup>81</sup> REF 2021, at: <https://www.ref.ac.uk/about/what-is-the-ref/>

<sup>82</sup> Hazelkorn (n65) p.13, p.16

<sup>83</sup> REF 2021 (n.81)

System<sup>84</sup> there is no equivalent system to the REF. Thus this thesis seeks to examine the organization and structure of the Cyprus research system and its main providers and performers in order to appreciate the structural organization of research offered to all researchers irrespective of their nationality.

### 1.3.1. B. Theory and Application

Schein proposes that three core components determine the organizational culture in an organization: external adaptation<sup>85</sup>, internal integration<sup>86</sup> and leadership.<sup>87</sup> The first feature, external adaptation, is the organisation's ability to solve and adapt to external challenges. The second feature, internal integration, is explained as the ability of the organization to solve problems arising within its groups or members in order to implement the strategy of adaptation in the external environment. The third feature is the organization's leadership which should be decisive, consistent and effective guiding the organization to overcome its external adaptation and internal integration problems develop and change organisational culture, when necessary.

The three core components of organizational culture, strongly reinforce an organization's culture in three ways: through the shared learning experiences of its members which in turn become strongly held taken-for granted basic assumptions;<sup>88</sup> through the beliefs values and assumptions of the organisation's founders; through the new beliefs and assumptions introduced by new members and leaders who are chosen to enter the organisation.<sup>89</sup> Although organizations may have one unique powerful culture, new sub-groups emerge while the organization grows and evolves.<sup>90</sup> These sub-groups can often have very differing cultures as well as subcultures within them reflecting however the larger culture<sup>91</sup> and contributing to finding solutions in relation to external adaptation, internal integration, future behaviour of the whole organization,<sup>92</sup> and its structural

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<sup>84</sup> European Commission, ERAWATCH Research Inventory Report For: Overview Across EU Countries (2010), at: <http://www.5toi.eu/wp-content/uploads/2016/11/Overview-across-EU.pdf>. For the Cypriot national research environment see section 1.3.4 and chapter 3

<sup>85</sup> Schein (n,1) pp. 10-23

<sup>86</sup> Ibid

<sup>87</sup> Ibid

<sup>88</sup> Ibid, p.22

<sup>89</sup> Ibid, p.225

<sup>90</sup> Ibid, p.20

<sup>91</sup> Ibid, p.20

<sup>92</sup> Ibid, p.30



stability.<sup>93</sup> If sub-groups are in disharmony with or reject the unique and powerful organizational culture they are termed counter-culture groups.<sup>94</sup>

In the candidate's view, Schein's definition and determining core features of organizational culture which imply common understandings and characteristics with the research culture definition proposed in scholarship literature<sup>95</sup> was the most suitable theoretical model to adopt. Schein's model of organizational culture can be adapted in this research to explain the role and impact of the EU and the State (Cyprus) in their management of the research environment at a supranational and national level and the consequences for the free movement of scientists. By its application within the context of broader dimensions that of the EU and that of the State conceptualized as 'organizations' it serves a twofold purpose: to allow the consideration and explanation of the role and impact of the EU, as an introducer and promoter of research policy and law to its Member States (MSs); to enable a better understanding of the role the State (Cyprus) in promoting research policy as linked to research culture and in making the necessary reforms for the accommodation of EU migration law within its regulatory framework.

The key elements of organizational culture external adaptation<sup>96</sup>, internal integration<sup>97</sup> and leadership<sup>98</sup> are adopted as a reference frame to assess the strength and desired impact such a culture should have for the organization, its leaders, members and its operating environment. How the basic elements of the theory: external adaptation<sup>99</sup>, internal integration<sup>100</sup> and leadership<sup>101</sup> apply to the EU and State dimension is the focus of the following sections. The EU dimension will be unpacked in more detail in Chapter 2, which includes an analysis of the European legislative and policy framework of the ERA pertaining to to EU and non-EU scientists and how the ERA defines and promotes the European way to excellence in research.<sup>102</sup>

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<sup>93</sup> Ibid, p.14

<sup>94</sup>Ibid, p.270. See also Jennifer Chatman and Karen Jehn 'Assessing the Relationship between Industry Characteristics and Organizational Culture: How Different Can You Be?' (1994) *Academy of Management Journal* (37) 3 :522-553

<sup>95</sup> Robbins et al., (n.71) p. 681, Dacles, et al., (n.71) p.439, Hill (n.65)

<sup>96</sup> Schein (n.1) pp.10-23

<sup>97</sup> Ibid

<sup>98</sup> Ibid

<sup>99</sup> Ibid

<sup>100</sup> Ibid

<sup>101</sup> Ibid

<sup>102</sup> EU Council 'Conclusions on the definition of a 2020 Vision for the ERA', Doc 16767/08, (9 December 2008) p.7

### 1.3.1. C. The EU Dimension

The EU, although not a State, is an economic and political union between 28 European countries<sup>103</sup> that has evolved into an organization spanning policy areas, from climate, environment and health to external relations and security, justice and migration.<sup>104</sup> Based on the rule of law, everything the EU does is founded on Treaties agreed by its MSs on a voluntary and democratic basis.<sup>105</sup> Research culture is shared through and within the ERA.

The ERA, still an ongoing project,<sup>106</sup> is defined as:

*“a unified research area based on the Internal Market in which researchers, scientific knowledge and technology circulate freely and through which the Union and its Member States strengthen their scientific and technological bases, their competitiveness and their capacity to collectively address grand challenges”.*<sup>107</sup> The ERA is based mainly on policies which include soft law measures such as benchmarking, exchange of good practices and periodic monitoring, evaluation and peer review not binding for MSs.<sup>108</sup>

Schein’s extended organizational culture theory, adopted in this thesis, allows elaboration on the EU dimension on the assumption that it is a ‘supranational organization’ which promotes the ERA concept. This promotion is achieved through policies endorsed by and in cooperation with EU MSs. However, Schein’s extended theoretical model affirms that the EU as an ‘organization’ faces external adaptation, internal integration and leadership challenges which impede the achievement of a coherent European research system and potentially hinder scientific mobility.

Application of the first basic element of the theory which refers to the organization’s external adaptation indicates exogenous (non-European) factors that affect the external adaptation of the EU as an organization due to its inability to solve them effectively. These factors include the international economic climate, financial and economic challenges in the EU,<sup>109</sup> the rising levels of unemployment,<sup>110</sup> unbalanced growth within the EU and the social and political conditions that characterize scientific mobility such as concerns around security and welfare issues to MSs. This inability fundamentally relates to internal integration and leadership challenges which the EU has

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<sup>103</sup> Until 29/5/2019 with the exit of the UK from the EU

<sup>104</sup> EU ‘The EU in Brief’, at: [https://europa.eu/european-union/about-eu/eu-in-brief\\_en](https://europa.eu/european-union/about-eu/eu-in-brief_en)

<sup>105</sup> The Treaty on the Functioning of the EU (TFEU) refers to the ERA as an area of free circulation of researchers, scientific knowledge and technology - Articles 179, 180 and 181.

<sup>106</sup> Reillon (n. 8): The EU Patent for the establishment of a ‘ERA’ remains a work in progress to this day.

<sup>107</sup> Commission Communication ‘A Reinforced European Research Area Partnership for Excellence and Growth’, COM (2012) 392, (17 July 2012) p.3

<sup>108</sup> Commission of the EC, ‘Development of an Open Method of Coordination for Benchmarking National Research Policies’, SEC (2000) 1842

<sup>109</sup> See Chapter 2, section 2.4

<sup>110</sup> Ibid

not been able to solve despite the shared vision of creating the ERA between the European institutions, the MSs and the stakeholders.

Application of the second basic element of the theory which refers to the organization's internal integration reveals a complex multilevel organization structure<sup>111</sup>: the ERA is divided into four levels, European, international, national and the regional, with MSs regulating their public and private research markets. This multilevel structure coupled with research policy fragmentation due to the division of research competences between the EU and its MSs and the absence of a common overarching strategy concerning research, funding and scientific mobility<sup>112</sup> seriously affect the ability of the EU to achieve internal integration. The voluntary nature and absence of legally binding measures for the various EU programmes and initiatives, aiming at mobility and research promotion cause further policy fragmentation.<sup>113</sup> The impact of the different legal frameworks for European and non-European scientists moving within the EU, the absence of EU-wide standards for non-EU migrants and enough areas of national discretion left to MSs relates to further integration challenges which in turn hinder scientific mobility.<sup>114</sup>

Application of the third basic element of the theory which refers to the organization leadership dimension indicates that the ERA's multilevel structure of functioning with a multiplicity of actors, targets and objectives results in leadership decisions to be taken at multiple levels,<sup>115</sup> a fact that weakens the strength of the organization's leadership dimension. Finally the absence of an ERA legal binding framework due to stakeholders' reticence about the prospect of the use of legislation<sup>116</sup> limits the efficiency of measures to be taken under strong leadership.

The above challenges relating to the external adaptation, internal integration and leadership of the EU as an organization not only affect the European legislative and policy framework of the ERA pertaining to EU and non-EU scientists' mobility they also impact on the national research environment of the Member States. Consequently, despite efforts for policy coordination at a supranational and national level within the EU Institutions, the EU as an 'organization' cannot fully deliver a unified ERA in which research policy as

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<sup>111</sup> Ibid

<sup>112</sup> Sonia Morano-Foadi, 'Citizenship and Migration within the European Research Area: The Italian example' in Martínez Arranz, Alfonso Pascaline Winand and Natalie Doyle (eds.) *New Europe, New Worlds? The European Union, Europe and the Challenges of the 21<sup>st</sup> Century* (Peterlang, 2010), 91-108. See also Chapter 2, sections 2.6.1 - 2.6.2

<sup>113</sup> See Chapter 2 section 2.4

<sup>114</sup> Ibid

<sup>115</sup> See Chapter 2, section 2.5

<sup>116</sup> European Council Conclusions on the progress report from the Commission on ERA 2013, Council of the EU, ST 6945 2014 INIT, 25 February 2014

linked to research culture is strong and in which researchers, scientific knowledge and technology circulate freely.

### 1.3.1. D. Cyprus -The State Dimension

The model suggested in this research conceptualizes the State as an organization and recognizes that its role in making research policy and managing the national research environment makes it the leader and initiator of a culture of research across the whole national research environment. It elaborates on EU policies and Migration Law on the assumption that these constitute external and internal influences and challenges relating to the research policy and law at national level. On the one hand, Cyprus is called to make the necessary national reforms considered by the EU Commission to be at the heart of the ERA, and put in place the conditions needed to complete ERA.<sup>117</sup> On the other hand, although EU law confers rights and obligations on Cyprus as a Member country and although it is ‘non-State law’ it is binding for the State and has supremacy over it.<sup>118</sup> Consequently, Cyprus is expected to carry out changes and reforms in order to respond to the above challenges and achieve the necessary EU policy and law integration into its public R&I system and legal system.

A country’s ability and capacity to reform is influenced by its national and uniquely historic experiences.<sup>119</sup> In this context a set of political and socio- economic factors impact on the adaptability of Cyprus’ existing national/ organizational culture to external challenges and the ability to solve problems internally under decisive, consistent and effective leadership.<sup>120</sup> The conceptual framework is presented in Figures 1.A and 1.B below.

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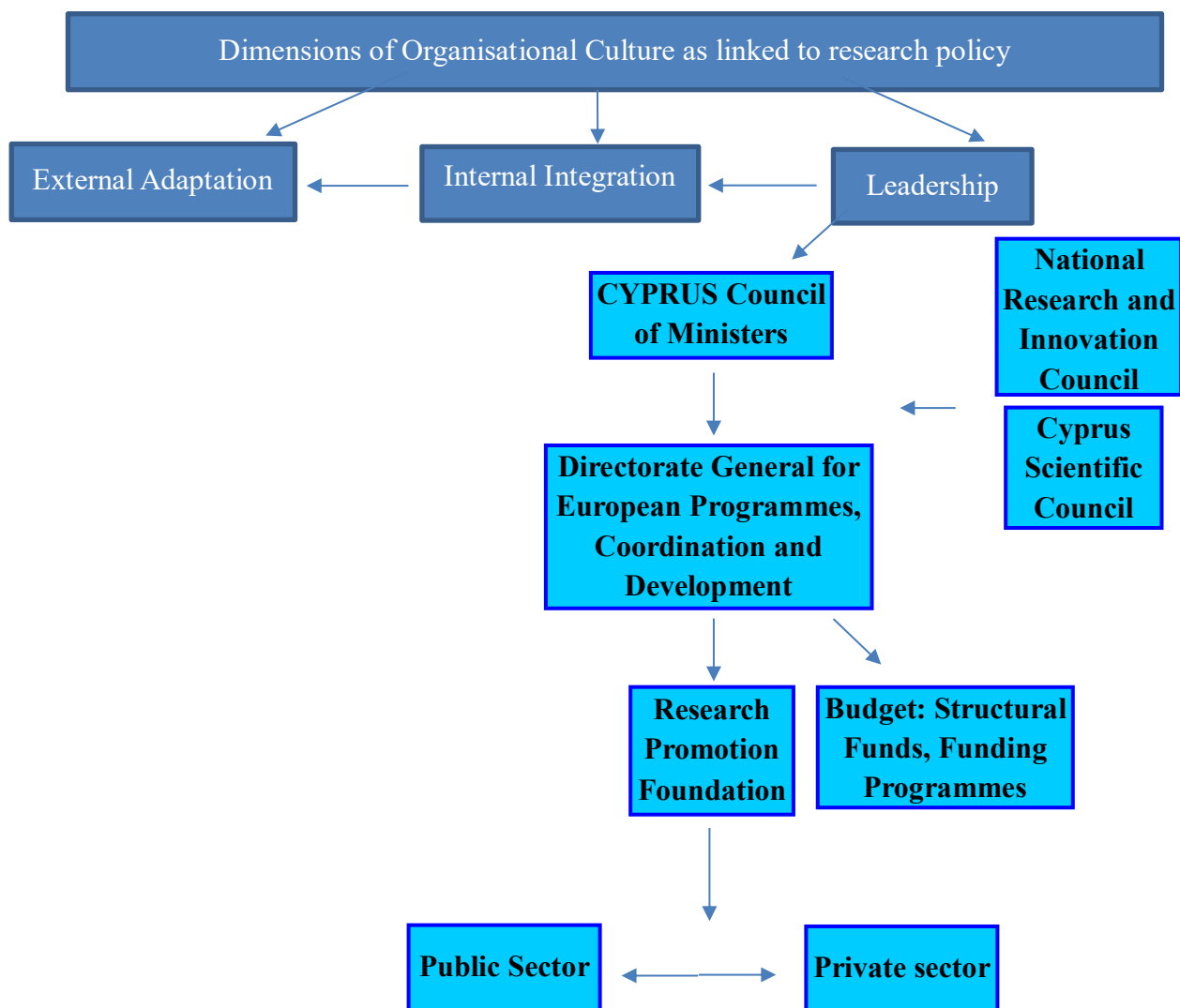
<sup>117</sup> Commission Communication ‘Implementing the Community Lisbon Programme: More Research and Innovation’, COM (2005) 488, (12 October 2005) and COM (2012) 392, (n. 107). See also Commission Communication, ‘ERA Progress Report 2013’, COM (2013) 637 and Commission Communication ‘Commission Decision on the signature of a Joint Statement to take action on working in partnership in achieving the ERA’, COM (2015) 4063.

<sup>118</sup> See Case 6/64 *Costa v Enel* [1964] ECR 585 and Case 409/06 *Winner Wetten* [2010] ECR I 8015, para 53. See also Denis Galligan, *Law in Modern Society* (OUP, 2007)

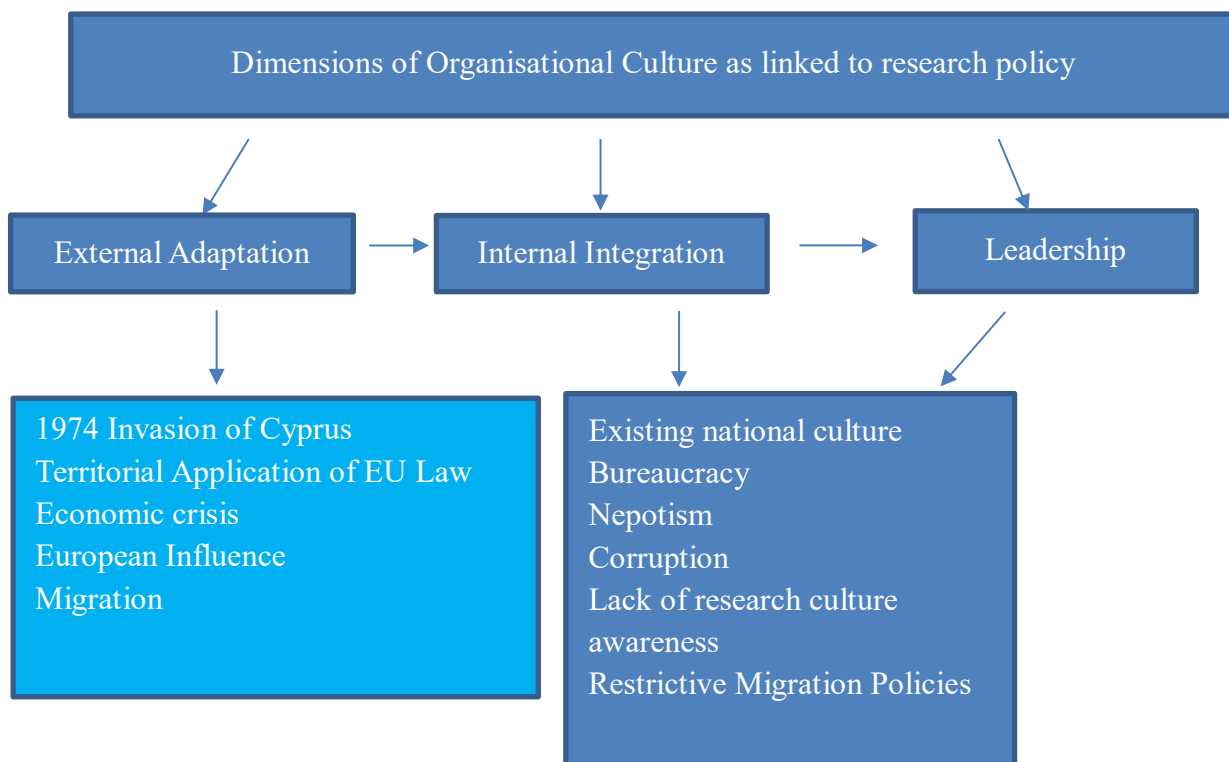
<sup>119</sup> Schein (n.1), p.289

<sup>120</sup> Schein (n. 1), p. 271

**FIGURE 1.A: ORGANISATIONAL CULTURE AND THE CYPRIOT R&I STRUCTURE IN RELATION TO THE LEADERSHIP DIMENSION-ACTORS**



**FIGURE 1.B: ORGANISATIONAL CULTURE AND THE CYPRIOT R&I STRUCTURE IN RELATION TO THE EXTERNAL ADAPTATION AND INTERNAL INTEGRATION DIMENSIONS- PROBLEMS RAISED IN THE RESEARCH**



Source: Own compilation

Application of the first basic element of the theory which refers to the organization's external adaptation indicates the external influences that affect the adaptability of Cyprus' existing national/ organizational culture to the challenges these influences pose.

The first major challenge occurred with Cyprus's declaration of an independent state in 1960 and its becoming a unitary state of both Greek- and Turkish-Cypriots (80% and 20% of the population respectively). Its Constitution was founded on rigorous bi-communalism agreements of 1959 known as the Zurich Agreements which formed the basis of three interrelated Treaties<sup>121</sup> and the Constitution.<sup>122</sup> Being widely described as

<sup>121</sup> See Treaty No 5476, UK of Great Britain and Northern Ireland, Greece and Turkey and Cyprus concerning the Establishment of the RoC, Nicosia, 16 August 1960, Treaty No 5475, of the RoC of the one part, and Greece, Turkey and the UK of Great Britain and Northern Ireland of the other part, Nicosia, 16 August 1960 and Treaty No 5712 of Greece, Turkey and Cyprus (with Additional Protocols) Nicosia, 16 August 1960.

<sup>122</sup>For a more detailed analysis see Chapters 3 and 4

rigid, complicated and dysfunctional, the Constitution led to a constitutional breakdown<sup>123</sup> with the Turkish Cypriot leadership withdrawing all Turkish Cypriot community members from all the State's organs.<sup>124</sup> The State reacted by transferring the jurisdiction and powers of the two pre-existing courts<sup>125</sup> to a newly established Supreme Court via the Administration of Justice (Miscellaneous Provisions) Law no. 33/64. This was held to be in conformity with the Constitution on the basis of recognised principles of the law of necessity.<sup>126</sup>

The second major external challenge the State faced came in 1974 when Cyprus was forcibly partitioned following a Turkish invasion.

Cyprus's 2004 accession to the EU<sup>127</sup> as a divided country with its long-standing political problem unresolved and with suspension of the EU law *acquis* application in those areas of the RoC which are not under the Government's effective control was the third major challenge.<sup>128</sup>

The fourth major external challenge was the 2011 financial and economic crisis which extended beyond the financial sector<sup>129</sup> and the extensive reforms the State is required to carry out by its creditors.

The following section explains the State dimension and the concepts of public and private sectors in Cyprus to offer the reader the framework in which the Cyprus research system functions.<sup>130</sup>

### 1.3.1. E. The State Dimension and the Concepts of Public and Private sectors In Cyprus

Elaborating on the State dimension on the assumption that it is an 'organization,' its role in making research policy and managing the national research environment is recognized as the role of a leader and promoter of a culture of research across the whole national research environment. This is achieved through the State's on-going series of

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<sup>123</sup>Stéphanie Lahlou, "Back to Reality': The Implications of EU Membership in the Constitutional Legal Order of Cyprus' in A. Lazowski (ed.) *The Application of EU Law in the New Member States- Brave New World* (TMC Asser Press 2010) p. 471. See also Thomas Adams, 'The First Republic of Cyprus: a Review of an Unworkable Constitution' (1966) *The Western Political Quarterly* 19 (3): 475-490

<sup>124</sup>Their posts remain vacant to this day. Press and Information Office (PIO) 'About Cyprus, Republic of Cyprus-1960' (2012), at: <http://www.aboutcyprus.org.cy/index.php/en/republic-of-cyprus--1960>

<sup>125</sup> High Court and a Supreme Constitutional Court

<sup>126</sup> See Chapter 4. The Constitution's viability was addressed in the landmark case *The Attorney - General of the Republic v. Mustafa Ibrahim* [1964] CLR 195, 264, where it was held that all prerequisites were there to determine the application of the doctrine of necessity.

<sup>127</sup> See Accession Treaty of the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia (2003), Ratifying law No 35(III)/2003, Official Gazette No 3740, 25.7.2003, OJ L 236, 23.9.2003 Document 12003T/TXT

<sup>128</sup> See Chapters 3 and 4.

<sup>129</sup> European Commission 'Assessment of the 2014 National Reform Programme for Cyprus' 2.6.2014 SWD (2014) 414 final (2014)

<sup>130</sup> Refer to Chapter 3 for an analysis of laws and policies on research at national level.

strategic policies and actions with a twofold aim. The first aim is research and development.<sup>131</sup> The second is to enable all national research environment stakeholders to solve the external adaptation and internal integration challenges the State faces with an optimal use of all resources human, financial and physical. Thus, the State functions in the same way a founder/leader/ manager does within an organization with a culture characteristic of the country just as it is characteristic of an organization.<sup>132</sup>

The State introduces policy measures aiming at research promotion whilst the State is, at the same time, a main research performer through the public sector, which encompasses organisations dependant on government budgetary allocations for their funding (mainly government departments, controlled by Ministers and Government Departmental Directors). It also includes self-funded organisations with a revenue flow independent of government budgetary allocations – these are ‘semi government’ such as universities. Although semi-government organisations make profit, they need to place it back into the institutions’ running expenses.<sup>133</sup>

The definition of the public sector, commonly accepted and referred to in Cyprus, is based on Article 2 provisions of the Public Service Law I/1990, as amended from 1990 to 2001, where “public service” means any service under the Republic other than the judicial service, the Armed or Security Forces, the Attorney General, the Auditor General and their Deputies, the Accountant General and his Deputies or service in any office in respect of which other provision is made by law in accordance with “Employment of Casual Officers” (Public and Educational Service) Laws (Law 99/1985 and Law 122/1985).<sup>134</sup>

The Cypriot public sector comprises 11 ministries, public research organizations and universities. Executive power is exercised by the President, an 11- member- Cabinet and the Ministers. In terms of political decision and formulation of long-term strategy in relation to the National Research and Innovation System this is the responsibility of the National Council for Research and Innovation (NCRI)<sup>135</sup> composed of a six-minister cabinet<sup>136</sup> and chaired by the President as the top-level body in Cypriot R& I governance. The Cyprus Scientific Council (CSC) is an advisory scientific body to the NCRI composed of 19 internationally recognised scientists.<sup>137</sup> (See Figure 1)

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<sup>131</sup> Hazelcorn (n. 65) p.13

<sup>132</sup> Deem and Brehony (n. 76) 149-165

<sup>133</sup> Tsholofelo Sethibe et al., ‘IT Governance in Public and Private Sector Organisations: Examining the Differences and Defining Future Research Directions’ (2007) ACIS 2007 Proceedings, Paper 118, p.834

<sup>134</sup> No separate definition is provided for the central government sector. In this context, central government is covered by the definition of public service as provided for in Law I/1990.

<sup>135</sup> See Chapter 3 Fig 1: The NCRI was created in 2007.

<sup>136</sup> Finance, Energy-Commerce-Industry and Tourism, Education and Culture, Transport-Communication and Works, Agricultural-Rural Development and Environment and Health

<sup>137</sup> See Chapter 3 Fig 1: The CSC was created in 2010



The Directorate General for European Programmes, Coordination and Development<sup>138</sup> (DG EPCD) (formerly the Planning Bureau) is an independent governmental body under the Ministry of Finance, responsible for the national R&I policy design.

R&I policy implementation is almost solely made by the Research Promotion Foundation (RPF), the main research funding agency, also responsible for designing and implementing R&I programmes. A National Committee for Research, Innovation and Technological Development (NCRITD), was created in 2013 to prepare suggestions on a new more effective R&I structure and governance.<sup>139</sup> (See Figure 1) The private sector comprises private corporations, and privately-owned non-profit organizations.<sup>140</sup> The Cypriot private sector consists of private tertiary education institutes, private non-academic organizations and private non-profit organizations and private small and medium-sized enterprises (SMEs) and start-ups in ICT.

In terms of the EU dimension in relation to ERA, the State translates EU soft law measures and European guidelines into national policies, develops strategies and implements them in compliance with the ERA dimension in the field of research.<sup>141</sup> The State also transposes and implements a large number of the *acquis communautaire* to harmonize Cyprus legislation with the EU. In the context of this thesis the reference is to the free movement of EU and non-EU nationals (TCNs) principle, more specifically EU and non-EU scientists, researchers, HS migrants and doctoral candidates.

Having explained the State dimension and the concepts of public and private sectors in Cyprus the following section focuses on the management of research in Cyprus and the application of the basic elements of the theory adopted, external adaptation<sup>142</sup>, internal integration<sup>143</sup> and leadership<sup>144</sup> to the country's research and organizational culture.

### 1.3.1. F. The State and Research Management

The State, individually and jointly with the other research performer sectors represents the national research/innovation system (NIS)<sup>145</sup> which provides the framework

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<sup>138</sup> Ibid

<sup>139</sup> George Strogilopoulos 'Stairway to Excellence, Country Report Cyprus 2015', (2015) Joint Research Centre (JRC) Science and Policy Report, Cyprus, EUR 27497 and Lena Tsipouri et al 'RIO Country Report 2015: Cyprus' (2016) EUR 27856.

<sup>140</sup> International Monetary Fund, *Government Finance Statistics Manual* (IMF 2001) p.15

<sup>141</sup> For a more detailed analysis see Chapter 2.

<sup>142</sup> Schein (n.1) pp.10-23

<sup>143</sup> Ibid

<sup>144</sup> Ibid

<sup>145</sup> Jorge Niosi, et al., 'National Systems of Innovation: in Search of a Workable Concept' (1993) *Technology in Society*, 15:207-227, p.219. Carl Dahlman and Claudio Frischtak, 'National Systems Supporting

within which the State/government forms and implements its national policies to influence the innovation/research process.<sup>146</sup> A National Innovation Policy (NIP) comprises science, technology and economic strategy elements which promote the development, spread and effective use of new products, processes, services, and organizational models.<sup>147</sup> It covers a wide range of policy domains with intersecting roles and relationships beyond focusing narrowly on R&D which include among others science and technology, education, human capital, and immigration, in creating economic and social welfare.<sup>148</sup>

Consequently, the process of developing and implementing I&R as demonstrated can come from multiple sources/groups and involves the activities of different levels of human capital, ranging from front-line researchers to top-level management also found in the public and private sectors.<sup>149</sup> Research is done at different group levels: At a high policy level the organization/the State designs its public research agenda and allocates public research budgets which shape the national research environment.<sup>150</sup> At a second level, research is done through the public and private sectors, for example, the Research University, medical school, an independent, private or public research organization. The third level consists of the research group or team from the public or private sectors while the third group is made up of the individual scientist or researcher or any new scientist or researcher member.<sup>151</sup>

Thus, despite the organisation's/ State's defined group boundaries, shared identity<sup>152</sup> generalised basic assumptions and meaning about ways of promoting and doing research across the whole organisation/country, the State is not the only 'group' and its organizational culture is not always uniform.<sup>153</sup> The country's research performance depends on how the State and all actors act and interact with each other as elements of a collective system of knowledge creation and use, and on their interplay with values, norms

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Technical Advance in Industry: the Brazilian Experience', (1990) Industry and Energy Department WP, Industry Series Paper No. 32.

<sup>146</sup> Stan Metcalfe, 'The Economic Foundations of Technology Policy: Equilibrium and Evolutionary Perspectives', in Paul. Stoneman, (ed.), *Handbook of the Economics of Innovation and Technical Change*, (Blackwell, 1995), 409-512

<sup>147</sup> Stephen J. Ezell and Robert D. Atkinson 'The Good, The Bad, and The Ugly (and the Self-Destructive) of Innovation Policy: A Policymaker's Guide to Crafting Effective Innovation Policy' (2010) The Information Technology and Innovation Foundation (ITIF) p.11

<sup>148</sup> OECD *Science, Technology and Industry Outlook 2014* (OECD, 2014) p.70, pp.251-252

<sup>149</sup> Lois Stevenson, *Private Sector and Enterprise Development: Fostering Growth in the Middle East and North Africa* International Development Research Centre (IDRC), (Edward Elgar, 2010) p.3, p.8; The World Bank, *Private Sector Development and Growth*, (World Bank, 2009).

<sup>150</sup> OECD (n. 144) pp.21-22

<sup>151</sup> National Research Council 'Integrity in Research,' in *Integrity in Scientific Research: Creating an Environment That Promotes Responsible Conduct* (The National Academies Press, 2002), See Chapter 2

<sup>152</sup> Schein (n. 1), p.116

<sup>153</sup> Rosemary Deem, 'New Managerialism and the Management of UK universities', (2000) End of Award Report of an Economic and Social Research Council (ESRC) Project, pp.15-16, at: <http://www.leeds.ac.uk/educol/documents/189420.pdf>; See also Deem and Brehony (n. 76)

and legal frameworks, within the national research environment.<sup>154</sup> However a NIP is viewed as primarily a public action that influences technical change, R&D, technology, infrastructure and education policies.<sup>155</sup> In this sense the State's role as the organizational culture leader is to adhere to principles, guide, intervene in case of a crisis or market failure by complementing by a specific policy and correct imperfections in the functioning of the innovation system<sup>156</sup> and the organization.

In the case of Cyprus, R&D programmes mainly started with the creation of the country's first public universities in 1992, 2006 and 2007 followed by the establishment of private universities. The first elements of a NIP appeared around the end of 1980s<sup>157</sup> with the Planning Bureau, renamed as DGEPCD since 2013, (see Figure 1) as the Government agency initially responsible for the preparation of development economy plans. Despite the fact that general strategic planning was institutionalized under the Planning Bureau and directorates of the Ministry of Finance (MoF), this organisation was neglected until recently.<sup>158</sup> The creation of a new system integrating research, innovation and entrepreneurship is still in the process, demonstrating inefficiency and delay into a NIP formulation and implementation.<sup>159</sup> Additionally the two advisory bodies mentioned above the National Council for Research and Innovation (NCRI)<sup>160</sup> (see Figure 1) and the Cyprus Scientific Council (CSC)<sup>161</sup> (See Figure 1) have not played a dynamic role so far since the former has only met once since the date of incorporation in 2007, without taking any policy decisions while the latter has met only several times.<sup>162</sup>

Cyprus' EU accession (2004) was an external, instrumental factor for the development of a research environment and increased emphasis on Research and Development (R&D) with the country making a series of modifications to meet EU obligations regarding implementation of necessary ERA reforms at the national level.<sup>163</sup>

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<sup>154</sup> Keith Smith, et al., 'The Norwegian National Innovation System: A Pilot Study of Knowledge Creation, Distribution and Use ', (1996) STEP Group Oslo

<sup>155</sup> Charles Edquist, 'Innovation Policy in the Systems of Innovation Approach: Some Basic Principles', in M.M. Fischer, and J. Fröhlich (eds.), *Knowledge Complexity and Innovation Systems*, (Springer Verlag, 2001). See Chapter 5.

<sup>156</sup> Charles Edquist, 'Innovation policy – A Systemic Approach' in D. Archibugi and B-Å Lundvall (eds.) *The Globalizing Learning Economy*, (Oxford, 2001), Part V, Chapter 12

<sup>157</sup> Robin Murray, 'Flexible Specialization in Small Island Economies: The Case of Cyprus', in F. Pyke and W. Sengenberger (eds.), *Industrial Districts and Local Economic Regeneration*, (International Institute for Labour Studies, 1992), 255-76. p.255

<sup>158</sup> Christophoros Christophorou, et al., *Cyprus Report Sustainable Governance Indicators 2016* (Bertelsmann Stiftung 2016) p.31

<sup>159</sup> See Chapter 5. See also Athanasios Hadjimanolis and Keith Dickson, 'Development of National Innovation Policy in Small Developing Countries: The Case of Cyprus' (2001) *Research Policy* 30(5): 805–817

<sup>160</sup> NRIC (n. 135)

<sup>161</sup> CSC (n. 137)

<sup>162</sup> Tsipouri et al (n. 139) p.7

<sup>163</sup> European Commission ERA Progress Report 2016 Technical Report EUR 28430 (2017)

However, despite this impetus, and although there has been further expansion of research activities through research organizations<sup>164</sup> the business and the academic sectors operate independently, while cooperation between public and private universities is almost non-existent.<sup>165</sup> Thus, the institutional linkages as the main channels through which technology/research/innovation policy is implemented<sup>166</sup> have not materialized. Most administrative units still fail to show action plans or explicitly identify goals with no undertaking of systematic programme evaluations, resulting in planning and coordination gaps, and a weak capacity to react to changes effectively and timely.<sup>167</sup> Studies are also being conducted pertaining to the public sector and public administration reform and the public sector restructuring, on the basis of which the Government should make political decisions for reform implementation.<sup>168</sup>

Nevertheless, State organisational structure reforms, to achieve external adaptation are impeded due to internal organizational weaknesses. Public sector bureaucracy and the cultural features of nepotism and corruption raise major difficulties for the setting up of an attractive research environment with a negative impact on scientists in Cyprus and those scientists who consider migrating to Cyprus for employment purposes.<sup>169</sup> Upon the Council of Europe's Group of States against Corruption (GRECO) recommendation, Cyprus established the Coordinating Body against Corruption in 2003 to develop an anti-corruption strategy, which does not yet exist.<sup>170</sup>

The issues that have been raised above in relation to the application of the basic elements of the theory adopted which refer to the organization's external adaptation, internal integration and leadership dimension indicate that the State as an organizational culture leader faces difficulties and challenges in bringing about the evolution and strengthening of organizational culture: mission and strategy, goals, means, measurement and finally correction.<sup>171</sup> Despite the progress made with the undertaking of the 2013

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<sup>164</sup> See Chapter 3

<sup>165</sup> Lena Tsipouri and Dariya Rublova, 'ERAWATCH Country Report Cyprus 2010' (2011); Lena Tsipouri and Dariya Rublova, 'ERAWATCH Country Report Cyprus 2011' (2013), EUR 25703; Lena Tsipouri and Sophia Athanassopoulou, 'ERAWATCH Country Reports 2013' Cyprus' (2014) EUR 26756.

<sup>166</sup> Henri Capron and Michele Cincera, 'Assessing the Institutional Set-up of National Innovation Systems' (Université Libre de Bruxelles, 2001), p.2, at: <http://homepages.ulb.ac.be/~mcincera/research/miami.PDF>

<sup>167</sup> Tsipouri et al (n. 139) p.7 Christophorou et al., (n. 158) p.31

<sup>168</sup> RoC 'The Unit of Administration Reform', at: <http://www.reform.gov.cy/en/public-administration-reform/restructuring-in-the-public-sector>

<sup>169</sup> Cyprus assessment by Transparency International-Cyprus, at: <https://www.transparency.org/gcb2013/country/?country=cyprus>

<sup>170</sup> The European Commission and the Council of Europe have focused on corruption concerns. The CoE's report (March 2015) noted that only two of eight requirements previously set for Cyprus had been met. See Council of Europe GRECO Second Compliance Report on Cyprus RC-III (2015) 1E, at:

[https://www.coe.int/t/dghl/monitoring/greco/evaluations/round3/GrecoRC3%282015%291\\_Second\\_Cyprus\\_EN.pdf](https://www.coe.int/t/dghl/monitoring/greco/evaluations/round3/GrecoRC3%282015%291_Second_Cyprus_EN.pdf)

<sup>171</sup> Edgar Schein et al., *DEC is Dead, Long Live DEC: the Lasting Legacy of Digital Equipment Corporation* (San Francisco, Calif.: Berrett-Koehler Publishers, 2004) p.17

administration, Cyprus is facing intertwined external, internal and leadership/political challenges that make the setting up of an attractive scientific research environment difficult, causing flaws in the implementation of the law pertaining to EU migration Directives and EU soft law initiatives at the national level.<sup>172</sup>

#### 1.4 Conclusion

To conclude, the focus of the first part of this chapter was on the research design and the methodology adopted in this study where the overall research approach, data collection and analysis methods, were discussed. The second part outlined the theoretical framework underpinning this thesis where the notion of organizational culture as defined by Schein was extended and applied within much broader boundaries those of the EU and the State dimensions. The extended theoretical framework of organizational culture adopted contends that although research culture in this context is the result of a complex group learning process, it is greatly influenced by leader's behaviour, willingness to adapt to a changing environmental context, successfully drawing on the intellectual capital of all integrated stakeholders involved for new learning.

The next step is to analyse the legislative and policy framework of the ERA and EU free movement provisions pertaining to EU and non-EU scientists in order to map out the existing interplay between these intertwined areas and demonstrate their impact in creating an effective European research environment within which scientific mobility functions. In this respect the first step is to examine what research is, who researchers are since they are directly linked to the European research system, the concept of the ERA and the area within which researchers' mobility functions. This examination will assist in appreciating the impact ERA is expected to have on research and the free movement of EU and non-EU scientists in Europe and whether Europe can offer them an attractive research environment.

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<sup>172</sup> See Chapters 4 and 5.

## Chapter 2 - The European Research Area: Concept, Policy and Legal Instruments

### 2.1 Introduction

This chapter focusses on the operation and effect of the highly technical ERA framework with particular reference to its concept, policies and laws regarding EU and non-EU scientists' and researchers' mobility as the key actors in the European Research Area. Therefore, the objective of this chapter is threefold. The first is to discern whether ERA has had the expected impact on research in Europe and whether it has been successful in filling the gaps and making the long-awaited difference, given the spill-over effects of its policies and laws it has had on other related areas. The second is to examine and assess the framework within which EU and Third Country National scientists' mobility functions, its impact and the extent to which their mobility is used as an instrument of knowledge transfer.<sup>1</sup> The third is to offer the reader the background and framework in which the Cyprus research system functions.<sup>2</sup>

Although the ERA idea was formally introduced by the Commission's Communication of 18 January 2000 'Towards a European Research Area'<sup>3</sup> it had always been present in the EU. The objective of the ERA concept was to achieve an internal research market in Europe. However, there was an absence of a clear legal basis, fragmentation and incoherence in the Union actions in this field. This fact coupled with lack of support by both MSs and the Council resulted in the concept of an "internal market of research" remaining symbolic.

As it will be demonstrated in this chapter, the above concerns, expressed in a plethora of the Commission's Communications<sup>4</sup> regarding European research could have easily been expressed even today since the progress made towards this end is far less from the original objective. The ERA had not been easy to define until recently when such a definition was provided by the 2012 Commission's Communication with objectives already broadly described in the 2000 Lisbon European Council Conclusions<sup>5</sup> as "research activities at national and Union level must be better integrated and coordinated to make

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<sup>1</sup> Commission Communication, 'Towards a European Research Area', COM (2000) 6 final, (Brussels, 18 January 2000), p.8

<sup>2</sup> Refer to Chapter 3 for an analysis of laws and policies on research at national level.

<sup>3</sup> COM (2000) 6, (n.1), pp.20-21

<sup>4</sup> See, for example, Commission Communication, 'Making a Reality of the European Research Area', COM (2000) 612, 4 October 2000, Commission Communication, 'The Lisbon Strategy – Making Change Happen', COM (2002) 14, 15 January 2002, Commission Communication, 'Implementing the Community Lisbon Programme: More Research and Innovation', COM (2005) 488, 12 October 2005, Commission Communication, 'Strategic Report on the Renewed Lisbon Strategy for Growth and Jobs: Launching the New Cycle (2008- 2010)', COM (2007) 803, 11 December 2007

<sup>5</sup> See Article 179 of the Treaty on the Functioning of the EU, and European Council, 'Presidency Conclusions' 23 and 24 March 2000, p.14

them as efficient and innovative as possible, and to ensure that Europe offers attractive prospects to its best brains”. This implies research collaboration between researchers who produce scientific and technological knowledge and researchers’ mobility so that this collaboration is integrated and coordinated. It also means absence of any barriers, impeding European and non-European researchers from research engagement.

This chapter, divided in two parts, reflects on the policy regarding the ERA development and strengthening and focuses on the legal provisions pertaining to the free movement of EU scientists and the separate free movement provisions for scientists who are Third Country Nationals (TCNs) within the ERA. The first part refers to the definition of researchers in the ERA and the mobility concept (second section). It next deals with European Policy and researchers on the move (third section), followed by a description of the birth of ERA and the Lisbon strategy (fourth section). The last section (fifth section) of the first part examines the ERA functioning. The second part of this chapter examines the evolution of the EU free movement provisions regarding EU and non-EU scientists and researchers identifying conflicts and synergies between the three intertwined areas: EU Free Movement (sixth section), Area of Freedom, Security and Justice and ERA (seventh section). This represents the basis for the following chapter of this thesis<sup>6</sup> which will appraise the Cyprus research system.

By employing Schein’s organizational culture theory<sup>7</sup>, the analysis that follows focuses on the key actors involved in the creation of the ERA: the EU and non-EU scientists and researchers who are called to make Europe “innovative, competitive and job-creating”<sup>8</sup>; the European institutions which promote the ERA concept through the supranational law and policy and the MSs’ contribution to the shared vision of creating the ERA by their endorsement, cooperation and implementation of laws and policies. This analysis aims at an understanding of the external adaptation<sup>9</sup>, internal integration<sup>10</sup> and leadership<sup>11</sup> challenges facing the EU as a supranational ‘organization’ and which impede the achievement of a coherent European research system, an attractive research environment and unhindered scientific mobility.

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<sup>6</sup> Ibid

<sup>7</sup> Edgar Schein, *Organizational Culture and Leadership* (4<sup>th</sup> ed Jossey Bass 2004). See also Chapter 1, section 1.3.1.

<sup>8</sup> Commission Communication, “First Action Plan for Innovation” Luxemburg (1997) EC Document drawn upon the basis of COM(96) 589 final, p13, at: <http://aei.pitt.edu/5589/1/5589.pdf>

<sup>9</sup> Schein (n.7) pp.10-23

<sup>10</sup> Ibid

<sup>11</sup> Ibid



## 2.2. Researchers in the European Research Context and the Mobility Concept

Researchers are important and a key to ERA's successful functioning. Consequently, three questions need to be addressed in a European context. The first is the question of what research is and what the researcher's profession entails since they are directly linked with the European research system. The second question refers to the area in which researchers are engaged in Europe: the ERA and its need to develop and exploit the potential of individuals' building capacities to the maximum degree. The third question addresses researchers on the move as an important European research aspect because of the impact scientific mobility has on the way research works at all ERA levels: national, regional, pan European and as an area of attraction for incoming researchers from non-European countries. Therefore, three definitions are considered: researchers, the mobility concept and ERA.

This study adopts the definition of researcher as inspired by the Frascati one, to define the category of people, the object of the present work, provided in the 2003 Commission Communication.<sup>12</sup> Researchers are "*Professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, and in the management of the projects concerned*" relating to "*basic research, strategic research, applied research, experimental development and transfer of knowledge including innovation and advisory abilities which depend on whether knowledge is targeted at being applied specifically (either in industry or for social purposes) or not*".<sup>13</sup>

In contrast with other definitions<sup>14</sup>, the definition used in this study also includes doctoral candidates among researchers. In the absence of comparable research career structures, the EU Commission has adopted a framework describing four broad profiles of career stages which is "sector-neutral".<sup>15</sup> This means that this definition applies to all researchers, independent of where they work in the private or public sector.<sup>16</sup> More specifically it applies to professional activities related to basic, strategic and applied research, experimental development and knowledge transfer which include innovation and advisory aspects. As for the working environment this can be an activity in the private

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<sup>12</sup> Commission Communication, 'Researchers in the European Research Area: One Profession, Multiple Careers' COM (2003) 436 final, p.6.

<sup>13</sup> Frascati Manual, *Proposed Standard Practice for Surveys on Research and Experimental Development*, (OECD, 2002) p.93, at: [http://www.tubitak.gov.tr/tubitak\\_content\\_files/BTYPD/kilavuzlar/Frascati.pdf](http://www.tubitak.gov.tr/tubitak_content_files/BTYPD/kilavuzlar/Frascati.pdf)

<sup>14</sup> See for example the Canberra Manual, at: [https://www.oecd-ilibrary.org/science-and-technology/measurement-of-scientific-and-technological-activities\\_9789264065581-en](https://www.oecd-ilibrary.org/science-and-technology/measurement-of-scientific-and-technological-activities_9789264065581-en) p.27

<sup>15</sup> European Commission DG for Research & Innovation, Directorate B- European Research Area Skills 'Towards a European Framework For Research Careers' (Brussels 21st July 2011)

<sup>16</sup> R1 First Stage Researcher (up to the point of PhD), R2 Recognized Researcher (PhD holders or equivalent not yet fully independent), R3 Established Researcher (researchers with a level of independence) and R4 Leading Researcher (researchers leading their research area or field)



sector such as private research organizations or science academies and large or small-scale industries. It can also be a public research setting such as public research organizations.

The importance of the mobility concept was pointed out by the Commission<sup>17</sup> with reference to different mobility forms. The 2012 Researchers Report refers to the inward, outward and sectorial mobility. Inward mobility concerns attracting researchers from abroad while outward mobility denotes the researchers' movement outside the EU. The mobility of researchers within the same sector is defined as intra-sectorial (e.g. from one University to another) while mobility between sectors is described as inter-sectorial (between academia and industry).<sup>18</sup> There is also reference to inter- and trans-disciplinary mobility between and across disciplines. Owing to the technological progress there was also the emergence of a quite new concept called virtual mobility which involved the use of the World Wide Web for the knowledge transfer or collaboration between researchers.<sup>19</sup> To date optimal circulation, access to and transfer to scientific knowledge, including via digital ERA has become one of the ERA priorities.<sup>20</sup> In terms of the residence length in the host country by the researcher, mobility is also distinguished between long-term and short-term.

An ERA definition that completes the researcher definition by establishing the area where researchers will move freely, as defined in the 2003 Commission Communication,<sup>21</sup> stating more than a vision for it<sup>22</sup>, has been provided in a 2012 European Commission Communication.<sup>23</sup> This is as follows: *a unified research area open to the world based on the Internal Market, in which researchers, scientific knowledge and technology circulate freely and through which the Union and its Member States strengthen their scientific and technological bases, their competitiveness and their capacity to collectively address grand challenges.*<sup>24</sup> The prerequisite based on the above definition is an adequate degree of research collaboration between researchers who produce all forms of scientific and technological knowledge so that this collaboration is sufficiently integrated and coordinated. It also means that mobility barriers and related obstacles that impede European and non-European researchers from research engagement should be eliminated.

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<sup>17</sup> COM (2000) 6 final, (n. 1), p.16

<sup>18</sup> European Commission, 'DG Research and Innovation, Researchers' Report (2012) Deloitte p.90, at: [http://ec.europa.eu/euraxess/pdf/research\\_policies/121003\\_The\\_Researchers\\_Report\\_2012\\_FINAL\\_REPOR T.pdf](http://ec.europa.eu/euraxess/pdf/research_policies/121003_The_Researchers_Report_2012_FINAL_REPOR T.pdf)

<sup>19</sup> European Commission, MORE2 – Researcher Indicators Report 'Support for continued data collection and analysis concerning mobility patterns and career paths of researchers' (2013)

<sup>20</sup> Commission Communication, ERA Progress Report 2016 'The European Research Area: Time for Implementation and Monitoring Progress' COM (2017) p.35

<sup>21</sup> COM (2003) 436 final (n. 12) 4 and Frascati (n. 13) p.30

<sup>22</sup> COM (2000) 6 final (n1), p.16

<sup>23</sup> Commission Communication, 'A Reinforced ERA Partnership for Excellence and Growth' of July 17, 2012 COM (2012) 392 final, p.3

<sup>24</sup> Ibid, 3, see Abstract p2 (n1) and Chapter 1, section 1.3.1.C

The European Commission has launched several landmark initiatives to facilitate scientists' and researchers' ERA mobility which will be examined next.

### 2.3 European Policy and Researchers on the Move

The importance of European researchers' mobility was already part of ERA vision. However, programmes promoting mobility date back to 1968 when the free movement of workers within the EU was achieved. Reflection on the EU policy demonstrates the influence ideas and preparation of policy frames and strategies had on the redirection of the EU policy towards technology and research. Actions supporting research mobility have been in place since the beginning of the Community RTD policy. Since the mid-1980s, the European Commission has been running a series of subsequent programmes (FPs) aimed at training young scientists and research engineers (such as COMETT, Erasmus, Human Capital and Mobility). Through these initiatives different successful programmes were introduced such as "Marie Curie"<sup>25</sup> setting researchers' mobility as one of their priorities.<sup>26</sup>

The European Commission's efforts in close cooperation with MSs have also culminated into a number of impressive initiatives to facilitate researchers' mobility in the last ten years. One such measure is facilitation to accessing information on mobility through the EURAXESS portals<sup>27</sup> while another is the establishment of the RESAVER framework<sup>28</sup> for pension portability. Furthermore, the European Charter for Researchers<sup>29</sup>, which refers to the role, responsibilities and researchers' rights and the Code of Conduct for the Recruitment of Researchers in Europe<sup>30</sup> for the improvement of recruitment, fairness and transparency of selection processes, were adopted to improve researchers' rights and their long-term career prospects and to create more favourable conditions for them across Europe. These important measures provide individual researchers the same rights and obligations wherever their work place may be across the EU since they may work at a local, regional or national level. In 2008 a "European Partnership for Researchers", a job information database<sup>31</sup> was instituted, followed by the Europe 2020

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<sup>25</sup> Under FP4 (1994-1998) through the 'Training and Mobility of Researchers' Programme' and FP7 (2007-2013) which launched the People Programme which includes Marie Curie actions

<sup>26</sup> Annamária Inzelt, 'Analysis of Researchers Mobility in the Context of the European Research Area' (2010), at: [https://ec.europa.eu/research/evaluations/pdf/archive/fp7-evidence-base/experts\\_analysis/a.%20inzelt\\_researchers'\\_mobility.pdf](https://ec.europa.eu/research/evaluations/pdf/archive/fp7-evidence-base/experts_analysis/a.%20inzelt_researchers'_mobility.pdf)

<sup>27</sup> Euraxess Researchers in Motion, at: <http://ec.europa.eu/euraxess/>

<sup>28</sup> For more on the Retirement Savings Vehicle for European Research Institutions, see <http://www.resaver.eu/>

<sup>29</sup> OJ L75/67 of 22/3/2005 (European Charter for Researchers)

<sup>30</sup> OJ L75/67 of 22/3/2005 (Code of Conduct for the Recruitment of Researchers)

<sup>31</sup> Commission Communication, 'Better Careers and More Mobility: A European Partnership for Researchers', COM (2008) 317 final, at: [http://ec.europa.eu/euraxess/pdf/comm\\_pdf\\_com\\_2008\\_0317\\_f\\_en\\_communication.pdf](http://ec.europa.eu/euraxess/pdf/comm_pdf_com_2008_0317_f_en_communication.pdf)

“Innovation Union” initiative<sup>32</sup> aiming to eliminate mobility obstacles. Although all the above have helped improve mobility and career paths for researchers enormously, more reforms are needed to allow researchers’ free circulation within the ERA.

The action taken at the EU level towards the launching of ERA, its promotion and strengthening and the interaction between the EU Institutions and MSs towards this end is discussed next.

## 2.4 The European Research Landscape: the ERA and the Lisbon Strategy

The year 2000 was crucial because of two important events. The launching of the ERA concept<sup>33</sup> constitutes the first important outcome.<sup>34</sup> The ERA involves more than a single research system creation being a complex multilevel structure with a multiplicity of actors, targets and objectives.

The Commission’s goal is to succeed in bringing together the actions of all actors involved at national, regional, European, the public and the private sectors and place them in a “pan” European framework. It identified certain weaknesses regarding researchers’ mobility, stating that theoretically EU researchers enjoyed intra-Union mobility due to the free movement of persons but practically legal, regulatory and practical obstacles persisted. Towards this end, action was undertaken to eliminate mobility barriers<sup>35</sup>, such as the launching of a European network of mobility centres, the coordination of social security systems and financial support and legal instruments to complete the ERA.<sup>36</sup> The ERA creation was supported by the European Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions as clearly evident in a series of documents<sup>37</sup>. The Council expressed the need of reviewing European Science and Technology policies and evaluating the ERA progress. The European Parliament observed that the absence of a European research policy resulted in actions carried out at MSs and Union’s levels independently.<sup>38</sup>

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<sup>32</sup> Commission Communication ,‘Europe 2020 Flagship Initiative Innovation Union’, COM (2010) 546, p.3,p. 10, at:

[http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication\\_en.pdf](http://ec.europa.eu/research/innovation-union/pdf/innovation-union-communication_en.pdf)

<sup>33</sup> This concept was already present in the earlier Commission Communication COM (2000) see (n.1).

<sup>34</sup> Ibid, p.8

<sup>35</sup> Ibid, 9

<sup>36</sup> See, for example, COM (2003) 436 (n.12) and Commission Communication, ‘Investing in Research: An Action Plan for Europe’, 4.6.2003 COM (2003) 226, p.12

<sup>37</sup>The European Parliament recognized that ERA could enable research facilities concentration and welcomed the Commission’s Communication. See COM (2000) 6 – C5-0115/2000 – 2000/2075(COS) 7 (n.1), at: <http://cordis.europa.eu/documents/documentlibrary/47796171EN6.pdf>. The ESC and the CdR considered the Commission Communication regarding the establishment of the ERA to be a significant and welcome initiative. See Opinion of the Economic and Social Committee on the Commission Communication COM (2000) 6 final ESC 595/2000, para 2.4 and Opinion of the Committee of the Regions on the Commission Communication: ‘Towards a European Research Area’ CdR 33/2000.

<sup>38</sup> Ibid, 17

The second event was the 2000 Lisbon Strategy formulation presenting the strategic goal for EU to “*become the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion*”<sup>39</sup> by 2010. The launch of a new cycle of ‘renewed’ Lisbon Strategy actions<sup>40</sup> for growth and jobs to boost the economy building on technology, science and knowledge transfer occurred in 2008. To accomplish this, the EU and its MSs should have removed barriers to the knowledge free movement by creating a “fifth freedom<sup>41</sup>” based on enhancing cross-border mobility of researchers, students, scientists, and university teaching staff. However, a year later, concerns around the economic crisis, evident in the March 2009 EU Council Presidency Conclusions,<sup>42</sup> placed the main emphasis on tackling the financial and economic crisis and the fast unemployment increase.

The renewed Lisbon Strategy, which included Integrated Guidelines<sup>43</sup>, was still the preferable means for supporting sustainable growth and jobs. The seriousness of the situation was also reflected in the March 2010 EU Council Conclusions<sup>44</sup> with reference to a new European Strategy for jobs and growth focusing on knowledge, innovation, a more sustainable economy, high employment and social inclusion focussing on the economic policy coordination and the euro-zone’s problems. Since the Lisbon Treaty implementation in 2009, the Commission has had the possibility to propose European legislation to enforce the establishment of the ERA concept.<sup>45</sup> However, stakeholders were reticent about this prospect which would address the ERA obstacles viewing it only as a last resort.<sup>46</sup> Even to date disagreement between the European institutions, the MSs and the stakeholders about the shape of the European research system when implementing the ERA concept and the way to accomplish it makes the potential use of legislation difficult.<sup>47</sup>

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<sup>39</sup> European Council, ‘Conclusions’, (n. 5) para 5

<sup>40</sup> European Council, ‘Presidency Conclusions’ 13 and 14 March (2008) 7652/1/08 REV 1 para 8, at: <http://register.consilium.europa.eu/pdf/en/08/st07/st07652-re01.en08.pdf>

<sup>41</sup> European Council, ‘Turning Challenges into Opportunities, Competitiveness Council’, ST 6933 2008 INIT, 26 February 2008, p.6

<sup>42</sup> European Council, ‘Presidency Conclusions’ March 19 and 20 March 2009, 7880/1/09 Rev 1, p.1, at: [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/106809.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/106809.pdf)

<sup>43</sup> Already adopted in Commission Communication ‘Implementing the Community Lisbon Programme: More Research and Innovation’, COM (2005) 488, 12 October 2005.

<sup>44</sup> European Council, ‘Conclusions’ 25 and 26 March 2010, 7/10 CO EUR 4, 1, at: <http://register.consilium.europa.eu/doc/srv?l=EN&f=ST%207%202010%20INIT>

<sup>45</sup> Under the Lisbon Treaty modification of the Articles on research and technological development, Art. 179 TFEU (ex-163 TEC) explicitly introduced the ERA as a Union objective while through Art. 182 TFEU (ex-166 TEC) the framework programme for research was extended to open up possibility to adopt European legislation for the ERA implementation enforcement.

<sup>46</sup> European Council, ‘Council Conclusions on ERA Progress 2013’, ST6945 2014 INIT, 25 February 2014, p.12

<sup>47</sup> Vincent Reillon, ‘The European Research Area, Evolving Concept, Implementation Challenges’, (2016) European Parliamentary Research Service (EPRS) PE 579.097, at: [http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/579097/EPRS\\_IDA\(2016\)579097\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/IDAN/2016/579097/EPRS_IDA(2016)579097_EN.pdf)

In the light of the above, application of the key dimensions of Schein's organizational culture indicate that the EU as a supranational organization is facing leadership challenges that are affected by and affecting its external adaptation and internal integration challenges in its crucial role in delivering the ERA with joint and concurrent efforts at EU and national levels.

The next section elaborates on how the ERA functions and examines how the 'isolated' national research systems have become more interconnected in an effort to facilitate more knowledge, technology and people flows among them in order to create a more integrated European research system.

## 2.5: How Does the ERA Function?

Based on the '28'<sup>48</sup> MSs' national research systems and funded from national tax revenues ERA enables Europe to capitalize on its scientific, cultural and geographical diversity.<sup>49</sup> The ERA is divided into four levels: European, international, national, the regional, impacting on the public and the private sectors.<sup>50</sup>

The role-sharing between European and the national level is determined in accordance with the 'subsidiarity principle'. MSs develop strategies and implement them in compliance with the European dimension, thus increasing synergies between national and European level regarding research.<sup>51</sup>

The regional dimension emphasized the significant role that regions play in contributing to the transition of the EU to a knowledge-based economy.<sup>52</sup> ERA's international dimension was built around the need to make Europe more attractive to the best scientists and researchers, making research an integral part of foreign policy objectives and responding to international issues of concern.<sup>53</sup> The private and public sectors' contributions have been highlighted in most of the Commission's

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<sup>48</sup>The UK Prime Minister invoked Article 50 on 29 March 2017 to formally initiate the withdrawal process of leaving the EU, European Union (Notification of Withdrawal) Bill Explanatory Notes as introduced in the House of Commons on 26 January 2017 (Bill 132).

<sup>49</sup> COM (2012) 392 final, (n. 23) p. 3

<sup>50</sup> COM (2000) 6 (n. 1), p.22

<sup>51</sup> In a Communication soon after the Commission presented its proposal for the sixth FP pointing out that it would be carried through the use of the Open Method of Coordination (OMC) – See Commission Communication, 'Making a Reality of The ERA: Guidelines for EU Research Activities' (2002-2006) COM(2000) 612, at: [http://ec.europa.eu/research/iscp/pdf/history/com\\_00\\_612erareality\\_en.pdf](http://ec.europa.eu/research/iscp/pdf/history/com_00_612erareality_en.pdf)

<sup>52</sup> Commission Communication, 'The Regional Dimension of the ERA' 03.10.2001 COM (2001) 549, para 2.2, [http://www.iglortd.org/Content/ERA/Com01\\_549en.pdf](http://www.iglortd.org/Content/ERA/Com01_549en.pdf)

<sup>53</sup> Commission Communication, 'The International Dimension of the ERA' COM (2001) 346, p.350, at: [http://www.iglortd.org/Content/ERA/Com01\\_346en.pdf](http://www.iglortd.org/Content/ERA/Com01_346en.pdf)

Communication.<sup>54</sup> To ensure these actors' active involvement the Commission has put forward legislative proposals to establish public-private partnerships and public-public partnerships with MSs under "Horizon 2020".<sup>55</sup>

The ERA is mainly based on soft law measures such as benchmarking, exchange of good practices and monitoring,<sup>56</sup> evaluation and peer reviews exercises all under the umbrella of the so-called Open Method of Coordination (OMC).<sup>57</sup> Before introducing any decisions, the Commission promoted a broad-based debate involving the civil society in Europe.<sup>58</sup> The main financial actions taken under the ERA are the Framework Programmes (FPs) which are placed at the heart of Europe's RTD policies covering all the research and technological development activities (RTD). The overall objective of these programmes and initiatives run through the EU funding is to maximize investment return in research while increasing its effectiveness at both the national and EU levels. While institutional policy documents referred to the FPs as tools or instruments to construct the ERA together with legal and regulatory measures, in reality these programmes are still the sole effective mechanisms employed within the ERA.<sup>59</sup> Despite the constant pressure on national R&D budgets, ERA structural reforms aim to help use limited resources more efficiently, as such the EU has heavily invested in research promoting mobility of brains and infrastructures across the continent and allocated resources to researchers' sponsorship.

The most recent financial programme launched by the EU is Horizon 2020 which is one of the most important pillars contributing to the ERA realization. With almost €80 billion of funding available over a seven-year period (2014-2020) it aims to produce world class science, removal of innovation obstacles and easier collaboration between public and

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<sup>54</sup>As early as 2002 the Commission asked for raising business funding from 56% to 66% of the total spending, see Commission Communication "More Research for Europe Towards 3% of GDP" COM (2002) 499, 504. In 2013 the Commission acknowledged slow progress towards the Europe 2020 objective of investing 3% of GDP in R&D, with particular weaknesses in private investments. See Commission Communication, 'Public-private partnerships in Horizon 2020: a powerful tool to deliver on innovation and growth in Europe' COM (2013) 494 final. To overcome this problem the Commission proposes the joining of forces with the private sector and MSs to achieve the desired results as key element for the next EU R&I Horizon 2020, European Commission on 'Horizon 2020'.

<sup>55</sup> Ibid COM (2013) 494 final

<sup>56</sup> The ERA monitoring mechanism is a continuously evolving process built in close collaboration with the MSs and stakeholder organizations, monitoring is more robust now through the European Semester which is the 1<sup>st</sup> phase of the EU's yearly cycle of economic policy. The European Commission analyses the fiscal and structural reform policies of each MS for recommendations and monitoring implementation. The 2<sup>nd</sup> phase of this cycle, the National Semester requires MSs to implement the policies agreed upon.

<sup>57</sup> Ibid para 37

<sup>58</sup> Reillon (n. 47), pp.26-27

<sup>59</sup> Decision No 1513/2002/EC of the European Parliament and of the Council of 27 June 2002 concerning the Sixth FP of the European Community for Research, Technological Development and Demonstration Activities, Contributing to the Creation of the European Research Area and to Innovation (2002 to 2006)

private sectors in delivering innovation.<sup>60</sup> R&I are at the heart of the Europe 2020 strategy and are considered as tools to smart, sustainable and inclusive growth promotion.<sup>61</sup>

Horizon 2020 is organised around three complementary and interlinked priorities: (1) Excellent Science; (2) Industrial Leadership; (3) Societal Challenges. The first block covers the European Research Council; Future and emerging technologies; Marie Curie actions; and Research infrastructures. The second block covers the business and SME community and its aligning between EU and private resources. The third block supports activities from research to market such as R&D projects.<sup>62</sup> Horizon 2020 is put into operation through funding schemes such as research and innovation grants which is the primary funding scheme. Two-year work programmes announce the specific Horizon 2020 funded areas while a European Commission's Participant Portal is set up for submitting a proposal electronically which is evaluated by experts before the EU Commission draws up an agreement with the participant(s).<sup>63</sup>

In order to address obstacles and common issues the Commission has set up a stakeholder platform to follow up on the implementation on the commitments and information exchange. Additionally, the ERA monitoring mechanism built in collaboration with the MSs and Stakeholder Organisations has produced for the first time 'The ERA Progress Report 2013' presenting an overview on the political setting, steps taken and first achievements in the '28' MSs. In 2015, the European Council endorsed the ERA Roadmap 2015-2020<sup>64</sup>, to guide MS in structuring their implementation of the six priorities, around which the ERA evolves, at national level: (1) more effective national research systems; (2) optimal transnational co-operation and competition; (3) an open labour market for researchers; (4) gender equality and gender mainstreaming in research; (5) optimal circulation, access to and transfer of scientific knowledge, including 'Knowledge circulation' and 'Open Access'; (6) international cooperation. MSs were called to implement the ERA Roadmap through appropriate measures in ERA National Action Plans (NAPs) and strategies. To date, 24 MSs have adopted an ERA national action plan 2015-2020.<sup>65</sup> Other initiatives to be mentioned briefly included the Scientific Visa, the European

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<sup>60</sup> Horizon 2020 - The EU Framework Programme for Research and Innovation 'What is Horizon 2020?' at: <http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>

<sup>61</sup> European Commission, 'ERA Progress Report 2013' Brussels, 20.9.2013 COM (2013) 637 final, at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0637:FIN:EN:PDF>

<sup>62</sup> Commission Communication, 'Horizon 2020 - The FP for Research and Innovation' 2011 COM (2011) 808 final

<sup>63</sup> Horizon 2020, (n.60)

<sup>64</sup> European Council, Outcome of the Council Meeting, 3392 and Council meeting 'Competitiveness (Internal Market, Industry, Research and Space)' EN 9385/15 Brussels, 28 and 29 May 2015, p. 9.

<sup>65</sup> European Commission, 'The ERA: Time for implementation and monitoring progress' ERA Progress Report 2016, COM (2017) p.35



Framework for Research Careers, the Principles of Innovative Doctoral Training, and the EURAXES services.

Regarding the future Commission's policy agenda on Open Science, Open Innovation and Open to the World also opens up ERA to future challenges, like digitalisation and global networks due to the change in the way scientific research is carried out.<sup>66</sup> The focus to date is towards reinforced implementation to deliver on all ERA priorities. This is considered by the Commission to be the responsibility of MSs, with monitoring and policy support from the Commission.<sup>67</sup> However, the ERA lacks a strong point of convergence between all actors such as policy-makers, research funders, stakeholders involved at all levels and a binding legal framework. This is due to the fact that national research systems are not yet fully interoperable, while the form of governance of shared competence of research policies between the European, and national levels, limits the efficiency of measures taken towards the desired point of convergence. Applying Schein's extended organizational culture theory within the EU dimension indicates that while the vision and concept of creating the ERA is shared, the shape of the ERA when implementing this concept remains unclear. Arguably external adaptation challenges coupled with internal integration and leadership challenges over the years have caused the scope of the ERA concept to be progressively refocused<sup>68</sup> and the deadline for its completion to be reset a number of times. For example, apart from the 2014<sup>69</sup> deadline for its achievement, a deadline for transforming the EU into a "genuine Innovation Union" is set for 2020.<sup>70</sup> Additionally on 23 June 2015, the Commission and five stakeholders – CESAER, EARTO, EUA, LERU and Science Europe jointly declared<sup>71</sup> that up to 31 December 2019 and if considered necessary beyond, partners will further strengthen efforts to make the ERA fully operational.

This concludes the policy part of the chapter and what follows is an analysis of the legislation concerning EU and non-EU scientists and researchers. The aim of this analysis is to demonstrate whether ERA is a truly open and excellence-driven area in which EU and TCN highly skilled and qualified people can move seamlessly across borders to where their talents can be best employed.<sup>72</sup>

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<sup>66</sup> For example, see the European Open Science Cloud Initiative: Commission Communication 'European Cloud Initiative - Building a competitive data and knowledge economy in Europe' Brussels, 19.4.2016 COM (2016) 178 final

<sup>67</sup> COM (2017) 35 (n. 20) p.11

<sup>68</sup> Reillon (n. 47), p.36

<sup>69</sup> COM (2010) 546 final (n.32) p.8 and European Council Brussels, 8 March 2011 EUCO 2/1/11 REV 1

<sup>70</sup> Ibid

<sup>71</sup> Commission Decision on the signature of a Joint Statement to take action on working in partnership in achieving the ERA, European Commission, COM (2015) 4063, 19 June 2015

<sup>72</sup> <sup>72</sup> COM (2017) 35 (n. 20) p.6



## 2.6 Evolution of the EU Free Movement Provisions: EU and non-EU Scientists and Researchers

The legal framework dealing with migrant scientists is at the intersection of the ERA framework and the area of the free movement of workers and the Area of Freedom Security and Justice (AFSJ). The application of the relevant body of law is triggered by the nationality of the scientists, either European or non-European migrating within the ERA. Therefore, the challenge posed by this chapter is to provide an overview of these two areas of law at their intersection point and to reflect on their impact on scientists within the EU. This will serve as a basis for an appraisal of the national research system of Cyprus an EU MS chosen as case study for the empirical stage of this work.

The free movement policy initially referred to workers within the context of the development of a common labour market as a necessary production factor. The “European” free movement rights owe their origin to the specific legal provisions concerning the free movement of workers contained in the European Coal and Steel Community Treaty 1951 (the ECSC Treaty) also known as the Treaty of Paris.<sup>73</sup> The vision in the Treaty Establishing the European Economic Community, commonly termed the Treaty of Rome<sup>74</sup> was the creation of a common market and economic policy between MSs characterised by free movement within the internal borders of the European Economic Community. Gradually the understanding of integration of MSs was further conceived as not primarily “economic” but as “social” and as such leading to a common European vision. The introduction of the EU citizenship concept led to a better understanding and appreciation of the migrants’ role as economic contributors to their European host countries.<sup>75</sup> The efforts for achieving more integration and mobility rights then focused on creating a comprehensive immigration policy addressing effectively all categories of non-European migrants.

The purpose of this part of chapter 1 is to guide the reader through a simple and comprehensive description of the legal instruments that gave the free movement of persons its present form, focusing on EU and non-EU scientists and researchers. These include directives, regulations and case law in the mobility area for EU and TCN workers. In the following section (2.6.1.) the analysis focuses on the legal framework for EU citizens and those accompanying them including possible non- EU nationals. The AFSJ which relates

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<sup>73</sup>Treaty Establishing the European Coal and Steel Community 1951 (ECSC Treaty)

<sup>74</sup> Treaty Establishing the ECC 1957

<sup>75</sup> The importance of migrants’ contribution to the European economy was commented on as early as 1990. European Commission , ‘Policies on Immigration and the Social Integration of Migrants’, Experts’ report drawn up on behalf of the European Commission, SEC (90) 813 final, 28 September (1990) Part III para 109.

to non-EU citizens or foreign nationals with no link with any EU citizens is analysed in the section 2.7 below.

## 2.6.1. The Legal Framework for EU citizens

### 2.6.1. A. Primary Law

The concept of the “European citizen” concept is considered very important because it set in motion a dynamic and potential of continuous further development of the free movement right to encompass more citizen categories facilitating their movement within the EU including the mobility of the particular group of people under consideration in this study. With the Maastricht Treaty, specifically Articles 20-25 TFEU, the Union citizenship status was recognized for every MS national. Therefore, any individual outside this juridical category is qualified as TCN by EU law.

Using these rights as a ground for broader interpretation and analysis the Court has been able to crystallise them ensuring that EU scientists and other workers could enjoy their fundamental status of citizenship as illustrated by consolidated CJEU case law.

EU citizens have inter alia the right to move and reside without restrictions within the MSs’ territory<sup>76</sup> by virtue of their nationality since nationality is the primary EU citizenship indicator. This status automatically confers on rights associated with national citizenship complementing and supplementing rights granted under the national citizenship.<sup>77</sup> These rights are to be exercised according to the conditions and limits defined by the Treaties and by the adopted measures to give them effect.<sup>78</sup> However, some transitional measures which are attached to the Acts of Accession<sup>79</sup> place mobility restrictions as was the case for citizens of Romania and Bulgaria.<sup>80</sup> The freedom of movement for workers has been supplemented by secondary legislation such as Regulations and Directives which are discussed next.

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<sup>76</sup> Art. 20 (2) TFEU

<sup>77</sup> Art. 9 TEU states that ‘*Citizenship of the Union shall be additional to and not replace national citizenship*’, which is also repeated in Article 20 (1) TFEU

<sup>78</sup> Art. 21 (1) TFEU

<sup>79</sup> See Freedom of movement in the EU, Citizens Information (2013), at [http://www.citizensinformation.ie/en/moving\\_country/moving\\_abroad/freedom\\_of\\_movement\\_within\\_the\\_eu/freedom\\_of\\_movement\\_in\\_the\\_eu.html](http://www.citizensinformation.ie/en/moving_country/moving_abroad/freedom_of_movement_within_the_eu/freedom_of_movement_in_the_eu.html)

<sup>80</sup> According to these transitional measures, the original MSs have certain rights to restrict free movement of persons among new and old MSs for a time period. With reference to the citizens from Romania and Bulgaria these restrictions expired on 31 December 2013.

## 2.6.1 B. Secondary Law

### 2.6.1. B. 1. Regulations

A number of Regulations, the most important of which was Regulation 1612/68 now replaced by Regulation 492/2011<sup>81</sup>, were instrumental in recognising that migrant workers are human beings with human rights and thus must be given protection and respect in situations that are within the ambit of EU law.

### 2.6.1. B. 2. The Citizenship Rights Directive (CRD)

Further strengthening of citizens' rights was achieved with the 2004 adoption, of the CRD 2004/38/EC on the right of citizens of the Union and their family members to move and reside freely within the MSs' territory.<sup>82</sup> The CRD systematises the relevant complicated body of secondary legislation and provides a framework in the area solving problems arising from the underlying economic reasoning of the Treaty of Rome original provisions. More specifically it addressed the issue of distinctions made in the case law and EU secondary legislation between certain categories of EU citizens: those who moved abroad whether as employees or self-employed; those seeking to study or take up vocational training abroad; those wishing to retire abroad; and those who wished to move abroad without needing to work.

Most importantly this legislation piece has since been widely construed by the CJEU so that its consolidating provisions now deal with the above categories through setting out the free movement rights of workers, self-employed, students, trainees, retired or well-off citizens and their dependent family members in relation to residence rights. Granting dependent rights to the EU citizens' family members, accompanying them regardless of their nationality, greatly facilitates EU nationals' mobility.<sup>83</sup>

The CRD concerns three tiers of residence rights: residence for up to three months; residence for more than three months up to five years and that of permanent residence. This setting of limits regarding the application of free movement provisions in relation to the citizenship status impacts on access to national welfare benefits. The provision for a permanent residency right is acquired after five years of lawful residency in the host State

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<sup>81</sup> Reg 1612/68 on freedom of movement for workers within the Community [1968] OJ L257/2 repealed and replaced by Reg 492/2011 on freedom of movement for workers within the Union [2011] OJ L141/1

<sup>82</sup> Directive 2004/38/EC of the European Parliament and of the Council of 29 April 2004 on the right of citizens of the Union and their family members to move and reside freely within the territory of the MSs amending Regulation (EEC) 1612/68 and repealing Directives 64/221/EEC, 68/360/EEC, 72/194/EEC, 73/148/EEC, 75/34/EEC, 75/35/EEC, 90/364/EEC, 90/365/EEC and 93/96/EEC. OJ L 158/77, 30 4 2004

<sup>83</sup> Case C-34/09 *Ruiz Zambrano v Office national de l'emploi (ONEm)* 8 March [2011] ECR I- 1177, para 39.

and once a citizen has become a permanent resident, she/he is entitled to equal treatment regardless of economic activity.<sup>84</sup> It is evident that the longer citizens' residence is in the host MS the more rights they enjoy.<sup>85</sup> This is because in the absence of a harmonized platform of rights MSs have the control of their welfare systems. However, protection against discrimination on reasons of other EU nationality is provided by Article 18 TFEU which in conjunction with citizenship has been used by the CJEU to extend citizens' social rights if and when available to nationals of the host State they had to be equally applicable to EU citizens.

Scientists, researchers and doctoral candidates are protected by this framework if they are European citizens. Nevertheless all Union citizens have the residence right for a period longer than three months if they are workers or self-employed in the host MS<sup>86</sup> or have 'sufficient resources' through their employment or other independent means and thus not becoming a burden on the host Member States.<sup>87</sup>

Arguably the limits set by such stipulation provide a solution to problems arising if migrants were to use the free movement right with a view to benefiting from a more favourable welfare system in a host MS, a concern termed as "Welfare tourism", or benefits tourism.<sup>88</sup> If their family members are non-EU they might need some procedural requirement such a visa or production of a valid passport<sup>89</sup> since all movement of non-EU family members into the home state is in the national law competence. Finally, under this directive the free movement and residence of Union citizens and their family members may be restricted on public policy, public security or public health grounds.<sup>90</sup>

Despite this, the fact that MSs have the ability to regulate a number of fields from immigration to education and research environment might impact negatively on the free movement rights across the EU. A landmark case of particular importance for this study is *Köbler*.<sup>91</sup> Although *Köbler* is commonly cited as a case whose ruling extended the state liability application to breaches committed by the national judiciary, it is one of the few cases that concerns a highly skilled mobile person 'caught in-between' the intersection between free movement and internal rules regulating the research environment and career development at national level. *Köbler* involved a university professor who after 15 years of university teaching in different MSs returned to Austria and applied for a special length-of-

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<sup>84</sup> See Article 16 of Directive 2004/38/EC.

<sup>85</sup> Case C-209/03 *The Queen, on the application of Dany Bidar v London Borough of Ealing and Secretary of State for Education and Skills* [2005] ECR. I-2119

<sup>86</sup> See Article 7(3) of Directive 2004/38/EC

<sup>87</sup> See Article 7(1) (b) of Directive 2004/38/EC

<sup>88</sup> Sonia Morano Foadi and Jen Neller *Fairhurst's Law of the European Union* (12<sup>th</sup> ed. Pearson 2018), p.19

<sup>89</sup> See Article 6 (2) of the Directive.

<sup>90</sup> Article 27 (1) of Directive 2004/38/EC

<sup>91</sup> Case C-224/01, *Köbler v Republic of Austria* [2003] ECR I-10239

service increment according to an Austrian national law. His application was rejected because to be eligible for the benefit he would have to have 15 years' service as an Austrian university professor alone. Mr Kobler appealed against the decision on indirect discrimination grounds contrary to the principle of freedom of movement for workers. Following a reference to the CJEU Mr Kobler's appeal was successful and the Court used the facts of this case to extend the scope of state liability.

Certain questions arise from this case. The first question is whether Mr Kobler's application should have been examined taking into consideration his HS status. The second is whether mobility should be penalised by reduction of any entitlements or taken into consideration seriously when mobile "workers" finally return to their home country. The third is whether the merited attention has been paid to the key scientific return migration issue not only at the national level but also at the EU level.<sup>92</sup> Arguably looked at from this angle, *Köbler* is linked to the issue of how States regulate their research environment and promotion criteria creating barriers which is in contrast with the rules that regulate the ERA.

The focus of the next section is on the CJEU's clarification of the citizenship rights and selected jurisprudence which have contributed towards the achievement of free movement rights for EU citizens.

### 2.6.1. C. The Creative Intervention of the CJEU

The CJEU paved the way for citizenship rights to stretch beyond the existing law when it decided on the importance of citizenship by stressing emphatically in *Grzelczyk* that: "*Union citizenship destined to be the fundamental status of nationals of the member states, enabling those among such nationals who find themselves in the same situation to enjoy the same treatment in law within the area of application ratione materiae of the EC Treaty irrespective of their nationality, subject to such exceptions as are expressly provided for...*".<sup>93</sup> Based on the wording of the above excerpt from *Grzelczyk* the Court considers that EU citizenship rights will continue to develop despite the fact that EU citizenship does not replace national citizenship.<sup>94</sup>

The progressive development of the EU citizenship rights is evidenced with the Court's elucidation of the right to non-discrimination on grounds of nationality as early as

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<sup>92</sup> Sonia Morano-Foadi 'Citizenship and Migration within the European Research Area: The Italian example' in Martínez Arranz, Alfonso, Pascaline Winand and Natalie Doyle (eds.) *New Europe, New World?: The European Union, Europe and the Challenges of the 21<sup>st</sup>* (P.I.E.-Peterlang, 2010) p.97, p.101. For more detail on return migration see Chapter 6.

<sup>93</sup> Case C-184/99 *Grzelczyk*, [2001] ECR I-6193, para. 31. See also Joined Cases C-76/05 & C-318/05 *Schwarz and another v Finanzamt Bergisch Gladbach; European Commission v Germany* [2007] ECR I-6849.

<sup>94</sup> Morano Foadi and Neller (n. 88) p.316

1998. In *Martinez Sala*,<sup>95</sup> and confirmed in subsequent rulings, such as *Avello*<sup>96</sup>, the Court considered that whenever a Union citizen exercised a right deriving from the fundamental freedoms or Article 21 TFEU such a situation falls within the EU personal and material scope. A year later the Court clarified the free movement right in *Wijsenbeek*<sup>97</sup> holding that free movement obstacles between MSs are not in line with Article 21 TFEU even in absence of discrimination on nationality grounds. The residence right in another MS's territory was the scope of the Court's examination in three landmark cases *Grzelczyk*<sup>98</sup>, *Baubast*<sup>99</sup> and *Bidar*.<sup>100</sup> In *Baubast*, the Court ruled the disengagement of the free movement rights from the need to be economically active;<sup>101</sup> while the enjoyment of social benefits for those legally residing in another MS equally with nationals was its ruling in *Grzelczyk*.<sup>102</sup> In *Bidar*, the Court held that the longer a Union citizen resides in the host MS's territory the more benefits the Union citizen receives equally with nationals and the more difficult it is to justify that he/she has become an unreasonable burden on the host MS's social assistance system.<sup>103</sup>

Further development of the fundamental status of citizenship rights is evidenced in a group of judgments which according to Tryfonidou are '*the jewel in the crown*' of the period 2010 onwards.<sup>104</sup> *Rottman*<sup>105</sup> (2010) indicated that while accessing EU citizenship is a matter to be determined by individual MSs, the substance, significance and interpretation of the rights attached to this status are mainly determined by the EU while conditions for the EU citizenship acquisition and loss must be applied having due regard to EU law.<sup>106</sup> Going even further in *Zambrano* the Court clarified the implications of the EU citizenship fundamental status of young children in a MS of which they are nationals irrespective of no previous exercise of their free movement right in the MS.<sup>107</sup>

Regarding politically sensitive issues such as accessing social benefits by economically inactive citizens in a host MS, the Court does not seem to hesitate to strike a balance over national concerns regarding unlimited social benefit access and expansion of

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<sup>95</sup> Case C-85/96 *Martinez Sala* [1998] ECR I-269

<sup>96</sup> Case C-148/02 *Carlos Garcia Avello v Belgian State*, [2003] ECR I-11613, para 24

<sup>97</sup> Case C-378/97 *Wijsenbeek* [1999] ECR I-6207

<sup>98</sup> *Grzelczyk* (n. 93)

<sup>99</sup> Case C-413/99 *Baubast and R v Secretary of State for the Home Department*, [2002] ECR I-07091 para 82

<sup>100</sup> *Bidar* (n.85)

<sup>101</sup> *Baubast* (n. 99) para 84

<sup>102</sup> *Grzelczyk* (n. 93) para 39

<sup>103</sup> *Bidar* (n. 85) paras 34,46,48,51,62

<sup>104</sup> Alina Tryfonidou *The Impact of Union Citizenship on the EU'S Market Freedoms*, (Hart Publishing, 2016) p. 53

<sup>105</sup> Case C-135/08, *Janko Rottman v Freistaat Bayern*, [2010] ECR I-01449

<sup>106</sup> *Ibid* paras 39 and 41. See also Case C-192/99 *The Queen v Secretary of State for the Home Department, ex parte: Manjit Kaur* [2001] ECR I-1237 and Case C-369/90 *Micheletti* [1992] ECR I-4239.

<sup>107</sup> *Zambrano* (n.83), para 39.

EU citizenship rights. Thus while the previous ruling of *Brey*<sup>108</sup>, provided for an individual assessment when granting of a social benefit to determine the burden such a benefit will have, once placed on the national social assistance system, the rulings in *Dano*<sup>109</sup> and *Alimanovic*<sup>110</sup> clarified that the equal treatment right is enjoyed only by those citizens whose residence is in compliance with the Citizenship Rights Directive (CRD) 2004/38/EC requirements.<sup>111</sup>

In the light of the above, the examination of landmark cases for the understanding of EU citizenship shows that not only is it a dynamic concept<sup>112</sup> in an evolutionary process, it is also a fundamental status. This examination also indicates that there is a discrepancy between what the Court rules and what is done at the national level since very often obstacles to the free movement rights placed by MSs are not in line with the substance, significance and interpretation of the rights attached to the EU citizenship status.

The implications and significance of Articles 20-25 TFEU are understood when seen together with the free movement right of workers provided by Articles 45 to 48 TFEU.<sup>113</sup>

In the following section there is going to be an analysis of EU legislation regarding TCN scientists and researchers, starting with the area which determines the conditions under which this particular category of people can enter the EU, namely the Area of Freedom, Security and Justice. This analysis aims to highlight the underlying concept of free movement across all groupings of EU citizens compared to researchers who are non-EU citizens moving on their own and whose movement is regulated by a different area.

## 2.7. The legal framework regarding the Area of Freedom, Security and Justice

### 2.7. 1. A. Primary Law

The evolution process of the legal framework regarding the Area of Freedom, Security and Justice has been long and progressive. Its examination includes the role of EU migration law particularly in relation to TCN scientists, researchers and doctoral candidates, the area of national discretion left to MSs within this field of law, and that of

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<sup>108</sup> Case C-140/12, *Pensionsversicherungsanstalt v Peter Brey* [2013] ECLI:EU:C:2013:565

<sup>109</sup> Case C-333/13 *Dano v Jobcenter Leipzig* [2014] ECLI:2358

<sup>110</sup> Case C-67/14 *Jobcenter Berlin Neukoln v Nazifa, Sonita, Valentina and Valentino Alimanovic* [2015] ECLI:597

<sup>111</sup> Article 7(1) of Directive 2004/38/EC

<sup>112</sup> Theodora Kostakopoulou, 'EU Citizenship and Member State Nationality: Updating or Upgrading the Link?' in Jo Shaw (ed.) *Has the ECJ Challenged Member State Sovereignty in Nationality Law?*, EUI Working Paper RSCAS No 62, 2011, p.21

<sup>113</sup> This umbrella of rights entails the right to look for employment in another MS; work and reside there for employment purposes; remain there and enjoy equal treatment in accessing employment, work conditions and advantages which would contribute to workers' integration in the host MS.

the Court and its case law. This examination is of particular importance to this study as it aims to demonstrate whether TCN HS including doctoral candidates and their family members enjoy free movement rights to the same extent with their EU counterparts in an ERA which achieves the goal of an open labour market for researchers.<sup>114</sup>

Title IV of the TFEU regulates the ‘Area of Freedom Security and Justice’,<sup>115</sup> (AFSJ). Articles 67 to 80 TFEU deal with border checks, asylum and immigration. More specifically Article 77 TFEU states that the Union shall develop a policy regarding three key objectives: a) to ensure “the absence of any controls on persons, whatever their nationality, when crossing internal borders”; b) to carry out “checks on persons and efficient monitoring of the crossing of external borders” and c) gradually introduce “an integrated management system for external borders”.<sup>116</sup> Article 79 TFEU paragraph (1) entails EU competences on common immigration laws while paragraph (2) states that the EU measures will target areas regarding “a) entry and residence conditions and standards on the issue by MSs of long-term visas and residence permits, including those for family reunification purposes”; “b) the definition TCNs’ rights residing legally in a MS, including the conditions governing freedom of movement and residence in other MSs;” while paragraph 5 Article 79 TFEU states that “this Article shall not affect the right of MSs to determine volumes of admission of TCNs coming from third countries to their territory in order to seek work, whether employed or self-employed”.

Other Articles closely linked with the AFSJ are Article 6 TEU on the Charter of Fundamental Rights and the European Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR), Article 8 TFEU on the elimination of inequalities, and Articles 18 to 25 TFEU on non- discrimination and Union citizenship. The inclusion of Article 6 TEU underlines the importance of fundamental rights gained within the EU legal system. Article 6 (1) provides that the Charter of Fundamental Rights of the EU shall have the same legal value as the Treaties. Article 6 (3) stipulates that Fundamental rights, as guaranteed by the ECHR and as they result from the constitutional traditions common to the MSs, shall constitute Union law general principles.<sup>117</sup>

The free movement of people has caused and still causes much concern around security and welfare issues to MSs. In fact, the opinion diversity between MSs in relation to issues such as the extension of free movement rights to all EU and non-EU citizens and

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<sup>114</sup> One of the ERA priorities see Council of the EU, (n.64) p.9

<sup>115</sup> Lisbon Treaty amending the Treaty on European Union and the Treaty establishing the European Community OJ C306/01 (2007)

<sup>116</sup> Article 77 TFEU 1(a), 1(b),1(c)

<sup>117</sup> However, according to Article 51 of the Charter, it only applies to acts of MSs when implementing EU law thus granting legally enforceable rights only within the EU law’s context.



border control abolition within the EU<sup>118</sup> culminated in closer integration for some EU countries which created the “Schengen Area”. The agreement between these States is known as the Schengen Agreement.<sup>119</sup>

The Schengen *acquis* was then moved into the new Title IV of Treaty of Amsterdam<sup>120</sup>, entitled “Visas, asylum, immigration and other policies related to free movement of persons”,<sup>121</sup> which however, by virtue of a Protocol annexed to the Amsterdam Treaty, does not apply to UK, Ireland and Denmark.<sup>122</sup> Obviously, the free movement is not “absolute”. It comes with restrictions and its regulation for non-EU citizens mainly depends on MSs Immigration law and legislation pertaining to EU Migration Directives concerning selective TCNs more specifically non-EU scientists, researchers and the HS migrants and is discussed next.

### 2.7.1. B. Secondary Law

The regulation of TCNs protection and free movement rights has expanded through a series of legal initiatives including soft law and binding measures the first of which was the transfer of the field of immigration to the then Community (now Union) competence with the entry into force of the Amsterdam Treaty.<sup>123</sup> The second initiative has been Directive 2005/71/EC<sup>124</sup> also known as the Researcher Directive adopted in 2005 replaced by the recast Directive 2016/801 of 11 May 2016<sup>125</sup> on the entry and residence conditions of TCNs for the purposes of research, studies, training, voluntary service, pupil exchange schemes or educational projects and au pairing, which merged the Directive on Students 2004/114/EC<sup>126</sup> and the Researcher Directive 2005/71/EC. The third initiative was Directive 2009/50/EC (Blue Card Directive-BCD) adopted in 2009<sup>127</sup> while the fourth initiative was Directive 2003/109/EC (Long Term Residence Dir.) replaced by the Recast

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<sup>118</sup> Marek Kupiszewski, ‘Consequences of EU Enlargement for Freedom of Movement Between Council of Europe Member States’, (2003) Central European Forum for Migration Research CEFMR Working Paper 1/2003, p.3

<sup>119</sup> In 1985 France, Germany, Belgium, Luxembourg and the Netherlands created the “Schengen Area”, an area without internal borders.

<sup>120</sup> Treaty of Amsterdam amending the Treaty of the EU, the Treaties establishing the EC and Certain Related Acts, O.J. C 340/10 (1997)

<sup>121</sup> Treaty of Amsterdam, ‘Protocol integrating the Schengen *acquis* into the framework of the EU’

<sup>122</sup> Cyprus is currently in the process of joining the Schengen area, see Cyprus Ministry of Foreign Affairs, ‘Schengen and Consular Affairs Division’, at:

<http://www.mfa.gov.cy/mfa/mfa2016.nsf/All/B2CBAAD64A119362C2258022003EA9BE>

<sup>123</sup> Treaty of Amsterdam Title IV

<sup>124</sup> Directive 2005/71/EC of 12 October 2005 on a specific procedure for admitting TCNS for the purpose of scientific research [2005] OJ L289/15

<sup>125</sup> Directive 2016/801 of 11 May 2016 [2016] OJ L 132/21

<sup>126</sup> Directive 2004/114 of 13 December 2004 on the conditions of admission of TCNs for the purposes of studies, pupil exchange, unremunerated training or voluntary service [2004] OJ L 375/12

<sup>127</sup> Directive 2009/50/EC of 25 May 2009, [2009] OJ L 155,

Directive 2011/51/EU<sup>128</sup> the fifth and sixth initiatives constitute soft law initiatives such as the European Charter for Researchers<sup>129</sup> and the Code of Conduct for the Recruitment of Researchers.<sup>130</sup> It should be highlighted though that the geographical scope of these directives is limited. They do not apply to the UK and Ireland and Denmark.

As with all EU Directives the specific objectives of the abovementioned Directives differ depending on the TCN category they address, and the different aspects of the migration process they cover, as well as their inter-linkages, particularly in other areas of relevance such as visas and free movement of persons. However, since the scope of the present study is on HS migrants, reference to the Family Reunification Directive<sup>131</sup> is for informative purposes only. In addition to the EU Directives, the CJEU jurisprudence clarified the status and the free movement right of TCNs, providing positive and broader interpretations expanding this status. These are the focus of discussion in the following sections with the aim to identify weaknesses that potentially make a difference between the EU's approach to EU and non-EU HS migrants which impacts on the opportunities and potential for scientific mobility to the EU as an attractive destination.

#### **2.7.1. B. 1. Directive 2005/71/EC (Researcher Dir) and the Recast Dir. 2016/801**

The aim behind the Researcher Directive was twofold. One was to promote scientists' and researchers' mobility from third countries by creating more favourable admission conditions to the EU. The other was to address the EU needs for more scientific man power to meet the 2002 European Council target of 3% of gross domestic product (GDP) invested in research.<sup>132</sup>

Under this Directive, TCN scientists and researchers are entitled to reside in one or more EU MSs for more than 3 months for research purposes. They are holders of an appropriate HE qualification, which gives access to doctoral programmes, and are selected by a research organization approved by the MS<sup>133</sup> for carrying out a research project for which the above qualification is normally required. For TCN researchers who work with an approved research establishment, MSs are to issue a residence permit for at least one –year period and renew it provided they possess the required documents, sufficient resources and medical insurance.<sup>134</sup> For research projects lasting for less than one year, the residence

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<sup>128</sup> Recast Directive of 19.5.2011 amending Directive 2003/109/EC to extend its scope to beneficiaries of international protection [2011] OJ L 132

<sup>129</sup> European Charter for Researchers (n. 29)

<sup>130</sup> Code of Conduct for the Recruitment of Researchers (n. 30)

<sup>131</sup> Directive 2003/86/EC of 22 September 2003 on the right to family reunification [2003] OJ L 251

<sup>132</sup> Directive 2005/71/EC para 4

<sup>133</sup> Directive 2005/71/EC Article 5

<sup>134</sup> Ibid Articles 6 and 7

permit is to be issued for the project's duration.<sup>135</sup> However, residence permit may be given for a shorter period than the research project duration potentially leading to unnecessary administrative problems and expenses. A researcher's family members are to be granted a residence permit to accompany them the duration of which is to be the same as that of the researcher's depending on their travel documents,<sup>136</sup> however without guaranteed labour market access.

Furthermore, under this Directive, researchers may teach in accordance with national legislation.<sup>137</sup> They are also allowed to carry out part of their research in another MS<sup>138</sup> but for periods longer than three months a new hosting agreement may be required.<sup>139</sup> Furthermore, researchers are entitled to equal treatment with MS nationals regarding working conditions, pay, dismissal, tax benefits and social security.<sup>140</sup> Regarding procedures MSs competent authorities are to decide on a researcher's application as soon as possible.<sup>141</sup> A number of shortcomings in this Directive identified by the Commission<sup>142</sup> and commented on by scholars<sup>143</sup> created a need for more effective policies in this area,<sup>144</sup> and led to the adoption of the new Directive 2016/801 of 11 May 2016<sup>145</sup> with a deadline of its transposition into national law the 23<sup>rd</sup> May 2018.

The main weaknesses concerned admission conditions including the obtainment of visas and residence permits; absence of time limits for evaluating and deciding on applications<sup>146</sup>; residence rights after a research project termination since without the possibility of extending the researcher residence permit, researchers were not able to seek employment or apply for jobs; no family reunification rights; lack of opportunities to be integrated in the EU labour market; limited possibilities for intra-EU mobility; exclusion of students applying to reside in a MS for research purposes leading to a doctoral degree from the Directive's scope<sup>147</sup> and finally a large margin of discretion left to MS since

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<sup>135</sup> Ibid Article 8

<sup>136</sup> Ibid Article 9

<sup>137</sup> Ibid Article 11

<sup>138</sup> Ibid Article 13

<sup>139</sup> Ibid

<sup>140</sup> Ibid Article 12

<sup>141</sup> Ibid Article 15

<sup>142</sup> Commission Staff Working Document on the Proposal for a Directive of the European Parliament and of the Council on the conditions of entry and residence of TCNs for the purposes of research, studies, pupil exchange, remunerated and unremunerated training, voluntary service and au pairing, recasting and amending Directives 2004/114/EC and 2005/71/EC COM (2013) 151 final and SWD (2013) 78 final, 10–22.

<sup>143</sup> See for example, Anja Wiesbrock 'Free Movement of Third-country Nationals in the European Union: The Illusion of Inclusion' (2010) *European Law Review* 35 (4): 455-475

<sup>144</sup> European Parliament, 'Foreign Students and Researchers: New Rules for Mobility', At a Glance, May 2016, at: [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS\\_ATA%282016%29581990](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_ATA%282016%29581990)

<sup>145</sup> Directive 2016/801

<sup>146</sup> Agne Vaitkeviciute 'Migration and Mobility of Third-country Researchers and Students in the EU and Switzerland', (13 February 2017) *Jusletter* p.13, p.5

<sup>147</sup> Researcher Directive Article 3b

whether or not researchers are allowed to stay was subject to national rules.<sup>148</sup> Key changes under the new Directive 2016/801 aim to remove the aforementioned legal barriers, thus improving and simplifying the entry and residence conditions of TCNs wishing to come to the EU for research purposes, facilitating their intra-EU mobility<sup>149</sup> and improving their current legal status.<sup>150</sup> These are briefly discussed below.

The requirements for the general admission conditions for research are now set out clearly<sup>151</sup> with the hosting agreement submission, or the hosting research organisation contract, approved as per national laws, being the main specific admission condition for researchers.<sup>152</sup> Once all general and specific conditions are fulfilled, a TCN should be admitted for research purposes to the MS<sup>153</sup> also in the spirit of the Court's ruling in *Ben Alaya*<sup>154</sup>, where the importance of clear and unambiguous wording regarding the conditions as these are laid down in the Students Directive<sup>155</sup> is highlighted.<sup>156</sup> A major improvement of the current legal status of TCN researchers is access to job-seeking or setting-up of a business for at least a 9- month period following research<sup>157</sup> with their family members having work access<sup>158</sup> as well.

TCN researchers are also entitled to a legal challenge to MS Courts<sup>159</sup> and thus being offered a more effective judicial protection. Other procedural guarantees relate to a time limit set for dealing with residence permits and long-stay visas applications<sup>160</sup>, easy access to information about applications and entry and residence, conditions for research of TCNs and their family members.<sup>161</sup> Furthermore, there is an increase in possibilities for intra-EU mobility but arguably mobility rules are not simplified enough. For example, for mobility for up to 6 months in one or several second MSs a valid authorisation is required, issued by the first MS.<sup>162</sup> A notification including a long list of documents can be required for submission to the second MS (s).<sup>163</sup> Additionally for mobility for more than 6 months per MS a notification or application will be required subject to submitting the same documents as for the first admission to the second Member State (s') competent

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<sup>148</sup> Commission SWD COM (2013) 151 and SWD (2013) 78 (n. 137)

<sup>149</sup> Paras 14 and 44 of the Preamble of Directive 2016/801

<sup>150</sup> Art. 25 para 1 Directive 2016/801

<sup>151</sup> *Ibid* Art. 7

<sup>152</sup> *Ibid* Arts 8 and 10

<sup>153</sup> *Ibid* para 30

<sup>154</sup> Case C-491/13 *Mohamed Ali Ben Alaya v Bundesrepublik Deutschland* ECLI: EU: C: 2014:2187, para 35

<sup>155</sup> Directive 2004/114, Articles 7 and 8

<sup>156</sup> Directive 2016/801, para 30, and Art 5(3)

<sup>157</sup> *Ibid* Art. 25, para 1

<sup>158</sup> *Ibid* Arts 26 and 30

<sup>159</sup> *Ibid* Art. 34, para 5

<sup>160</sup> *Ibid* Art. 17, paras 1–2

<sup>161</sup> *Ibid* Art. 35

<sup>162</sup> *Ibid* Art. 28, para 1

<sup>163</sup> *Ibid* Art 28 paras 2-10

authorities.<sup>164</sup> For family members the same rules as for the researcher apply.<sup>165</sup> However, the new Directive provides for the family reunification right for TCN researchers' family members<sup>166</sup> for whom MSs are under the obligation to issue a residence permit<sup>167</sup> in accordance with the Family Reunification Directive if its conditions are met.

Compared to the Researchers Directive, the new Directive preamble encourages MSs to treat doctoral candidates as researchers.<sup>168</sup> However, by the definition of a researcher, under the new Directive, as a TCN holder of a doctoral degree or a HE qualification having access to doctoral programmes<sup>169</sup> doctoral candidates may not be considered as researchers by Member States. This means that MSs are given direction but have the discretion to interpret this definition as they see fit and regard doctoral candidates as students. Arguably the right approach would be to treat all TCN doctoral candidates as researchers for the purpose of the Recast Directive.

Finally, the new Directive does not apply to TCNs who enjoy LTR status,<sup>170</sup> TCNs who are studying in the EU, TCNs who reside temporarily or have a formally limited residence permit<sup>171</sup> and those who are admitted as highly qualified<sup>172</sup> under the Blue Card Directive. Evidently the aforementioned provisions create inconsistencies in TCN researchers' and students' status, excluding them from the possibility to obtain the LTR status or be granted a right of getting a blue card in the MS of the EU.

In the light of the above, there is evidence that non-EU researchers and HS migrants including doctoral candidates and their family members are still treated differently from their EU counterparts. Arguably despite the improvements under the new Directive the possibilities for them and their family members to access LTR in the EU as well as their integration chances after completion of their studies or research are very low. This is evident by the fact that researchers' and students' mobility is subject to national internal law, dependent on wide margin of discretion of MSs and complex administrative procedures. At the same time the stay for a period of least nine months during which researchers and students are allowed to look for a job or set up a business<sup>173</sup> is subject to the fulfilment of certain conditions and requirements and submission of relevant

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<sup>164</sup> Ibid Art. 29 paras 1-7

<sup>165</sup> Ibid Art 30

<sup>166</sup> Ibid Art 26 para 1

<sup>167</sup> Ibid Art. 26, para 4

<sup>168</sup> Para 12 of the Preamble of Directive 2016/801

<sup>169</sup> Directive 2016/801 Art. 3, para 2

<sup>170</sup> Ibid Art. 2 para 2(d)

<sup>171</sup> Ibid Art 2 paras 2 (e) (f)

<sup>172</sup> Ibid Art 2 para 2 (g)

<sup>173</sup> Art. 25, para 1 of the Recast Directive

documentation such as getting residence permits for a job search<sup>174</sup> in such a short period of time.

### 2.7.1. B. 2. Directive 2009/50/EC (Blue Card Directive-BCD)

The aim of the BCD is to increase investment in research and innovation by attracting TCN well-qualified potential workers in the EU since immigration from outside the EU is considered a source of HS people.<sup>175</sup> At the same time it addresses the need to make the EU internationally more competitive,<sup>176</sup> improve labour market efficiency<sup>177</sup> and limit brain drain.<sup>178</sup> The BCD concerns HS TCNs who want to be admitted to a MS for more than three months<sup>179</sup> to a maximum of four years<sup>180</sup> for employment purposes. After a period of 18 months of legal residence, they may move to another MS to take up highly qualified employment subject to the limits set by the MS on the number of non-nationals accepted.<sup>181</sup> After two years of legal employment, they may receive equal treatment with nationals as regards access to any highly qualified employment.<sup>182</sup>

In order to be eligible, applicants must produce: a recognized diploma and have at least five years of professional experience;<sup>183</sup> a work contract of at least a year<sup>184</sup>; a valid travel document and a valid residence permit or a national long-term visa; and proof of sickness insurance.<sup>185</sup> Family members can accompany them. The application procedure is expected to take less than three months while the issued EU Blue Card is valid for a standard period of one to four years. However its application can be rejected if the MS decides to give priority to EU citizens, TCNs with a preferred status under Union law or who are legal residents or who are EU long-term residents and wish to move to that MS. Additionally MSs determine the number of TCNs they admit for HS employment purposes<sup>186</sup> since the admission of economic migrants is a shared competence between the EU and its MSs. In particular, any measure proposed in the legal migration area shall not affect MSs' right to determine admission volumes of TCNs coming from third countries to their territory in order to find work, whether employed or self-employed.<sup>187</sup> For some MSs

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<sup>174</sup> Art. 25, paras 2–7 of the Recast Directive

<sup>175</sup> Para 4 of the Preamble of Directive 2009/50/EC

<sup>176</sup> Ibid para 3

<sup>177</sup> Ibid para 15

<sup>178</sup> Ibid para 22

<sup>179</sup> Directive 2009/50/EC Art 1

<sup>180</sup> Ibid Art 7 (2)

<sup>181</sup> Ibid Art 18

<sup>182</sup> Ibid Art 12

<sup>183</sup> Article 2

<sup>184</sup> Article 5 (a)

<sup>185</sup> Article 5 (e)

<sup>186</sup> Para 8 of the Preamble of Directive 2009/50/EC

<sup>187</sup> Article 79 (5) TFEU

such as Cyprus, Bulgaria, Greece and Romania, this can be a justification to put a zero quota for HS migrants which is in contradiction with the BCD and its objectives.<sup>188</sup> For countries opting out of this directive such as the UK, the country's points-based system Tier 1 is the pathway for highly skilled migrants. In the event that EU Blue Card holders wish to move to a second MS after the set period of eighteen months, they must apply for another EU Blue Card, which practically means re-evaluation of all national conditions in force in the second MS.

Regarding this Directive's scope the definition of HS TCN worker as provided under the BCD means a person who has the required adequate and specific competence, as proven by higher professional qualifications<sup>189</sup> attested by evidence of HE qualifications lasting at least three years or by at least five years of relevant professional experience of a level comparable to HE qualifications.<sup>190</sup> Thus the most obvious indicators of HS Immigration are the education level<sup>191</sup> or occupation. The above definition could create confusion since in the relevant existing literature there is no universal or clear definition for HS Immigration.<sup>192</sup> Furthermore, based on the scope of this definition the BCD only applies to TCN employees excluding entrepreneurs and HS service providers who have a high potential to provide innovation, employment creation<sup>193</sup> and growth-creating potential.<sup>194</sup>

As for the definitions of HS occupations, these rely on statistics based on the International Standard Classification of Occupations (ISCO), and consider, among others, managers, professionals and associates. Moreover, the Manual on the Measurement of Human Resources of 1995, or the "Canberra Manual"<sup>195</sup> limits its focus on S&T occupations and thus disregards many other HS categories, such as teachers, healthcare providers and medical trainee specialists. It is also pointed out that definitions in European

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<sup>188</sup> See Chapters 3 and 4

<sup>189</sup> Art 2 (b) Directive 2009/50/EC

<sup>190</sup> Ibid Article 2 (h)

<sup>191</sup> In relation to para 9 of the Preamble of Directive 2009/50/EC, reference may be made to the International Standard Classification of Education (ISCED) 1997 levels 5a and 6. This, however, considers mainly tertiary education

<sup>192</sup> Lindsay Lowell, 'Chapter 2: Highly skilled migration', in IOM, World Migration Report (2008) <http://www.iadb.org/intal/intaledi/PE/2008/02382a04.pdf>

<sup>193</sup> Part II 'Migrant Entrepreneurship in OECD Countries' in OECD, *Migrant Entrepreneurship in OECD Countries*, (12 July 2011)

<sup>194</sup> European Commission, 'Review of Directive 2009/50/EC of 25 May 2009 on the conditions of entry and residence of third-country nationals for the purposes of highly qualified employment (EU Blue Card Directive)' Inception Impact Assessment, 16 July 2015, at:

[http://ec.europa.eu/smart-regulation/roadmaps/docs/2016\\_home\\_025\\_review\\_eu\\_blue\\_card\\_directive\\_en.pdf](http://ec.europa.eu/smart-regulation/roadmaps/docs/2016_home_025_review_eu_blue_card_directive_en.pdf)

<sup>195</sup> OCDE 'The Measurement of Scientific and Technological Activities', Manual on the Measurement of Human Resources Devoted to ST "Canberra Manual" OCDE/GD (95)77 (Paris 1995)

law on migration regarding who is considered a HS migrant are too varied and flexible in nature.<sup>196</sup>

Regarding the indicator of education in its strictest definition of HS workers this refers to those who possess a master's professional or doctorate degree.<sup>197</sup> Although the BCD does not apply to those TCNs who apply to reside in a MS as researchers in order to carry out a research project<sup>198</sup> under the provisions of Directive 2005/71/EC, it may apply to those who do research but do not have a research position as linked to a specific project. Obviously, there is lack of clarity about the very concept of "HS immigrants" considering the above definitions.

Based on the above analysis, despite the huge potential of HS TCNs, the opportunities for intra-EU mobility are few.<sup>199</sup> Their chances for being granted Blue Cards are also low since conditions which can make their mobility right exercisable are affected by the extensive discretionary powers of MSs. At the same time the fact that many MSs run parallel national schemes to attract HS TCNs creates a complex and fragmented landscape of many different regimes for the admission of HS TCNs<sup>200</sup>, giving rise to competition with the EU Blue Card and with each other.<sup>201</sup>

Following identification of the above shortcomings, weaknesses and limited usage, as evidenced by an overall small number of HS permits issued<sup>202</sup>, and insufficient attractiveness of the EU BCD<sup>203</sup> the EU Commission adopted a proposal for a new EU BCD. The aim is to better equip the current EU immigration system for HS workers for the current and future challenges and assess various policy options in order to address them.

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<sup>196</sup> Sergio Carrera, 'Building a Common Policy on Labour Immigration: Towards a Comprehensive and Global Approach in the EU', (2007) CEPS Working Document No. 256, p.2

<sup>197</sup> Barry Chiswick, 'High-Skilled Immigration in a Global Labor Market American Enterprise' (2011) Institute for Public Policy Research WD.C p.129

<sup>198</sup> Article 3 (d) Directive 2009/50/EC

<sup>199</sup> Commission Communication, 'Proposal for a Directive of the European Parliament and of the Council on the Conditions of Entry and Residence of TCNs for the Purposes of Highly Skilled Employment' Strasbourg, 7.6.2016 COM (2016) 378 final, p.2

<sup>200</sup> Katharina Eisele, 'Why come here if I can go there? Assessing the 'Attractiveness' of the EU's Blue Card Directive for 'Highly Qualified' Immigrants', (2013) Liberty and Security in Europe Papers No. 60, p.23

<sup>201</sup> European Commission, Inception Impact Assessment (n. 194) p.3

<sup>202</sup> National permits for HS went up from 19 755 in 2012, to 21 940 in 2013 and 24 922 in 2014, while the rise of EU Blue Cards was less marked, from 3 664 in 2012, to 12 964 in 2013 and 13 852 in 2014, at:

[http://www.europarl.europa.eu/meetdocs/2014\\_2019/documents/com/com\\_com\(2014\)0287\\_/com\\_com\(2014\)0287\\_en.pdf](http://www.europarl.europa.eu/meetdocs/2014_2019/documents/com/com_com(2014)0287_/com_com(2014)0287_en.pdf)

<sup>203</sup> See for example Commission Communication on the implementation of Directive 2009/50/EC on the conditions of entry and residence of third-country nationals for the purpose of highly qualified employment ("EU Blue Card") COM (2014) 287 final and Commission Communication, 'A European Agenda on Migration', COM (2015) 240 final



### 2.7.1 B. 3 Recast Dir. 2011/51/EU amending Long Term Residence Dir. 2003/109/EC

Although the Long Term Residence (LTR) Directive 2003/109 on the status of non-EU nationals who are LTRs may not apply directly to scientists and researchers, it may apply to their family members and consequently it is relevant to the present study. In 2011 the LTR Directive was amended to extend to refugees and people with subsidiary protection. Under the LTR Directive TCNs who have legally and continuously resided for 5 years in a MS are granted a LTR status dependent upon the person having a stable and regular source of income, health insurance and, when required by the EU MS, having complied with integration measures.<sup>204</sup> LTR applicants must also not constitute a threat to public security, public policy<sup>205</sup> and public health.<sup>206</sup> The main advantages of holding such status can be summarised as accessing equal treatment with nationals<sup>207</sup> in a number of areas such as access to employment and self-employed activity, education and vocational training, social protection and assistance and access to goods and services; the conditional right to reside in another MS<sup>208</sup>; the reinforced protection against expulsion<sup>209</sup>, and conditions for TCN family members accompanying a TCN<sup>210</sup> not covered under the Reunification Directive.

The focus of the next section is on the CJEU's interpretations expanding TCNs' free movement rights demonstrating the Court's approach in ensuring that MSs guarantee that no disproportionate administrative obstacles are created for TCNs wishing to benefit from the LTR and the equal treatment that is subsequently associated with it.

#### 2.7.1. C. CJEU Case Law on Third Country Nationals (TCNs)

Although there is no specific case law on migrant scientists there are a number of landmark cases relating to the interpretation of the LTR Directive specific provisions with particular relevance to the respect of Union rights relating to TCNs pertaining to the free movement of EU citizens' and their TCN family members and equal treatment guarantee.<sup>211</sup> This implies that CJEU's role has contributed in a positive way to TCNs' enjoyment of free movement rights given the fact that EU LTR is the only way to legally reside and work in other EU MSs for those TCN citizens who do not naturalise.<sup>212</sup>

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<sup>204</sup> Directive 2011/51/EU Art 15

<sup>205</sup> Ibid Art 17

<sup>206</sup> Ibid Art 18

<sup>207</sup> Ibid Art 11

<sup>208</sup> Ibid Articles 14 and 15

<sup>209</sup> Ibid Art 12

<sup>210</sup> Ibid Art 16

<sup>211</sup> Recast Directive 2011/51/EU Art 11

<sup>212</sup> Kees Groenendijk, 'The Long-Term Residents Directive, Denizenship and Integration', in A. Baldaccini, E. Guild and H. Toner (eds.), *Whose Freedom, Security and Justice? EU Immigration and Asylum Law and Policy* (Hart, 2007) p.429

Not being born in a MS, EU citizenship acquisition comes as a consequence of residence and integration. This creates difficulties for the enjoyment of any derivative rights making residence length to be the most obvious direction for acquiring any other benefits as seen by the EU migration Directives requirements. From the Court's jurisprudence it is indicated that the Court has aimed at limiting the obstacles for TCNs to exercise their free movement right in such cases, even when there was clear opposition on the part of MSs as in *Metock*<sup>213</sup>. This case was of major political significance particularly for Ireland and Denmark and concerned the residence right for EU citizens' family members. The Court ruled definitively that the residence right for family members of an EU citizen must be guaranteed, whether or not the person had previously resided lawfully in another MS, and whether or not the person entered that MS before or after marriage.

In relation to the guarantee of equal treatment to LTRs as opposed to nationals of MSs in *Kamberaj*<sup>214</sup> the Court interpreted the LTR Directive's provisions on TCNs' status and its implications for national social security systems. The Court held that when determining the social security, social assistance and social protection measures defined by their national law and subject to the principle of equal treatment enshrined in Article 11(1) (d) of the LTR Directive MSs must comply with these rights.

The Court's decision in *Commission v the Netherlands* made clear that the discretion granted to MSs by the LTR Directive is not unlimited and that MSs may not apply national rules which are liable to jeopardise the achievement of the objectives pursued by a directive and, therefore, deprive it of its effectiveness.<sup>215</sup> In the same case it was held that the level of fees charged for residence permit applications for LTRs must not create obstacles to the LTR status obtainment.<sup>216</sup> The scope of the LTR Directive was examined by the Court in *Singh*<sup>217</sup> when it interpreted the meaning of the concept '*formally restricted residence permit*' under Art 3(2) (e). The Court ruled that this concept does not include a fixed-period residence permit but that a fixed period residence permit can be relevant for the accumulation of five years as required by the Directive and that the formal limitation attached to that permit does not prevent the LTR of the TCN in the MS.<sup>218</sup>

The Court's clarifications in the above mentioned cases regarding the documentation and fees requested to accompany LTR applications as well as the interpretation of Art 3(2)

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<sup>213</sup> Case C-127/08 *Blaise Baheten Metock and others v Minister for Justice, Equality and Law Reform* [2008] ECR I-6241

<sup>214</sup> Case C-571/10 *Servet Kamberaj v Istituto per l'Edilizia sociale della Provincia autonoma di Bolzano (IPES) and Others* [2012] ECLI:EU:C:2012:233

<sup>215</sup> Case C-508/10 *Commission v the Netherlands*, [2012] ECLI: EU: C: 2012: 243 paras. 64-66

<sup>216</sup> *Ibid* para 69

<sup>217</sup> Case C-502/10 *Staatssecretaris van Justitie v Mangat Singh* [2012] ECLI: EU:C: 2012: 636, see Chapter 4

<sup>218</sup> *Ibid* para 54, see Chapter 4

(e) are crucial as these issues have been found to be a recurring obstacle for many TCN family members of EU citizens in many MSs.<sup>219</sup>

In the light of the above, when taken together the Court's rulings in all the above mentioned cases contribute to ensuring the LTR Directive's effectiveness and serve its primary objective which is none other than the integration of TCNs who are settled on a long term basis in the MSs.<sup>220</sup>

## 2.8 Conclusion

As it has been demonstrated, all that has been achieved regarding the ERA vision and scientific mobility to and in the ERA is only through policy coordination at a national and supranational level within the Union Institutions. At a supranational level the call is to increase actions in a joint effort and for the Union interest as a whole, so that researchers make Europe "innovative, competitive and job-creating".<sup>221</sup> At the same time MSs are invited to participate actively in the ERA completion by implementing reforms of their national research systems which together with ambitious initiatives such as Horizon 2020 will help deliver the ERA objectives. However, the European research and innovation landscape is diverse with MSs having their own strengths and specificities and therefore still fragmented. This creates barriers which prevent Europe from fully delivering a unified ERA in which researchers, particularly TCN researchers, scientific knowledge and technology circulate freely.

HS migration has been recognised as a contributor to the European growth in competitiveness and research excellence and this makes migration an integral part of the whole process of shaping policies and conditions. However, regarding EU migration law acquis there is fragmentation since it draws from various sources of law applying to TCNs. In turn EU Migration Directives demonstrate a sectorial approach towards the Migration field according to which TCNs' legal status remains dependent on which category of TCNs they belong to. This coupled with the area of national discretion left to MSs within this field of law results in variations in the free movement provisions for the different mobile TCN groups. In this way MSs can shape mobility based on their own national law and/or have enough room for interpretation and implementation.

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<sup>219</sup> DG for Internal Policies, Policy Department C: Citizen's Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs Petitions, 'Obstacles to the Right of Free Movement and Residence for EU Citizens and their Families-Comparative Analysis' PE 571.375 (EU, September 2016), see Chapter 4

<sup>220</sup> Recitals 4, 6 and 12 of the Preamble to the Recast Directive 2011/51/EU

<sup>221</sup> European Commission, 'First Action Plan for Innovation' (1997) EC Document drawn upon the basis of COM (96) 589 final, p.13, <http://aei.pitt.edu/5589/1/5589.pdf>

Undoubtedly, the CJEU's role was able to give the citizenship concept a more substantial content.<sup>222</sup> The citizenship status has made enough and sufficient progress to be referred to in the case-law as the only reason behind the granting of more rights.<sup>223</sup> EU scientists, researchers and doctoral candidates have rights by virtue of their status. However, their TCN counterparts are granted rights on condition they meet the requirements of the Directives that target their category and provided the MSs competent authorities decide positively on their application. Consequently, the free movement rights of EU and non-EU scientists, researchers and doctoral candidates are affected by the MSs' behaviour since European citizenship is a derivative form of citizenship and since MSs have the competence to define the form and scope of rights they grant to TCNs. In the absence of EU fixed standards for rights that all could share, the Court's decisions set the rules according to which the legality of MS' standards is judged.<sup>224</sup>

Overall, despite the shared vision of creating a European Research Area between the European institutions, the MSs and the stakeholders involved, the voluntary nature for the various EU programmes and initiatives and the existence of different legal frameworks for European and non-European scientists moving within and to the EU coupled with the national discretion left to MSs prevent the EU as a 'supranational' organization from delivering the ERA concept. The ERA also fails as at the intersection of the ERA framework and the AFSJ since there is not clear free movement for TCN scientists, researchers, TCN highly-qualified people, including doctoral candidates and their family members who do not enjoy free movements rights to the same extent with their EU counterparts. Application of Schein's theory indicate that the EU as a supranational organization is facing leadership challenges that are affected by and affecting its external adaptation and internal integration challenges in its crucial role in providing a broader and seamless approach to EU migration law and free movement rights with joint and concurrent efforts with its MSs at EU and national levels.

The focus of the next chapter is on the Cyprus national research environment and the extent to which this country implements EU law in the field of research and free movement.

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<sup>222</sup> Jacobs G Francis, 'Citizenship of the European Union—A Legal Analysis' (2007) *European Law Journal* 13(5): 591–610, p.592

<sup>223</sup> Panos Stasinopoulos, 'EU Citizenship as a Battle of the Concepts: *Travailleur v Citoyen*' (2011) *European Journal of Legal Studies*, 4(2), 74-103, p.76

<sup>224</sup> *Bidar* (n. 85)

## Chapter 3 - Cyprus: Laws and Policies on the Research Area and Free Movement of Scientists

### 3.1 Introduction

This chapter focuses on the Cypriot national research system and its research law and policy framework with a twofold aim. The first aim is to examine the organization and structure of the Cyprus research system and its main providers and performers in order to appreciate the structural organization of research offered to all researchers irrespective of their nationality. The second aim is to explore the legal framework governing research performers' mobility such as EU and non-EU scientists, researchers and HS migrants in the country. Cyprus is the third largest Mediterranean island and one of the smallest EU MSs with a population of 803,000 (0.2% of the EU-28). Its historical, political and legal history is disproportionate considering its size and population.<sup>1</sup>In 1960 it became an independent sovereign republic after being a British Crown Colony since 1925.

Five main landmarks shaped by exogenous and endogenous causes in the country's modern political existence affect the national research environment and the country's adaptation and organizational reform to new, existing, external and internal challenges. The first is Cyprus' EU accession. The second is the effect of the 2011 economic crisis that hit the country, the unfolding financial distress since then and the country's efforts towards recovery. The third is the ongoing occupation of 37% of the island's territory by the Turkish military since 1974 with all its disastrous economic consequences. The fourth is the creation of the first public university in 1989 followed by the establishment of other HE institutions in 1992<sup>2</sup> while the fifth is the country's utilization of gas for its own energy needs.

Cyprus' EU accession in 2003<sup>3</sup> together with other nine acceding countries<sup>4</sup> on 1<sup>st</sup> May 2004 was the result of a long effort beginning as early as 1972, when Cyprus signed an Association Agreement with the European Economic Community (EEC) which came into

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<sup>1</sup> Andreas Neocleous, *Neocleous's Introduction to Cyprus Law* (3<sup>rd</sup> ed Andreas Neocleous & Co LLC, 2011), p.xiii

<sup>2</sup> George Michailidis and Bernard Musyck 'Smart Specialization Strategy in Cyprus' Expert Review for DG REGIO February 2013, [http://www.structuralfunds.org.cy/uploadfiles/PPT\\_RS13\\_strategyCyprus.PDF](http://www.structuralfunds.org.cy/uploadfiles/PPT_RS13_strategyCyprus.PDF)

<sup>3</sup> EU Accession Treaty of the RoC: Ratifying law No 35(III)/2003, Official Gazette No 3740, 25.7.2003, OJ L 236, 23.9.2003 Document 12003T/TXT

<sup>4</sup> The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

force in 1973.<sup>5</sup> After its accession and until 2010 Cyprus had a strong average annual growth of 4% outperforming the EU-27 average growth rates<sup>6</sup> until the risk of economic collapse that emerged in 2011 and resulted in the country requesting financial support from the EU. In March 2013 following a bailout agreement with the EU, the European Central Bank, and the International Monetary Fund, a group of three described as ‘Troika’,<sup>7</sup> the Cyprus Government agreed to a mandatory deposit taxation of bank deposits above 100,000 Euros to save the over-indebted banks and ease public sector credit pressures.<sup>8</sup> This caused further turbulence and a reduction in all types of public funding resulting in underinvestment in research, innovation and growth and unemployment rise<sup>9</sup> with the country exiting its three-year financial assistance programme in March 2016.

Arguably the sovereign debt crisis is considered the second major blow to the country’s 40-year- growth following the 1974 Turkish invasion. Although a positive development was the creation of the first state-owned universities, marking the beginning of research projects<sup>10</sup> the research system in Cyprus has been growing mainly over the last two decades with a weak demand from business and industry resulting in the low number of human resources for research activities.<sup>11</sup> However, with the recent natural gas discovery and the ongoing hydrocarbon exploration activities offshore Cyprus, the country’s energy sector profile is set to change radically,<sup>12</sup> potentially allowing the country to expand its international role.<sup>13</sup>

An appraisal of the Cypriot national research environment in the field of research and free movement provisions regarding EU and non-EU scientists against the impact of the abovementioned external and internal challenges, which the country needs to address, lies at the core of the present Thesis. This Thesis seeks to answer a twofold research question by employing Schein’s organizational culture theory.<sup>14</sup> The first question

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<sup>5</sup> Draft Decision of the EC-Cyprus association Council derogating from the provisions concerning the definition of the concept of originating products laid down in the Agreement establishing an association between the EEC and the RoC SEC/2000/2273 final

<sup>6</sup>Lena Tsipouri and Dariya Rublova, ‘Analysis of Policy Mixes to Foster R&D investment and to Contribute to the ERA: Cyprus’ (2009) ERAWATCH Country Report 2009, p.11

<sup>7</sup> The term Troika comes from the Russian meaning 'group of three'.

<sup>8</sup> European Commission, ‘The Economic Adjustment Programme for Cyprus’ (2013) Occasional Papers 149, p.7

<sup>9</sup> European Commission, European Semester Thematic Fiche Research and Innovation 2015 (2016) [http://ec.europa.eu/europe2020/pdf/themes/2015/research\\_and\\_innovation.pdf](http://ec.europa.eu/europe2020/pdf/themes/2015/research_and_innovation.pdf)

<sup>10</sup> Christophoros Christophorou et al., *Sustainable Governance Indicators 2016* (Bertelsmann Stiftung 2016), p.10

<sup>11</sup> European Commission, ‘Research and Innovation Performance in EU Member States and Associated Countries: Innovation Union Progress at Country Level’ (2013), p.48

<sup>12</sup> Cyprus National Reform Programme 2014 ‘Europe 2020 Strategy for: Smart, Sustainable and Inclusive Growth’ (2014)

<sup>13</sup> Christophoros Christophorou et al., *Sustainable Governance Indicators 2017* (Bertelsmann Stiftung, 2017) p.39

<sup>14</sup> Edgar Schein *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass 2004), 10-23. See Chapter 1, sections 1.3.1 A-1.3.1 B

addresses the attractiveness of the Cyprus research landscape to EU and non-EU scientists, researchers and HS migrants in the country. The second question seeks to provide an answer as to whether EU migration law *acquis* is accommodated within the Cypriot national legal system and what the impact of its implementation is. The key elements of Schein's organizational culture external adaptation<sup>15</sup>, internal integration<sup>16</sup> and leadership<sup>17</sup> are adopted as a reference frame to assess the strength and desired impact such a culture should have for the organization, its leaders, members and its operating environment.

This chapter, divided in five sections, considers the Cypriot national research system and its research, law and policy framework.<sup>18</sup> The second section examines the Cypriot national research landscape and the factors exercising an impact on it. The third section focuses on the structure and organization of the Cyprus research system with reference to the Cyprus policy-making model regarding research and innovation, the main research performer sectors, research activity, research performer groups and the linkage between them.

The fourth section considers the strengths and constraints of the national research landscape. The former includes, among others, a number of key science and technology areas. The latter refer to an over-broad research orientation with little engagement of enterprises to R&D activities and limited human resources for research. Shortage of researchers triggers the brain drain phenomenon and brings to surface the possibility of a potential brain waste. This research considers the latter a significant phenomenon since it can be systemic and which in the context of Cyprus has been under-researched (fifth section).

The sixth section begins with an introduction to Cyprus' immigration legislation and policy pertaining to the principle of free movement of EU and non-EU scientists, researchers and the HS<sup>19</sup>. The focus of this section is to examine how Directives 2004/38/EC (the Citizenship Rights Dir), 2005/71/EC (Researcher Dir.), 2009/50/EC (Blue Card Dir.) and 2003/109/EC (Long Term Residence Dir.) are transposed and implemented into national law.

The seventh section considers the challenges arising from the transposition and implementation of the EU citizenship and migration Union law into national law as these are reflected in practice and in landmark case law. A case study approach is used, systematizing the cases that most characteristically represent the relevant problematic

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<sup>15</sup> Schein (14) pp.10-23

<sup>16</sup> Ibid (14)10-23

<sup>17</sup> Ibid (14) 10-23

<sup>18</sup> See Chapter 1 sections:1.3.1 D-1.3.1 F

<sup>19</sup> The EU Free Movement Provisions were discussed in detail in Chapter 2 with particular reference to the category of people under consideration in this study.

areas. This section aims at examining the extent to which implementation of EU law in relation to the admission of the above stakeholders for scientific purposes, occurs in practice and not just on paper.

The eighth section concludes with reference to the application of the theoretical framework and its key elements to the national research environment in Cyprus and the impact of these on the mobility of research performers irrespective of their nationality.

### **3. 2: The National Research Landscape in Cyprus: Identification of Gaps**

Cyprus' 2004 EU accession was instrumental for the development of a research environment and the main driving force behind increased emphasis on Research and Development (R&D). This led to an increase in the R&D intensity<sup>20</sup> of Cyprus, improvement of science and technology levels and an upgrading in the knowledge intensity<sup>21</sup> of the national economy approaching the EU average level<sup>22</sup> prior the economic crisis. Due to the fact that the research and innovation (R&I) system in Cyprus is relatively young and new this is not surprising. The first public university was established in 1989, the first national research funding programme was launched in 1998, and the first R&I strategy was finalised in 2004 in the context of Cyprus' EU accession.<sup>23</sup> Additionally the R&I system depends mostly on public expenditure since the persistent problem of underinvestment in R&I by the business sector is a reality.<sup>24</sup>

Overall, the main source of total research funding comes from the public sector, accounting for over 62% of total funding in the period 2010-2013 (latest available data), followed by external funding, mainly European at 14.1%.<sup>25</sup> This came primarily from the EU Framework Programme for Research and Technological Development (FP7), which was the EU principal instrument for supporting collaborative research, development and innovation in science, engineering and technology<sup>26</sup> prior to the present EU FP, Horizon 2020, for R&I 2014-2020. In the same period the business sector contributed about 12%, about 0.05% of GDP, far below than the EU28 average (1.12%) while the remaining 4.3% derived from HEIs funding.<sup>27</sup> Private non-profit institutions are practically non-existent.

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<sup>20</sup> Gross Domestic Expenditure on R&D (GERD) as % of Gross Domestic Product (GDP) Source: European Commission Directorate-General for Research and Innovation 'Research and Innovation Performance in the EU, Innovation Union Progress at Country Level 2014' EUR 26334 EN (2014) 337-344

<sup>21</sup> The index on structural change that focuses on the sectoral composition and specialisation of the economy and shows the evolution of the weight of knowledge-intensive sectors and products and services

<sup>22</sup> European Commission (n11), p.48

<sup>23</sup> Lena Tsipouri et al., Research and Innovation Observatory- RIO Country Report 2015: Cyprus (No. EUR 27856 EN) Institute for Prospective Technological Studies, Joint Research Centre (2016), p.6

<sup>24</sup> Deloitte 'Researchers' Report 2014 Country Profile: Cyprus' (2015), p.3

<sup>25</sup> Tsipouri et al., (n. 23) p.24

<sup>26</sup> European Commission (n20)

<sup>27</sup> Tsipouri et al., (n. 23) p.24



A second major factor negatively affecting the national research landscape is the financial crisis that has concerned the country enormously. Since its onset and owing to the ongoing fiscal consolidation process, the R&D budget and measures aiming at boosting innovation have been greatly affected. In fact, the low R&D intensity target of 0.50% for 2020 which was set by the 2013 Cyprus National Reform Programme (NRP) for smart, sustainable and inclusive growth in the context of the third European Semester, compared to the Europe 2020 target of 3%<sup>28</sup>, remained the same for 2017.<sup>29</sup> Conversely in 2014 research performed by the sector of HE had increased over the same period from 43.7% to 53.5% of Gross Domestic Expenditure on R&D (GERD).<sup>30</sup>

A third major factor with an adverse impact on the national research landscape and economy is the occupation of 37% of the island's territory by the Turkish military. The aftermath of the 1974 Turkish invasion was the country's dependence on foreign aid with savings leading to huge fiscal, trade and current account deficits<sup>31</sup> setback in growth, loss of resources and lives, people displacement and other social traumas.<sup>32</sup>

A fourth factor relating to the Cypriot national research landscape is the small number of human resources available for research. Although Cyprus has the EU's second highest tertiary education attainment rate (52.5%, EU average: 37.9%)<sup>33</sup> at the end of 2015, the number of new doctoral graduates per thousand population aged 25–34 stood at 0.4 and 0.3 for 2012 compared to an EU average of 1.81.<sup>34</sup> At the end of 2012 (latest available date) total R&D personnel and researchers accounted for 0.62% of total active population, the lowest rate after Romania while most of the researchers are employed in HEIs (66% of total)<sup>35</sup>. This might be explained by a number of factors such as the weak demand from business and industry, the lack of investment in R & I and the absence of high-tech industrial activity which further limit researchers' employment opportunities and might

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<sup>28</sup> Cyprus National Reform Programme 2013 'Europe 2020 Strategy for: Smart, Sustainable and Inclusive Growth' prepared in collaboration with all pertinent Ministries and approved by the Council of Ministers on 24 May 2013 <[http://ec.europa.eu/europe2020/pdf/nd/nrp2013\\_cyprus\\_en.pdf](http://ec.europa.eu/europe2020/pdf/nd/nrp2013_cyprus_en.pdf)>

<sup>29</sup> EUROPE 2020 Cyprus National Reform Programme 2017 (April 2017), <https://ec.europa.eu/info/sites/info/files/2017-european-semester-national-reform-programme-cyprus-en.pdf>

<sup>30</sup> Deloitte (n. 24) p.3

<sup>31</sup> George Syrighas et al., 'Cyprus Economy: Past Successes, Current and Future Challenges' in Athanasios Orphanides and George Syrighas (eds.) *The Cyprus Economy Historical Review Prospects Challenges* (Central Bank of Cyprus, 2012) p.16

<sup>32</sup> Yiannis Papadakis, 'History Education in Divided Cyprus: A Comparison of Greek Cypriot and Turkish Cypriot Schoolbooks on the "History of Cyprus"' (2008) International Peace Research Institute, p.3

<sup>33</sup> European Commission Education and Training Monitor 2015 'Cyprus' European Union (2015), [http://ec.europa.eu/dgs/education\\_culture/repository/education/tools/docs/2015/monitor2015-cyprus\\_en.pdf](http://ec.europa.eu/dgs/education_culture/repository/education/tools/docs/2015/monitor2015-cyprus_en.pdf)

<sup>34</sup> Lena Tsipouri and Sophia Athanassopoulou, 'ERAWATCH Country Reports 2013: Cyprus', (2014) European Commission JRC Science and Policy Reports EUR 26756, p.20

<sup>35</sup> Eurostat, Total R&D personnel and researchers by sectors of performance, as % of total labour force and total employment, and by sex (rd\_p\_perslf) (2012)

potentially lead to brain drain and or brain waste phenomena<sup>36</sup> issues to be discussed in the following sections.

A fifth factor impacting on the national research environment relates to the developments in the field of hydrocarbons within Cyprus's Exclusive Economic Zone with the declaration of the commerciality of the 'Aphrodite' natural gas field considered an important milestone for the country towards the transition from gas resources discovery to the actual monetisation stage.<sup>37</sup>

Having considered the impact of new and old challenges, creating gaps in the national research environment in Cyprus next the focus of discussion is on the structure and organization of the Cyprus Research system and the strategic level of R&I governance.

The Cyprus model for policy-making and coordination is central ministerial or inter-ministerial responsibility for coordination, with weak advisory bodies, often linked to direct ministerial responsibility for funding decisions.<sup>38</sup> The President of the country is at the top-level body of Cypriot R&I governance advised by the National Council for Research and Innovation (NCRI) and the Cyprus Scientific Council (CSC)<sup>39</sup>. The main delivery tool for the R&D and innovation policy has been the multi-annual and multi-thematic National Reform Programme for R&I while the Research Promotion Foundation (RPF) is almost solely responsible for the implementation of RTDI policy in cooperation with the Directorate General of European Programmes, Coordination and Development (DG EPCD) and the main Cypriot funding agency.<sup>40</sup> The model of the R&I System in Cyprus is presented in Figure 1 below:

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<sup>36</sup> Frederic Docquier and Hillel Rapoport, 'Globalization, Brain Drain, and Development' (2012) *Journal of Economic Literature*, 50(3): 681-730 and Bernd Wächter, 'Brain Drain: What We Know and What We Don't Know', Ulrich Teichler (ed.) *The Formative Years of Scholars*, (Portland Press 2006). See also Chapter 5 sections 5.3-5.4

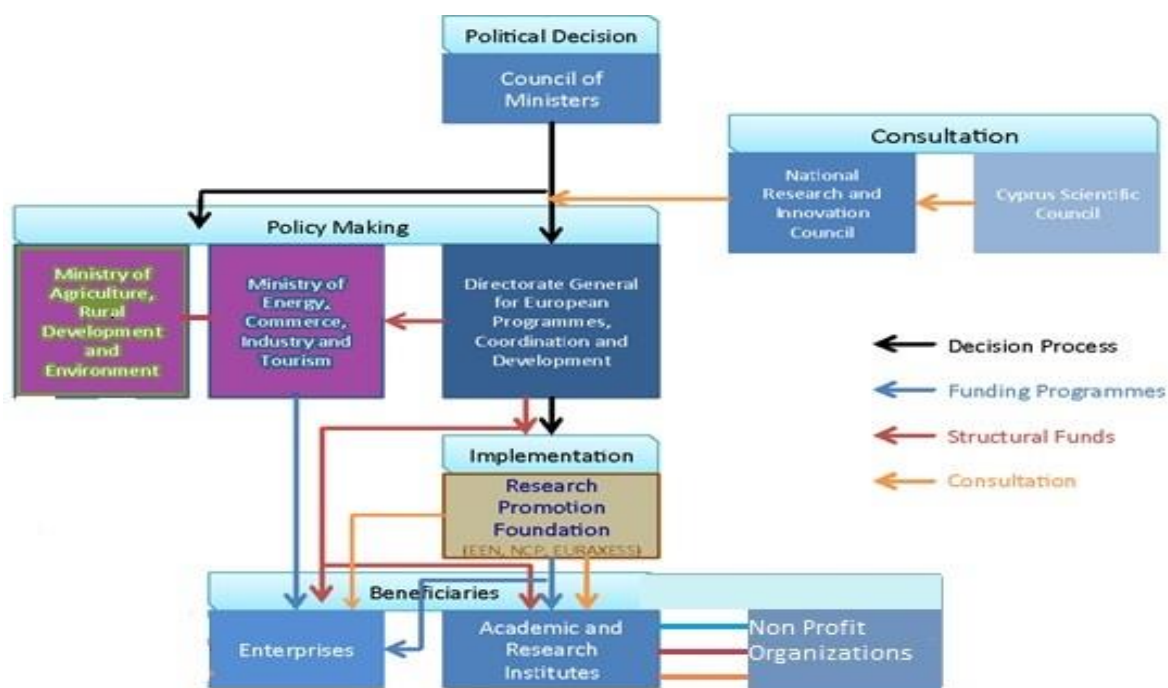
<sup>37</sup> Cyprus National Reform Programme 2017 (n. 29) p.3

<sup>38</sup> European Commission, ERAWATCH Research Inventory Report: Overview Across EU Countries', (2010), p.32, at <http://www.5toi.eu/wp-content/uploads/2016/11/Overview-across-EU.pdf>.

<sup>39</sup> See Chapter 1, section 1.3.1. E

<sup>40</sup> Research Promotion Foundation (RPF), at: [http://www.research.org.cy/EN/ipe\\_info/general\\_info.html](http://www.research.org.cy/EN/ipe_info/general_info.html). See Chapter 1, section 1.3.1. E

**FIGURE 1: MODEL OF THE R&I SYSTEM IN CYPRUS**



**Source:** Modified and updated based on the relevant scheme of the European Commission, Joint Research Centre-Institute for Prospective Technologies Studies (JRC-IPTS) (2014), ERAWATCH Country Reports 2013: Cyprus and National ‘European Research Area’ (ERA) National Roadmap for Cyprus 2016 – 2020 RoC Nicosia July 2017

In the context of governmental reforms towards building a more robust R&D policy system the Council of Ministers (Cyprus) approved ‘the Smart Specialisation Strategy for R&I (S3Cy)’ in 2015<sup>41</sup> to be implemented through the new R&I framework programme called ‘RESTART 2016-2020 Programmes’.<sup>42</sup> Given the absence of an independent and complete National R & I strategy, the S3Cy provides policy formulation and development guidance.<sup>43</sup>

Additionally, a new National Committee on Research, Innovation and Technological Development (NCRITD) was set up in 2013 with the purpose to prepare suggestions on a new R&I structure and governance. The recommendations of the Committee’s report were delivered to the President in spring 2014.<sup>44</sup> However a political decision is still to be made on how to implement the NCRITD recommendations.<sup>45</sup> The Government’s decision to continue at present with existing structures considering the

<sup>41</sup> Republic of Cyprus Directorate General for European Programmes Coordination and Development, ‘Smart Specialization Strategy’ at: [http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page44\\_en/page44\\_en?OpenDocument](http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page44_en/page44_en?OpenDocument)

<sup>42</sup> RPF, ‘Restart 2016-2020 Programmes’, at: <http://www.research.org.cy/el/restart-2016-2020>

<sup>43</sup> For more on the National Research System and national research policies see Chapter 5 section 5.1.4

<sup>44</sup> Presidency - Unit for Administrative Reform, Republic of Cyprus - December 2015, at: [https://issuu.com/presidency-reform-cyprus/docs/progress\\_report\\_-\\_december\\_2015\\_-\\_f/7](https://issuu.com/presidency-reform-cyprus/docs/progress_report_-_december_2015_-_f/7)

<sup>45</sup> Antonis Theocharous et al., ‘RIO Country Report 2016: Cyprus’ (2017) No. EUR 28500 EN, p.14

Committee findings<sup>46</sup> prolongs the R&D governance shortcomings<sup>47</sup>, making change prospects difficult to assess.

Cyprus is among those countries which do not have a single overarching national strategy for R&I, such as Croatia, Belgium, Portugal and Poland.<sup>48</sup> This might have potentially led to a broad research orientation and funding spreading throughout many and different research areas without specific funding lines. Conversely for MSs such as Finland and countries such as the UK there is establishment of formal advisory structures at all levels of science policy development and implementation leading to smart specialization. A single overarching strategy for R&I<sup>49</sup> and coordination by strong advisory councils and/or chief advisers are found in MSs such as Finland, Hungary, Romania, and former MSs such as the UK leading to smart specialization.<sup>50</sup>

### 3.3: Main Research Performer Sectors, Research Activity, Research Performer Groups

The main research performer sectors are: a) the public sector through public research institutes and universities, b) the private sector through private universities, private non-academic organizations and private non-profit organizations and c) the business sector through private small and medium-sized enterprises (SMEs). Industrial research is virtually absent due to lack of industrial base of which 99% of enterprises are SMEs with a services-oriented structure. The overall research activity performed by the above mentioned sectors for 2015 is summarized in Table 1 below with Cyprus compared with countries such as Romania (0, 49%), and Latvia (0, 63%), while the highest shares recorded are for Sweden (3, 26%) and Denmark (3, 03%).<sup>51</sup>

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<sup>46</sup> Presidency (n.44)

<sup>47</sup> European Commission, 'Country Report Cyprus 2017, Including an In-Depth Review and the Prevention and Correction of Macroeconomic Imbalances' (2017) Commission Staff Working Document, Brussels, 22.2.2017 SWD 78 final, p.46

<sup>48</sup> European Commission, 'European Research Area Progress Report 2016' (2017) EUR 28430, p.18

<sup>49</sup> Ibid. It is worth mentioning that the latest data is from 2016.

<sup>50</sup> ERAWATCH 2010 (n. 38)

<sup>51</sup> Statistical Services of the Republic of Cyprus 'Latest Figures: Research and Development Activity in Cyprus (2015)

<http://www.cystat.gov.cy/mof/cystat/statistics.nsf/All/B49A931B5B13AB74C225815D003189DF?OpenDocument&sub=1&sel=1&e=&print>

**TABLE 1: Overall Research Activity-Key Figures**

<b>Total R&amp;D expenditures for Cyprus in 2015: €85.3 million=0.48%</b> Average EU MSs: 2,03%	
<b>Research Activity Performance of total R&amp;D Expenditure by sector in 2015 (latest figures)</b>	
<b>Higher Education</b>	49.9% or €42,6 million
<b>Public Sector</b>	13,0% or €11,1 million
<b>Private Non-profit Institutions</b>	14,3% or €12,2 million
<b>Business Enterprises</b>	22.8% or €19,5 million
<b>Industrial Sector</b>	-----

**Source:** Own Compilation based on the Statistical Services of the Republic of Cyprus

In the business enterprise sector, the most dynamic businesses are pharmaceuticals (€7, 3 million) and information and communication (€10, 1 million) being also principal sources of R&D activity in this sector.<sup>52</sup> It is worth mentioning that the R&D expenditure of pharmaceuticals did not decline during the crisis and that on the contrary it increased from 2013 to 2014 to €3.9m.<sup>53</sup>

The main research performer groups are the Public Universities with the exception of the Open University with very few R&D projects. There are three Public<sup>54</sup> and five Private Universities<sup>55</sup> given recently a status equivalent to that of public universities (January 2012). A challenge faced by the Cyprus private Universities is that for funding programmes targeting innovation activities they are treated not as a University/Research Organisation, but as a business a fact that places the funding rate at 70% instead of 100%.<sup>56</sup>

There has also been an expansion of research activities through other major organisations which undertake research such as the Cyprus Institute of Neurology and Genetics (CING). Additionally, the Cyprus International Institute (CII) for the Environment and Public Health, the joint venture with the Harvard School of Public Health, implements research in the respective sectors. In 2005 the Cyprus Institute was established and it is considered a top-class venture operating three Research Centres<sup>57</sup>

<sup>52</sup> Ibid

<sup>53</sup> European Commission, EUR 28430 (n. 48)

<sup>54</sup> The University of Cyprus (1992), the Open University of Cyprus (2006) and the Cyprus University of Technology (2007). See Cyprus Higher Education <http://www.highereducation.ac.cy/gr/eval-private-un.html>

<sup>55</sup> The European University Cyprus, the Frederick University, the University of Nicosia, the Neapolis University and the University of Central Lancashire Cyprus

<sup>56</sup> Cyprus' Universities position paper on the next EU FP for Research and Innovation (2018) coordinator European Office of Cyprus, at:

[http://www.ucy.ac.cy/research/documents/Research/news-and-events/Cypriot\\_Universities\\_position\\_paper\\_FP9.pdf](http://www.ucy.ac.cy/research/documents/Research/news-and-events/Cypriot_Universities_position_paper_FP9.pdf)

<sup>57</sup> The Energy, Environment and Water Research Centre (EEWRC), the Science and Technology in Archaeology Research Centre (STARC) and the Computation-based Science and Technology Research Centre (CSTRC).

collaborating with other foreign establishments.<sup>58</sup> Non-profit organizations include among others the Cyprus Neuroscience and Technology Institute while certain private academic organizations such as the European University Cyprus are involved in research activities.

Regarding researchers' rights and responsibilities, all public and private universities and research institutes in Cyprus have endorsed the 'Charter & Code'.<sup>59</sup> Moreover, the University of Cyprus and the Cyprus Institute of Neurology and Genetics (CING) have received the European Commission's 'HR Excellence in Research Logo'. However, the Charter and Code provisions regarding for example the working conditions, worker rights, permanence of employment funding and researchers' salaries, particularly in the private HE sector are still underdeveloped.<sup>60</sup> The role of trade unions or other associations whose aim is the promotion of researchers' rights is almost non-existent or underperforming. This might be a reason for lack of awareness about researchers' rights and specifically about the early researchers' status.<sup>61</sup>

Cyprus joined the Bologna Process in 2001 endorsing its support to the major objectives of the Process, namely increased mobility and employability of HE graduates, teachers and researchers towards better competitiveness of European HE. The Directorate of Tertiary Education under the MOEC is responsible for implementing the Bologna Process main trends and aspects in Cyprus. By setting up the suitable legal context in consultation and close collaboration with all the institutions and the stakeholders of Cypriot HE, the Department tries to develop a HE structure based on three areas: the adoption or general implementation of the European Credit Transfer and Accumulation System (ECTS), the Diploma Supplement, the establishment of a national qualifications framework and joint/double degrees, as well as, the development of quality assurance measures. The Cyprus Bologna Promoters Group was established in conjunction with the Cyprus Foundation for the Management of European Lifelong Learning Programmes, aimed at disseminating information and promoting the Bologna requirements implementation.<sup>62</sup>

Due to the fact that the establishment of public HEIs is governed by specific laws there are research performance monitoring mechanisms in place. For example, the University of Cyprus is required by University Law (144/1989 to 199(I)/2003 section 31)

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<sup>58</sup> Including the MIT, the University of Illinois and Centre de Recherche et de Restauration des Musées de France.

<sup>59</sup> See Chapter 4 section 4.3.3.D

<sup>60</sup> Nicos Trimikliniotis (ed.), *Free Movement of Workers in Cyprus and the EU*, PRIO Cyprus Centre Report 1 (PRIO Cyprus Centre 2010); Nicos Trimikliniotis, 'Report on the Free Movement of Workers in Cyprus in 2012-2013', (2013) p.39

<sup>61</sup> Ibid, p.40

<sup>62</sup> Cyprus LLP National Agency Foundation for the Management of EU Lifelong Learning Programmes Bologna Process, <http://www.llp.org.cy/bolognaprocess/contactus.html>

to submit to the Council of Ministers (Cyprus Republic) a Report on its yearly activities, policies and achievements annually.

Regarding linkages between the public and private sectors involved in research and the business sector, these are not strong<sup>63</sup> while the university-industry synergy is in its infancy.<sup>64</sup> The Government identifying the above as an obstacle to higher R&D activity has taken initiatives to promote sector synergy. Examples include the creation of the Business Innovation Centres, which will provide advisory services to public and private businesses for the development of competitive products and the creation of university Liaison Offices, expected to bridge university research with industry.<sup>65</sup>

The focus of the next section is on the areas of strengths and weaknesses of the Cypriot national research environment. The latter constitute external and national challenges which the country needs to address in order to set up a more attractive and effective research environment.

### **3.4 Strengths and Constraints of the Research Landscape in Cyprus**

In the Cypriot research environment there are some areas of a promising note, some of real strengths and other areas in which there remains much room for improvement (see Table 2 below).

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<sup>63</sup> Theocharous et al., (n. 45) pp.7, 8. See also European Commission, ‘Innovation Union Scoreboard 2016’ (2016)

<sup>64</sup> Tshipouri and Athanassopoulou, EUR 26756, p.21 (n.34)

<sup>65</sup> Lena Tshipouri and Dariya Rublova, ‘ERAWATCH Country Reports 2011: ‘Cyprus’ (2013), JRC Science and Policy Reports EUR 25703, pp. 10, 17



**TABLE 2: Summary of the Strengths and Weaknesses of the National Research Environment as Analysed below**

<b>Strengths</b>	<b>Constraints</b>
<ul style="list-style-type: none"> <li>● On the road to recovery from the financial crisis</li> <li>● Undertaking structural reforms and reorganization of the governance of the R&amp;D system</li> <li>● New R&amp;D infrastructures</li> <li>● Development of academic and research community</li> <li>● Development of the Higher Educational and Research Sectors</li> <li>● Competitive participation in EU programmes</li> <li>● Satisfactory participation in FP programmes</li> <li>● High tertiary attainment</li> <li>● Opportunity to benefit from exploiting the gas through the manufacturing sector</li> </ul>	<ul style="list-style-type: none"> <li>● Reorganization of the governance of R&amp;I system not fully implemented</li> <li>● A lack of a unified vision of the national research policy framework</li> <li>● Newly created bodies to design and support the R&amp;D policy do not really operate in practice</li> <li>● R&amp;I not at the top of the policy agenda</li> <li>● Lack of research and innovation culture</li> <li>● Limited industrial activity</li> <li>● Low private sector investment in R&amp;D</li> <li>● Little interaction between public and private sectors on R&amp;D issues</li> <li>● The small size of the country and its research potential</li> <li>● Limited national funds for R&amp;I</li> </ul>

Source: Own compilation

Based on the description of the characteristics of Cyprus economy as open, free-market, service oriented, and dominated by SMSs not favouring industrial research development, it could be argued that R&D and innovation had never played an important role for growth.<sup>66</sup> However Cyprus EU membership has contributed to the country gradually changing its R&D and Innovation policy accordingly. This coupled with the completion of its three-year EU-IMF economic adjustment programme in March 2016 whereby Cyprus began adopting a range of financial, fiscal and structural reforms,<sup>67</sup> including the R&I policy and system restructuring<sup>68</sup> promise tangible future results and the building of a more robust R&D policy system.

Although Cyprus moved from being an Innovation follower in 2013 and 2014<sup>69</sup> back to a Moderate Innovator in 2016 and 2017 with a performance at about 75% of the

<sup>66</sup> John Violaris and Marcel de Heide, ‘Monitoring and Analysis of Policies and Public Financing Instruments Conducive to Higher Levels of R&D Investments - The “POLICY MIX” Project: Country Review Cyprus’ (United Nations University, Universiteit Maastricht, 2007)

<sup>67</sup> European Commission, SWD (2017) 78 (n. 47), p.1

<sup>68</sup> Theocharous et al., (n. 45), p.7

<sup>69</sup> European Commission, ‘European Innovation Union Scoreboard’ (2013), Cyprus National Reform Programme 2014 (n. 12). See also European Commission, (2014) SWD Commission Staff Working Document 280 final PART 5/10 and European Parliament COM (2014) 575



EU average according to the Innovation Union Scoreboard 2017<sup>70</sup>, there are areas of strong performance. For example, Information and Communication Technologies (ICT) is an area of science and technology (ST) where Cyprus demonstrates real strengths in a European context due to the strong performance of its ICT, computing base and its strong e-infrastructure.<sup>71</sup> Other key ST areas with real strengths are Energy, Materials (excluding nanotechnologies) New Production Technologies, Construction and Biotechnology.<sup>72</sup>

The above are connected to the Cypriot R&I system building on the ERA and the country's success in raising funds first from the FP7<sup>73</sup> and the subsequent Horizon 2020 Programme<sup>74</sup> the main source of external R&I funding, with most collaborative links being with the UK, Germany and Greece. For instance, in the FP7, the share of participation of Cyprus in total participation was 0.4 % and the country received 0.2 % of total EC contribution. FP funding represented EUR90 per inhabitant (EU average EUR72 per capita) for the period 2007-2013 and 19.5 % of the Gross Domestic Expenditures on R&D (GERD) for the period 2007-201 (EU average 3 % of GERD for the same period). Until March 2014, about 440 participants from Cyprus benefited from FP7 funding with the country ranking 21st in the EU-28.<sup>75</sup>

Furthermore, due to building on the ERA priorities 'Open Access' and 'Open Innovation' and International cooperation there is high growth observed for international scientific co-publications and EU designs with Cyprus ranking 9<sup>th</sup> within the EU with Finland ranking 5<sup>th</sup> Belgium 6<sup>th</sup> Austria 7<sup>th</sup> and the UK 11<sup>th</sup>.<sup>76</sup> This makes Cyprus notable as the country with the largest number of ERA co-publications<sup>77</sup> per 1000 researchers in 2014. Researchers from Cyprus, Switzerland, Ireland, the Netherlands, Austria and Luxembourg tend to publish the most articles in collaboration with other ERA partners.<sup>78</sup> Regarding scientific publications within the 10% most cited scientific publications worldwide as % of total scientific publications of the country Cyprus ranks 17<sup>th</sup> within the EU with Austria ranking 10<sup>th</sup> Finland 9<sup>th</sup> the UK 4<sup>th</sup> and Denmark 2<sup>nd</sup>.<sup>79</sup>

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<sup>70</sup> European Commission, 'European Innovation Scoreboard 2017 (Office of the European Union, 2017)

<sup>71</sup> European Commission (n. 11), p.50

<sup>72</sup> European Commission Directorate-General for Research and Innovation 'Research and Innovation and Innovation Performance in EU Member States and Associated Countries, Innovation Union Progress at Country Level 2013' (2013), p.50,p.57

<sup>73</sup> European Commission (2014) (n. 20)

<sup>74</sup> European Commission, 'In-depth Interim Evaluation of HORIZON 2020' (2017) Staff Working Document, 29.5.2017 SWD 220 final,

<sup>75</sup> European Commission and European Parliament (n. 69)

<sup>76</sup> European Commission EUR 26334 (n. 20). See also European Commission, 'European Innovation Scoreboard 2016' (Office of the European Union, 2016) p.59

<sup>77</sup> Papers published by authors from at least two countries located within the EU and/or beyond

<sup>78</sup> European Commission EUR 28430 (n. 48), p. 6

<sup>79</sup> European Commission EUR 26334 (n. 20) pp. 63,69

Despite the above unusual areas of success against a less successful performance in other fields especially when considering the population size and the small size of the Cypriot economy, it is evident that the R&D system has not yet adapted to the new external and internal challenges in the national research environment. Although the country has made a series of modifications to meet EU obligations regarding implementation of necessary ERA reforms at the national level<sup>80</sup> and achieving recovery after three consecutive years of contraction in real GDP due to the financial crisis it had not yet built a more robust R&D policy system.

As demonstrated in previous sections<sup>81</sup>, reorganising the governance of the country's R&I system in theory has not had the expected results in practice. The two Councils, created a few years ago to design and support the RTDI policy, have not started operating effectively yet and have not met their purpose while reforms proposed in the NCRITD report<sup>82</sup> for the adjustment and upgrading of the R&I system have not been implemented<sup>83</sup>

One of the main issues raised in the above NCRITD key report is the absence of a more efficient governance structure of the R&I system and evaluation mechanism of policies and funding schemes in Cyprus which lacks a focused strategic direction and vision of the policy framework.<sup>84</sup>

Consequently, shortcomings in strategic governance hinder progress and create obstacles in supporting and funding research ideas and specific scientific fields where the national innovation system could potentially excel. Additionally, this has a negative impact of various dimensions regarding the national research environment since all efforts in addressing long standing and emerging challenges, need to be accompanied by a more efficient governance structure.

Among the challenges the country needs to address is the domination of small enterprises, constituting 99.8% of total enterprises in Cyprus, not favouring industrial research development and not having yet developed an innovation culture.<sup>85</sup> However, the limited engagement of enterprises to research activities with Business R&D spending being one of the lowest in the EU<sup>86</sup> can be partly explained by the financial crisis when the

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<sup>80</sup> George Stroylopoulos, 'Stairway to Excellence Country Report: Cyprus' (2015) JRC Science and Policy Reports EUR 27497, pp. 2,18

<sup>81</sup> See Presidency (n. 44) and Stroylopoulos (n.80), p.6

<sup>82</sup> Presidency (n. 44)

<sup>83</sup> Theocharous et al., (n. 45) and Stroylopoulos (n. 80) pp. 6,7

<sup>84</sup> Stroylopoulos (n. 80), p.6, Tsipouri et al., (n.23), p.61. See also M. Demetriades and N. Robledo-Böttcher 'RIO Country Report 2017: Cyprus' (2018) EUR 29151, p.9.

<sup>85</sup> Stroylopoulos (n.80), p.11

<sup>86</sup> European Commission EUR 28430 (n.47). See also Theocharous et al., (n. 45),p. 6

R&D budget related to innovation was put on hold,<sup>87</sup> undermining simultaneously the capacity of private funding for R&D activities. Additionally, the private sector low investment in RTDI, can also be partly justified by the absence of high-tech industrial activity.

A more efficient governance structure of the national R&D system and policy could arguably address the little interaction between public and private sector on RTDI issues. This has resulted in significant reliance of R&D financing in Cyprus more than the EU average on external funding (EU Framework Programme, private R&D funding from abroad)<sup>88</sup> and in low commercialisation of research results. The low exploitation capacity of innovative ideas in the market which is directly associated with the inadequate knowledge exploitation, is cited as a major problem in numerous reports<sup>89</sup> by independent external experts who provide evidence-based analysis of the national R&I system and policy such as in the ERAWATCH Country Report 2013 for Cyprus.<sup>90</sup>

This is linked with the lack of awareness and culture of enterprises for the potential benefits of innovation and benefits arising from their cooperation with public or private universities and research organizations.<sup>91</sup> Low commercialization of research results is also linked with low awareness among SMEs of support programmes and funding opportunities as well as insufficient access to finance.<sup>92</sup> As for public-private university co-operation this is almost non-existent, a fact that has a negative impact on the knowledge transfer in the long run as well as to the initiation of research collaboration.<sup>93</sup> Thus owing to the above, university research results remain unexploited despite Cyprus' performance in academic research output and high scores on EU trademarks as previously demonstrated.<sup>94</sup> To address this issue the Government plans the establishment of a Central Technology Transfer Office (CTTO) to support the Cypriot academic and research institutions in relation to the protection and exploitation of their research results in close cooperation with the Liaison Offices.<sup>95</sup>

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<sup>87</sup> European Commission (2013) (n.8). See also Cyprus National Reform Programme 2017 (n. 29)

<sup>88</sup> European Commission EUR 26334 (n. 20). See also Theocharous et al., (n. 45), p.11

<sup>89</sup> Tsipouri et al., (n. 23), Lena Tsiouri, and Sophia Athanassopoulou, 'RIO Country Report Cyprus 2014', JRC Science and Policy Reports EUR 27302, (2015) p.45. See also Strogilopoulos (n. 80) p.18

<sup>90</sup> Tsiouri and Athanassopoulou (n. 34)

<sup>91</sup> Theocharous et al., (n. 45), p.16

<sup>92</sup> Ernst & Young Cyprus, 'Cyprus Innovation and Entrepreneurship Dynamics' Issue 2 Newsletter', (2017), 9. See also Tsiouri, and Athanassopoulou (n.89),p. 45

<sup>93</sup> European Commission, 'Facts and Figures 2014 Cyprus' at: [https://ec.europa.eu/research/era/pdf/era\\_progress\\_report2014/country\\_fiches/era-cy.pdf](https://ec.europa.eu/research/era/pdf/era_progress_report2014/country_fiches/era-cy.pdf). See also Smart Specialisation Strategy For Cyprus 'Executive Summary' (Nicosia 2014), p.17, at: [http://s3platform.jrc.ec.europa.eu/documents/20182/122769/S3CY\\_Executive+Summary\\_EN.pdf/c223adae-5e44-4339-a2b3-39038456e391](http://s3platform.jrc.ec.europa.eu/documents/20182/122769/S3CY_Executive+Summary_EN.pdf/c223adae-5e44-4339-a2b3-39038456e391)

<sup>94</sup>Ibid, pp.13-14

<sup>95</sup>Ibid, p.12

Cyprus is a country where the performance of the national RDTI system is mainly based on the performance of specific research teams, key individuals and its human research resources.<sup>96</sup> However, the country's results indicate limited human resources for research in closely linked areas despite the fact that Cypriot tertiary attainment is among the highest in the EU<sup>97</sup>, a fact in sharp contrast with employability prospects since tertiary graduates' employment levels are below average with a rate of 72.4% in 2014 compared to an EU average of 80.5%.<sup>98</sup> Simultaneously many young people, particularly women, in Cyprus work in jobs which do not require their qualification level.<sup>99</sup> This could be partially explained by the fact that comparatively high shares of education are in social sciences and humanities with Cyprus having a low share of Science, Technology, Engineering and Math (STEM) graduates (9/1000) ranking last of the EU countries.<sup>100</sup>

Regarding the total number of researchers in government and HEIs, this was at 1,475 researchers in Cyprus at the end of 2011, compared to an EU-28 average of more than 1,570,000 researchers.<sup>101</sup> Concerning female researchers in 2014, the percentage of women among Grade A positions in the HE sector was 13.6 % in the RoC, falling 42% below the EU average of 23.5%<sup>102</sup> while the share of women among heads of HE institutions was at 10.9% and trailed the EU-28 average by 46 %. This suggests that Cyprus has fewer women in senior positions despite the fact that the share of women researchers as well as the share of women PhD graduates (38.3% and 50% respectively) exceeded the EU-28 average (33.2% and 47.3% respectively).<sup>103</sup>

As regards new doctorate graduates Cyprus performs below the EU average.<sup>104</sup> While the number of Cypriot doctoral candidates studying in another MS as a share of total doctoral candidates studying or working in the country of origin, Cyprus is at the highest share followed by Slovakia, Ireland, Bulgaria, Portugal, and Italy<sup>105</sup> Cyprus is a MS that attracts fewer doctoral students from EU countries, lagging behind the EU-28 average by

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<sup>96</sup> Stroylopoulos (n. 80), p.14

<sup>97</sup> European Commission Education and Training Monitor (n. 33), 6; European Commission SWD (2017) 78 final (n. 47), p.35

<sup>98</sup> European Commission, 'Education and Training Monitor 2017' (2017), at: [https://ec.europa.eu/education/sites/education/files/monitor2017\\_en.pdf](https://ec.europa.eu/education/sites/education/files/monitor2017_en.pdf)

<sup>99</sup> Ibid

<sup>100</sup> Ibid

<sup>101</sup> Smart Specialisation Strategy For Cyprus 'Executive Summary' (Nicosia 2014), p.17 at: [http://s3platform.jrc.ec.europa.eu/documents/20182/89368/S3CY\\_Executive+Summary\\_EN.pdf/4af4bbe0-85ce-4be7-8b55-b7eb7b27ebd6](http://s3platform.jrc.ec.europa.eu/documents/20182/89368/S3CY_Executive+Summary_EN.pdf/4af4bbe0-85ce-4be7-8b55-b7eb7b27ebd6)

<sup>102</sup> European Commission, European Research Area, Progress Report 2016 'Country Snapshot Cyprus' (2017), p.102, at:

[http://ec.europa.eu/research/era/pdf/era\\_progress\\_report2016/country\\_fiches/era-cy.pdf](http://ec.europa.eu/research/era/pdf/era_progress_report2016/country_fiches/era-cy.pdf)

<sup>103</sup> Ibid

<sup>104</sup> Ernst & Young Cyprus, (2017) (n. 92), p.3

<sup>105</sup> EUROSTAT data on Foreign students in TE (ISCED 5-6) by country of citizenship (2014): All these countries with a share of approx. 15% at: - [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ\\_enr18&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr18&lang=en)

49 %.<sup>106</sup> The above results on the availability of human resources for research in Cyprus could potentially be reasons exacerbating the brain drain phenomenon in Cyprus potentially giving rise to brain waste aspects which are briefly discussed in the next section.

### 3.5: Brain Drain and Brain Waste Aspects

Restricted demands from industry and businesses for researchers and PhD holders, poor presence of R&D programmes in school curricula, skills mismatch, salary reductions, affecting in particular the number of PhD students, limit researchers' career choices and discourage students from pursuing a researcher's career.<sup>107</sup> Additionally the financial crisis that hit Cyprus resulted in a limited availability of finance to the private sector, and impacted negatively on university research contributing to a dramatic rise in unemployment rates. Unsurprisingly S&T graduates and researchers seek employment in other countries, predominantly the UK and the USA.<sup>108</sup> Although the sharp increase in unemployment rates appears to be gradually falling (from around 16, 1% in 2014 to 15%<sup>9</sup> in 2015 and around 13% in 2016)<sup>109</sup>, there is a risk of prolonging lower demand and the de-skilling of a significant labour force segment. Simultaneously a significant emigration rate and a pattern of students opting not to return to Cyprus after study completion have also contributed to declines in unemployment figures.<sup>110</sup>

Concerns about a serious or potential threat of brain drain are actually cited in several European Commission reports on Cyprus<sup>111</sup> and case studies carried out by the Universities and Colleges Employers Association.<sup>112</sup> Apart from the brain drain challenge this research considers the issue of a possible brain waste problem in the country more significant and one which has been so far under researched in the context of Cyprus. For the above reasons, brain waste and brain drain phenomena are topics to be dealt with in detail in chapter 5 based on the empirical evidence on Cyprus.

Following the examination of the organisation and structure of the Cyprus research system and its main providers and performers as well as the challenges facing the country's research environment, the focus of attention in the rest of the present chapter is on the legal

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<sup>106</sup> European Commission, 'Country Snapshot: Cyprus' (n. 102), p.4

<sup>107</sup> Smart Specialisation Strategy for Cyprus (n. 101). See also Theocharous et al., (n. 45)

<sup>108</sup> European Commission EUR 26334 (n.20)

<sup>109</sup> Statistical Service of Cyprus 'Statistical Abstract 2016' (2017) General Statistics, Series I, Report No. 62

<sup>110</sup> Christophorou et al., (n. 13), p.8

<sup>111</sup> See for example, European Commission EUR 26334 (n. 20). See Chapter 5 section 5.4.1

<sup>112</sup> See for example Universities and Colleges Employers Association (USAE) 'Supporting Early Career Researchers in Higher Education in Europe, EU DGV Project VS/2013/0399 Cyprus-Country Report' (2015) See also Chapter 5 section 5.4.1

and policy framework which impacts on the mobility of EU and non-EU scientists and researchers and the HS in the country.

### **3.6 The Cypriot Migration Policy and Law Pertaining to the Principle of Free Movement of EU and non-EU Scientists, Researchers and the Highly Skilled**

#### **3.6.1 An Introduction to Cyprus' Immigration Legislation**

Cyprus' immigration legislation which finds its bases on its 1960 Constitution<sup>113</sup> comprises the implementation of the European Directives relating to the areas of free movement of EU citizens and their family members to move and reside within the territory of the RoC; the Aliens & Immigration Law (Cap.105); the Aliens & Immigration Regulations; the Decisions of the Council of Ministers; the Decisions of the Ministerial Committee for the Employment of TCNs, and the Decisions of the Interior Minister (IM) applying to non EU citizens. The IM's Decisions applying to non-EU citizens may also apply to EU citizens regarding matters of public policy, public security or public health marriages of convenience or becoming a burden to the state because of lack of sufficient resources through their employment or other independent means as per Law N.92 (I)/2003 on Free Movement and Residence of Nationals of MSs of the EU and their families.<sup>114</sup>

The current Aliens and Immigration Law, introduced following the 1960 independence of RoC, is based on Article 32 of the Cyprus Constitution.<sup>115</sup> Then in 1972 a number of Regulations were issued for the better interpretation and implementation of the Law. Major policy decisions are taken by the Council of Ministers, which exercises executive power together with the President. The Council of Ministers established the Ministerial Committee for the Employment of TCNs and the delegation to this Committee to decide on migration issues and refer back to the Council for major importance matters. All their decisions are binding and in accordance to the legislation. The employment of TCNs Committee is chaired by the IM. The Ministers of Labour and Social Insurance, Justice and Public Order and Trade, Industry and Tourism also participate. Other Ministers and the Attorney General are invited to the Committee meetings when deemed necessary.

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<sup>113</sup> The 1960 Constitution incorporated the Establishment Treaty No 5476 of Great Britain and Northern Ireland, Greece and Turkey and Cyprus, 16 August 1960. It annexed Treaty No5475 of the RoC of the one part, and Greece, Turkey and the UK of Great Britain and Northern Ireland of the other part as well as the Alliance Treaty No 5712 of Greece, Turkey and Cyprus (with Additional Protocols). See also Chapter 4

<sup>114</sup> Republic of Cyprus, Civil Registry and Migration Department, [http://www.moi.gov.cy/moi/CRMD/crmd.nsf/page02\\_en/page02\\_en?OpenDocument](http://www.moi.gov.cy/moi/CRMD/crmd.nsf/page02_en/page02_en?OpenDocument)

<sup>115</sup> RoC, Presidency of the Roc 'Constitution' (2008-2018) [http://www.presidency.gov.cy/presidency/presidency.nsf/all/1003AEDD83EED9C7C225756F0023C6AD/\\$file/CY\\_Constitution.pdf?openelement](http://www.presidency.gov.cy/presidency/presidency.nsf/all/1003AEDD83EED9C7C225756F0023C6AD/$file/CY_Constitution.pdf?openelement)

The Committee is responsible for policy making on TCNs' employment and for evaluating, reviewing and reforming enforced policies.

According to the Aliens and Immigration Law, the IM is the Chief Immigration Officer, meaning that this officer is in the highest rank. The Minister's decisions concerning policy issues must always be in line with the relevant legislation, while certain competencies have been delegated by the Minister to the Director of the Civil Registry and Migration Department (CRMD). The role of the coordinator for the immigration policy in Cyprus belongs to the IM. The CRMD, under the IM, is responsible for the policy implementation. Thus the CRMD is responsible for the issuance of temporary Residence Permits for TCNs, Registration Certificates for EU Citizens and their EU family members, residence cards for non- European family members when applying<sup>116</sup> and for the examination of naturalization- nationalization applications .<sup>117</sup>

Legislation in Cyprus provides for a number of different categories of immigration status distinguishing primarily between TCNs and those non-EU citizens who are EU nationals' family members. Regarding the TCN category, where the conditions foreseen in the law are met, a TCN applicant is granted a temporary residence and employment permit. Apart from the LTR permit currently there are 13 types of such permits (See Table 3 below).<sup>118</sup>

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<sup>116</sup> This must be done as soon as applicants secure employment and an employment certificate within 3/4 months from the arrival date in Cyprus. Furthermore, they have to apply for a social insurance number to the Social Insurance Services of the Ministry of Labour and Social Insurance. See table 3: For their non-EU family members then a visa is required in the form of a residence permit; two main residence permit categories are available as well as Immigration permits for specific categories (A-F) which will not create undue local competition or affect negatively the general economy of the RoC. See RoC CRMD Migration Section, [http://www.moi.gov.cy/moi/CRMD/crmd.nsf/page07\\_en/page07\\_en?OpenDocument](http://www.moi.gov.cy/moi/CRMD/crmd.nsf/page07_en/page07_en?OpenDocument)

<sup>117</sup> RoC, CRMD, Civil Registry Section, <http://www.moi.gov.cy/moi/CRMD/crmd.nsf/All/F03BEB8DF3591BC1C2257D2C00453383?OpenDocument&highlight=citizenship>

<sup>118</sup> CRMD, Migration Section (n.114)

**TABLE 3: Types of Residence Permits**

TCNs	TEMPORARY RESIDENCE PERMITS	
	Types:	
	Start-up permit	Employees at international companies
	Domestic worker	Researchers
EU Citizens and Family Member(s)	General employment	Trainees
	Visitors	Volunteers
	Students	Recognized refugees, Subsidiary protection, Asylum seeker
	Pupils	Cypriot citizen's family member
	Intra-corporate transferee	
	LONG TERM RESIDENCE	
	IMMIGRATION PERMITS on specific categories A-F	
FAMILY REUNIFICATION FOR THIRD COUNTRY NATIONALS		
	EU Citizens (Application Form MEU1)	
	Family Members of EU Citizens that are non-EU Citizens (Application Form MEU2)	
	Permanent Residence of EU Citizens and their Family Members (Application Form MEU3)	

**Source:** Own compilation based on the RoC CRMD, Migration Section

The RoC claims to provide for no less favourable treatment for TCN workers than that of EU citizens through various instruments. Article 28 (2) of Cyprus Constitution ensures the protection of people's rights regardless race, religion or ethnic origin.<sup>119</sup> As regards Cypriot citizenship acquisition on the basis of the Population Registry law<sup>120</sup> as amended from time to time, this can be acquired due to Cypriot origins, as a Cypriot citizen's spouse, via naturalisation<sup>121</sup>, and via a scheme for naturalization of investors in Cyprus by exception.<sup>122</sup>

Following the introduction to Cyprus' immigration legislation, this section proceeds with an examination of the main rules providing for Cypriot citizenship acquisition (section 3.6.2.), followed by a description of the legislation pertaining to EU Migration Directives which concern EU citizens and TCNs more specifically EU and non-

<sup>119</sup> The Cyprus Supreme Court (CYSC) is responsible for immigration issues with exclusive jurisdiction as it was the sole administrative court in the country due to the fact that the decisions of the executive are subject to administrative review (Article 146 of the Constitution).

<sup>120</sup> Civil Registry Law of 2002 (N. 141(I)/2002)

<sup>121</sup> Citizenship application via naturalization can be submitted by TCNs, who have completed 7 years of legal residence in the Republic prior to the application date. In cases of TCNs who are either parents or children of Cypriot citizens the time required is 5 years rather than 7 on the condition that the applicant has resided legally and continuously in Cyprus during the twelve months preceding the application date.

<sup>122</sup>



EU scientists, researchers and the HS migrants and its implementation into national law (section 3.6.3).

### 3.6.2 Cypriot Citizenship Acquisition

The main rules providing for citizenship acquisition date back in 1960 as provided by the Establishment Treaty of the RoC.<sup>123</sup> Any British subject of Cypriot origin residing in the island at any time in the period of five years immediately before 1960 became a RoC citizen on 16 August 1960. Equally, a person could- and still to this day can -also acquire the Republic citizenship by birth if one of her/his parents was a citizen at the time of her/his birth but also if s/he is married to a citizen of the Republic and the two have lived together for at least two years. Thus, Cypriots of Greek or Turkish origin could claim Cypriot nationality.

However, Cyprus EU accession has not led to the island's reunification or to the restoration of human rights and free movement rights. It added a new dimension to the island's partition with competing claims of authority and citizenship on the island.<sup>124</sup> The RoC recognises the citizenship and the citizenship right of all Cypriot residents of Turkish origin, residing in the North, who can prove that they come under the scope of its legislation. This is in accordance with Article 20(1) of the Treaty on the Functioning of the EU (TFEU), which states that: *'every person holding the nationality of a Member State shall be a citizen of the Union.'* Consequently, Turkish Cypriots may 'activate' their EU citizenship status on condition they provide proper documentation to the Republic's district administrative offices that would prove that they come under the Republic's citizenship rules.

In 2002, a new law, the Civil Registry Law, No. 141(I)/2002 was enacted to be finally amended by the Civil Registry Law No. 168(I)/2017 which amends all the Population Data Archives Laws from 2002 until 2015. This law together with Annex D of the Establishment Treaty currently regulates the Cypriot citizenship acquisition and loss. Under the law Cypriot citizenship can be acquired due to Cypriot origins, as a Cypriot citizen's spouse, via naturalisation, and via a scheme for naturalization of investors in Cyprus by exception.<sup>125</sup> Application for acquisition via naturalisation and registration mechanisms can be submitted by TCNs who have completed a 7- year legal residence in the RoC prior to the application date. In cases of TCNs who are either Cypriot citizens'

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<sup>123</sup> Annex D, sections 1-8 of Treaty No 5476 (n.113)

<sup>124</sup> Nikos Skoutaris, *The Cyprus Issue: The Four Freedoms in a Member State under Siege* (Hart Publishing, 2011) p.3

<sup>125</sup> Civil Registry and Migration Department, <http://www.moi.gov.cy/moi/crmd/crmd.nsf/All/E84172965E9BEEC6C2257D1E0025C46A?OpenDocument>

parents or children a 5-year -period of time is required rather than seven. In any case, the applicant must have resided legally and continuously in Cyprus during the twelve months preceding the application date. Additionally, given the fact that migrant worker permits have been reduced to four years whereas before they were for six, acquiring citizenship for this category of people is very hard, unless they are married to a Cypriot or are granted leave to stay on other exceptional grounds.

### 3.6.3 Implementation of EU law into National Legislation

#### 3.6.3. A. The Citizenship Rights Directive –CRD

The principle of free movement of workers within Europe has been applied in Cyprus since 1<sup>st</sup> May 2004 and covers EU citizens including scientists, researchers and the HS. European citizens mobility and employment is regulated by Law N 7(I) of 2007<sup>126</sup> “The Right of Union Citizens and their Family Members to Move and Reside Freely within the Territory of the Republic of Cyprus” as amended from time to time<sup>127</sup> which implemented Directive 2004/38/EC (the Citizenship Rights Directive –CRD-).<sup>128</sup>

This framework protects the rights of scientists and researchers if they are European citizens. Thus, EU citizens do not experience significant obstacles in exercising their entry rights in Cyprus given the European dimension of Cyprus nationality as an EU MS. By contrast, in numerous studies, it has been observed that, family members, in particular TCN family members encounter a number of obstacles in exercising their right of entry into Cyprus such as excessive delays in obtaining residence cards/registration certificates and use of invalid grounds to justify denials of the right to reside.<sup>129</sup>

What follows is an analysis of the legislation concerning migrant workers, more specifically non-EU scientists and researchers (section 3.6.3. B), non –EU HS migrants (section 3.6.3. C), and those non –EU highly qualified migrants who may have stayed in Cyprus long enough to claim the LR status including EU citizens’ family members (section 3.6.3. D). The aim of this analysis is to demonstrate whether Cyprus offers an attractive

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<sup>126</sup>Ο περί του Δικαιώματος των Πολιτών της Ένωσης και των Μελών των Οικογενειών τους να Κυκλοφορούν και να Διαμένουν Ελεύθερα στη Δημοκρατία Νόμος του 2007 (Ν. 7(I)/2007) as amended by Law N. 181(I)/2011, Law N. 8(I)/2013, Law N. 67(I) 2013 and Law N. 77(1) 2015 until 2015, [http://www.cylaw.org/nomoi/indexes/2007\\_1\\_7.html](http://www.cylaw.org/nomoi/indexes/2007_1_7.html)

<sup>127</sup> As amended by Law N. 181(I)/2011, Law N. 8(I)/2013, Law N. 67(I) 2013 and Law N. 77(1) 2015 until 2015

<sup>128</sup> See Chapter 2 section 2.6.1.B.2.

<sup>129</sup>See, for example, DG for Internal Policies, Policy Department C (DG IP PD C): Citizen’s Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs Petitions, ‘Obstacles to the Right of Free Movement and Residence for EU Citizens and their Families-Comparative Analysis’ PE 571.375 (EU, September 2016). See also Nicos Trimikliniotis, ‘Report on Citizenship Law: Cyprus’ (2015) EUDO Citizenship Observatory, Robert Schuman Centre for Advanced Studies in collaboration with Edinburgh University Law School

and excellence-driven research environment in which the aforementioned people can enjoy their free movement rights and work compared to their EU counterparts.

### **3.6.3 B.: Directive 2005/71/EC (Researcher Dir) and the Recast Directive 2016/801**

Cyprus has harmonised its legislation to include the provisions of Directive 2005/71/EC also known as the Scientific Visa Package Directive of 12 October 2005, on a specific procedure for admitting TCNs for scientific research purposes.<sup>130</sup> The active national legislation which integrated the Directive is Law N.29 (I)/2009 “Aliens and Immigration (Amending) Law of 2009”. The Council of Ministers of the RoC has nominated the RPF<sup>131</sup> as the competent authority for granting an approval of research organizations wishing to host TCNs researchers under Directive 2005/71/EC. Approved research organizations for the purposes of the abovementioned Law N.29 (I) 2009 are included in “the List of Approved Research Organizations,” published and regularly updated by the RPF.

Continuing under the Law N.29 (I) 2009 provisions, approved Research Organizations wishing to host a TCN Researcher should sign a Hosting Agreement with the interested TCN Researcher. According to this Agreement the researcher is responsible for the completion of the research project and the organization is responsible for hosting the researcher. The Hosting Agreement form is provided by the RPF. The financial responsibility of the Research Organization ends at the latest six months after the Hosting Agreement termination. For this purpose, a Certification of Undertaking Financial Responsibility is provided by the RPF.

Academic researchers can receive a one year renewable residence permit (RP) for the purpose of conducting research in a Cyprus host Institution.<sup>132</sup> A minimum of 2000 Euro is the amount they are expected to receive if they are post-graduates/PhD candidates<sup>133</sup> and a minimum of 2500 Euro per month if they are post-Doctorate researchers.<sup>134</sup> Family reunification eligibility is under the same conditions as with HS migrants and they have the right to teach for up to six hours per week. Academic researchers are entitled to equality of treatment regarding recognition of qualifications, working conditions (including pay and dismissal), tax benefits and public goods and services access.

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<sup>130</sup> See Chapter 2 section 2.6.2. B.1 and Chapter 5 section 4.3.3.

<sup>131</sup> RPF (n. 40)

<sup>132</sup> Law 29(I)/2009

<sup>133</sup> 2500 Euros, if they have dependent family members

<sup>134</sup> 3000 Euros, if they have dependent family members

TCN researchers entering Cyprus from another EU MS for less than three months can commence working on the grounds of their signed contract in the first MS and on the basis that they have sufficient funds and do not pose a public order, security and health threat. TCN researchers wishing prolonged stay for more than three months require a new contract with entry and stay provisions according to the requirements for initial entry and stay for TCNs who apply for the first time to be admitted to the EU. As mentioned previously such applications must be approved by the RPF of Cyprus.

On 12 May 2016 a new Directive, Directive 2016/801214 entered into force, recasting Directives 2004/114/EC<sup>135</sup> on students and 2005/71 on researchers. MSs including Cyprus had until 23 May 2018 to transpose the directive into national law. As evidenced by the European Commission report assessing the application of the Directive 2005/71/EC Cyprus has included most of its key elements in its national law.<sup>136</sup> However, according to the ‘Stairway to Excellence (S2E) project’ (2015)<sup>137</sup> which assessed and corroborated all the qualitative and quantitative data in drawing national/regional FP7 participation patterns of 13 MS including Cyprus, there are issues with the administrative process followed by the RPF<sup>138</sup> when scientists and researchers submit a grant proposal. The study reports excessive checks and controls that follow rigid guidelines often resulting in scientists being requested often several years after their proposal submission, to prove that the research they performed with the grant was exactly what had been stated initially proposal. Gaps in grants evaluation and generally the need for a more comprehensive R&I evaluation mechanism are also reported in more recent studies.<sup>139</sup> Undoubtedly these cause concerns for the scientific community, loss of time and money.

### 3.6.3. C Directive 2009/50/EC (Blue Card Dir.)

The Directive 2009/50/EC (Blue Card Dir.) on the entry conditions and residence of TCNs for highly qualified employment purposes<sup>140</sup> was implemented via National Law N41 (I) 2012 setting a legislative framework regulating the recruitment of HS migrants for the first time<sup>141</sup> albeit with a considerable delay.<sup>142</sup>

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<sup>135</sup> [OJ L 375, 23.12.2004](#), see Chapter 2 section 2.6.2.B.1

<sup>136</sup> European Commission, ‘Report From the Commission to the Council and the European Parliament on the Application of Directive 2005/71/EC on a specific procedure for admitting third country nationals for the purposes of scientific research’ Brussels, 20.12.2011 COM (2011) 901 final

<sup>137</sup> Stroylopoulos (n.80) p.10

<sup>138</sup> RPF (n. 40)

<sup>139</sup> Demetriades and Robledo- Böttcher (n. 84) p.1

<sup>140</sup> OJ L 155, 18.6.2009. See Chapter 2, section 2.6.2.B.2 and Chapter 4 section 4.3.3.C

<sup>141</sup> Martina Belmonte, ‘The EU Blue Card- Is There a Need for a More Comprehensive Approach?’ (2015), Institute for European Studies, Policy Brief, Issue 2015/3; Vera Pavlou, ‘Highly Skilled Indian Migrants in Cyprus’, (2013) CARIM-India RR 2013/42, Robert Schuman Centre for Advanced Studies, European University Institute, p.1

In an increasing global competition for talent Cyprus has set the admission volumes on the basis of the Blue Card Directive to zero and does not grant any HS employment permits,<sup>143</sup> taking into account the economic crisis and the high unemployment levels in Cyprus.<sup>144</sup> As a result there have been no practical arrangements as of today, with regards to the issuance/statistical info of EU Blue Cards.<sup>145</sup> In addition very little research exists on the subject of HS migration in Cyprus with the notable exception of a study on HS Indian migrants in the country in 2013.<sup>146</sup> A positive note, however, is the fact that Cyprus has introduced new permit categories, whereas before the only exception had been the case of TCN HS employed by foreign companies.<sup>147</sup>

### **3.6.3. D. Directive 2003/109/EC- (Long-Term Residence Dir.)**

Directive 2003/109/EC concerning the status of TCNs, who are long-term residents,<sup>148</sup> was implemented via National Law N8 (I) 2007. TCNs, (including family members of EU citizens not covered by the Right of Union Citizens and their Family Members to Move and Reside Freely within the Territory of the Republic Law No. 7(I)/2007), who have resided legally, and continuously within the Government controlled areas for 5 years prior to the submission of the relevant application, possess valid residence permits and are financially self-sufficient, obtain a permanent residence permit.<sup>149</sup> The RoC, however, does not issue Long Term Residence (LTR) permit to family members of LTR residents. It issues family reunification permits only when TCN family members meet by themselves the criteria.<sup>150</sup> However, in practice this category arguably includes non – EU highly qualified migrants who may have stayed in Cyprus long enough to claim the LTR status including EU citizens’ family members. Given the fact that their applications

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<sup>142</sup> Commission Communication on the implementation of Directive 2009/50/EC on the conditions of entry and residence of third-country nationals for the purpose of highly qualified employment (“EU Blue Card”) Brussels, 22.5.2014 COM (2014) 287 final

<sup>143</sup> European Commission, European Migration Network ‘Country Fact-sheet: Cyprus 2015’ (2015) p.2

<sup>144</sup> Cyprus EMN National Contact Point ‘Annual Policy Report 2012 Cyprus’, (2013), p.35

<sup>145</sup> Nicos Trimikliniotis and Corina Demetriou ‘Migrants and their Descendants: Social Inclusion and Participation in Society, Cyprus, (2015), FRANET, University of Nicosia and Symfiliosi, p.37

<sup>146</sup> Pavlou (n.141)

<sup>147</sup> According to the EU Immigration Portal Cyprus, foreign companies including multinational corporations that satisfy certain requirements relating to their shareholders’ nationality and their capital invested are able to recruit or transfer certain categories of HS TCNs to Cyprus. Applications are submitted to the Director of the CRMD who will decide whether or not to grant a permit. Such decisions can be challenged before the CYSC, [http://ec.europa.eu/immigration/what-do-i-need-before-leaving/cyprus/worker/highly-qualified-worker\\_en](http://ec.europa.eu/immigration/what-do-i-need-before-leaving/cyprus/worker/highly-qualified-worker_en)

<sup>148</sup> Directive 2003/109/EC (Long Term Residence Dir.) replaced by the Recast Directive 2011/51/EU [2011] OJ L132. See Chapter 2 section 2.6.2.B.3 and Chapter 4 section 4.3.3.A

<sup>149</sup> RoC, Civil Registry and Migration Department, Migration Section, Long Term Residence, <http://www.moi.gov.cy/moi/CRMD/crmd.nsf/All/D0B62F3A3B68AFA8C2257D2C0037B99D?OpenDocument>

<sup>150</sup> RoC, CRMD Migration Section (n.116). EMN Ad-Hoc Query on Family Members of Long-term Residents Requested by Sweden EMN NCP on 28th November 2017

are examined by the Immigration Control Committee which submits a relevant suggestion to the IM for a decision to be taken as already previously mentioned creates obstacles in their accessing the LTR status.

Problems have been reported in assessment reports and studies provided by the European Commission,<sup>151</sup> the European Parliament<sup>152</sup> and the European Union Agency for Fundamental Rights<sup>153</sup> with the adoption of the LTR Directive by Cyprus which weaken its potential for TCNs benefiting from accessing the LTR status. These problematic issues which are also highlighted in various NGO and NGO Network reports such as KISA-Action for Equality, Support and Antiracism<sup>154</sup> and ENAR (European Network Against Racism)<sup>155</sup> refer to difficulties in obtaining the LTR status, the low level of integration of TCNs, wrong interpretation of the Directive's provisions relating to 'adequate resources',<sup>156</sup> and duration of residence.<sup>157</sup> These problematic issues often result in the LTR status to be granted only to a few TCNs<sup>158</sup> while rejection of their LTR application potentially leads to their detention and deportation.<sup>159</sup>

In the light of the above, the introduction, implementation, and integration of EU policy and law into the country's public R&I system and internal legal system has created new challenges for Cyprus the impact of which is reflected in practice and in landmark case law the focus of examination next. A case study approach is employed systematizing the cases that most characteristically represent the relevant problematic areas.

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<sup>151</sup> European Commission, Report from the Commission to the European Parliament and the Council on the application of Directive 2003/109/EC concerning the status of TCNs who are long-term residents', Brussels, 28.9.2011 COM (2011) 585 final

<sup>152</sup> DG IP PD C (n.129)

<sup>153</sup> European Union Agency for Fundamental Rights, 'Together in the EU - Promoting the Participation of Migrants and their Descendants' (Luxembourg Publications Office of the EU 2017), at: <https://publications.europa.eu/en/publication-detail/-/publication/155b860a-0f96-11e7-8a35-01aa75ed71a1/language-en/format-PDF/source-30939431>

<sup>154</sup> See for example KISA's (Action for Equality, Support, Antiracism) position on the Fifth Periodic Report Submitted by the Government of Cyprus on the Implementation of the International Covenant on Economic, Social and Cultural Rights, (2008)

<sup>155</sup> Sharif Chowdhury and Christos Kassimeris 'Racist Violence in Cyprus' (2011) European Network against Racism (ENAR) at: <http://cms.horus.be/files/99935/MediaArchive/Racist%20Violence%20Cyprus%20-%20online.pdf>

<sup>156</sup> Para 7 of the Preamble LTR Directive

<sup>157</sup> LTR Directive Article 7

<sup>158</sup> Anthoula Papadopoulou and Romy Wakil 'Legal Capability in Relation to Socially Excluded and Migrant Youth in Cyprus: A Gender Based Analysis' in KISA, *My Voice - My rights: Young, Marginalised and Empowered by the Law* (The IARS International Institute UK 2016) p.151

<sup>159</sup> DG IP PD C (n. 129)



### 3.7. Evaluation of the Implementation of EU Migration Law in the Cypriot Legal System

This section considers the external and internal challenges that affect Cyprus' efficient and effective alignment of its domestic law and research policy with the EU migration law acquis, policy and implementation within the country's regulatory framework.

A number of case studies cited in this section and taken from case law highlight the following problematic issues: (a) problems to the free movement rights; (b) rejecting citizenship applications by those who meet the legal criteria; (c) deportation of EU nationals and or family members; (d) problems in going by the basic underlying principles created by the LTR Directive legal framework and ultimately accessing the LTR status.

What follows is a brief introduction to each problematic issue mentioned above with reference to case law that illustrates these challenges, followed by a more detailed description of case studies presented in boxes.

Problems to the free movement rights in category (a) above arise from the EU Law Provisions territorial application only in those RoC areas which are controlled by the Government, as stipulated by Protocol 10<sup>160</sup> to Cyprus Accession Treaty, as a result of Cyprus 2004 EU accession<sup>161</sup> as a divided country. This creates practical and conceptual problems that can potentially have negative effects not only on the free movement implementation<sup>162</sup> but also on the implementation of all EU migration directives. This issue has been raised in the cases of *Apostolides*<sup>163</sup> and *Loizidou*<sup>164</sup> albeit in the context of legal aspects of property rights in the country's occupied areas. Although these cases are out of the scope of the present thesis they are mentioned to highlight the extent of the impact of the territorial application of the acquis on the free movement, confirmed by the CJEU in the case of *Apostolides*, which pointed out this problematic situation. Likewise in *Loizidou* before ECHR there was explicit reference to the freedom of movement restrictions.<sup>165</sup>

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<sup>160</sup> Article 1, Protocol 10 to the Act of Cyprus - EU Accession. For more extensive analysis see Chapter 4

<sup>161</sup> EU Accession Treaty of the RoC: Ratifying law No 35(III)/2003, Official Gazette No 3740, 25.7.2003, OJ L 236, 23.9.2003 Document 12003T/TXT  
[http://www.europarl.europa.eu/enlargement\\_new/treaty/default\\_en.htm](http://www.europarl.europa.eu/enlargement_new/treaty/default_en.htm)

<sup>162</sup> Nicos Trimikliniotis, 'Exceptions: Soft Borders and Free Movement of Workers' in Paul Minderhoud and Nicos Trimikliniotis (eds.) *Rethinking the Free Movement of Workers: The European Challenges Ahead*, (Wolf Legal Publishers, 2009) 135-154, p.148

<sup>163</sup> C-420/07 *Meletis Apostolides v David Charles Orams and Linda Elizabeth Orams*, ECLI: EU: C: 2009:271, para 34.

<sup>164</sup> *Loizidou v Turkey*, Merits, App no 15318/89, Case No 40/1993/435/514, ECHR 1996-VI, [1996] ECHR 70, (1997) 23 EHRR 513, IHRL 3333 (ECHR 1996), 18th December 1996, Grand Chamber [ECHR]

<sup>165</sup> *Loizidou* (n. 164) paras 56, 63

The problem of rejecting citizenship applications by those who meet the legal criteria in category (b) above arises due to external and internal influences exercising an impact on Cyprus. The political situation in which the country is entangled in, its partition since 1974 with competing Greek and Turkish Cypriots claims of authority and citizenship on the island and fears of altering the demographic balance of the Cyprus population<sup>166</sup> have given rise to a restrictive nationality policy of citizenship acquisition.<sup>167</sup> Arguably this is an issue more closely connected to national sovereignty<sup>168</sup> and in the context of Cyprus extremely politicised<sup>169</sup> greatly influencing the country's management of and attitude towards citizenship acquisition, HS migration, and acquisition of the LTR status.

The issue of restrictive migration policies and reluctance to open up citizenship has resulted in the rejection of citizenship applications where the applicant may go through a long, costly and discretionary procedure.<sup>170</sup> *Angelides*<sup>171</sup> is an illustrative example where the applicant's citizenship application was rejected due to the fact that the applicant had remained in Cyprus without a valid permit, only for a few days whereas in the duration of her overall stay in the country she was granted renewed residence permits as described below.

***Emma Angelides***: A Philippina national, a Cypriot national's spouse was repeatedly granted renewable temporary residence permits (TRPs). She applied for citizenship in 2008 following police certification that her marriage was genuine. In 2010 her citizenship application was rejected by the immigration authorities on the ground that she had remained illegally in the country for 15 days in 2004. The applicant applied to the Court for the judicial review of her rejection and succeeded in having her rejection annulled. The CYSC's decision, in line with the CJEU ruling in *Ergat v Stadt Ulm*<sup>172</sup>, annulled the immigration authorities' decision to reject her citizenship application on the ground that the applicant had remained in Cyprus without a valid permit for 15 days, establishing that the authorities are unjustified to act inconsistently and to consider as

<sup>166</sup> Trimikliniotis, (n.129), p.15. See also Charis Psaltis and Huseyin Cakal, 'Social Identity in a Divided Cyprus' in S. McKeown et al. (eds.), *Understanding Peace and Conflict Through Social Identity Theory: Contemporary Global Perspectives* (Springer International Publishing 2016), p.234

<sup>167</sup> Population Registry Law of 2002 (N. 141(I)/2002)

<sup>168</sup> Ton Van Den Brink 'The Impact of EU Legislation on National Legal Systems: Towards a New Approach to EU – Member State Relations' (2017) *Cambridge Yearbook of European Legal Studies*, 19, 211-235

<sup>169</sup> Sanja Ivic, 'EU Citizenship as a Mental Construct: Reconstruction of Post-national Model of Citizenship', (2012) *European Review*, 20(3), 419–437, p.420

<sup>170</sup> European Commission against Racism and Intolerance, 'Report on Cyprus, Fourth Monitoring Round', (Council of Europe, 2011), 169 and ECRI, 'Report on Cyprus, Fifth Monitoring Round', (Council of Europe, 2016), p.23.

<sup>171</sup> *Emma Angelides v the Republic of Cyprus*, Supreme Court No. 1408/2010, 31 October 2012

<sup>172</sup> C-329/97 *Ergat v Stadt Ulm* [2000] ECR I-1487



illegal those time periods which had subsequently been covered by the applicant's renewed residence permits. In its ruling the CYSC made a reference in its decisions in *Noreen Nuique v. Republic*<sup>173</sup>, *Mutikah (Arc No 5384169) v. Republic*<sup>174</sup> and *Nick Solamillo v. Republic*<sup>175</sup> whereby it was stated that the administration cannot inconsistently and against the principles of good administration consider illegal those periods retrospectively covered by the renewal of TRPs. This case confirms the immigration authorities' wide margin concerning decisions to grant citizenship. Although citizenship application rejection by persons who entered or remained in Cyprus illegally is allowed by provision of the law<sup>176</sup>, when interpreted restrictively, this results in the automatic rejection of all citizenship applications by Cypriot nationals' spouses even if an 'illegal' stay may only be for a few days.

The problematic issue of deportation of EU nationals and or family members in category (c) above may arise due to problems with permits and excessive delays in issuing residence cards for family members<sup>177</sup> as well as rejection of citizenship applications, which may lead to detention and deportation issuance orders for EU and non-EU nationals.

Data concerning the above issues is scarce since Cypriot authorities do not systematically collect data specifically relating to the expulsion of EU citizens and their TCN family members.<sup>178</sup> However, as evidenced in case law,<sup>179</sup> in recent research studies<sup>180</sup> and reports by the European Commission against Racism and Intolerance (ECRI)<sup>181</sup> and the National Institution for the Protection of Human Rights (NHRI)<sup>182</sup> this is a serious issue of concern. Over 10,000 persons were deported between 2010 and 2012 while from 2004 to the beginning of 2013, the RoC has deported a total of 1795 EU citizens.<sup>183</sup> These are high numbers considering the country's size and jurisdiction, the fact that 20.3% of the population are non-Cypriots<sup>184</sup> and that the grounds for expelling Union

<sup>173</sup> *Noreen Nuique v. Republic* Case No 1648-1608 (25.5.2010)

<sup>174</sup> *Mutikah (Arc No 5384169) v. Republic* Case No 1833- 1808 (25.5.2010)

<sup>175</sup> *Nick Solamillo v. Republic* Case No 642/09 (22.7.2010)

<sup>176</sup> Article 110(2)(d) of Law on Population N. 41(I)/2002

<sup>177</sup> For example, Cyprus received a formal notice from the Commission in May 2011: Infringement Number 20112064, closing of the case July 2014. See Chapter 4 section 4.3.3.

<sup>178</sup> DG IP PD C (n.129) See also: ECRI, (2011) (n.170) 20, ECRI, Report on Cyprus, (Third Monitoring Round) (2006), Strasbourg: Council of Europe (2006) 17

<sup>179</sup> See for example: *Guilan Zhou v. The Republic of Cyprus*, No. 1079/2014, 23 December 2014, Case No. 1079/2014, *M.A. v the Republic of Cyprus*, ECtHR case, application no. 41872/10 (23 July 2013), *Mitova Zoya Margaritova v. Republic of Cyprus* through the Interior Minister and Chief Immigration Officer, Supreme Court Case application no 67/13, ex parte application 8/8/2013. 20 September 2013.

<sup>180</sup> See DG IP PD C, (n.129), European Union Agency for Fundamental Rights (n.153)

<sup>181</sup> ECRI, (2011) (n.170) ECRI, (2006) (n178)

<sup>182</sup> NHRI: available at: <http://www.nhri.net/nationaldatalist.asp>

<sup>183</sup> Trimikliniotis (n.129)

<sup>184</sup> Of the total economically active people 417,180 in Cyprus, 308,612 are Cypriots, 64,669 are EU citizens and 43,810 are TCNs, Statistical Service of the RoC, 'Demographic Report 2014

citizens are clearly listed by the EU acquis: threats to public policy, public security or public health, abuse of rights, fraud and unreasonable burden on the national social security system. EU law provides for very limited power to remove Union citizens from a MS as specified under Articles 83(1) TFEU<sup>185</sup>, 20 TEEU<sup>186</sup> and 28<sup>187</sup> and 31<sup>188</sup> of Directive 2004/38/EC.

Considering the above limited restrictions placed on the free movement right and the grounds they are based on in Cyprus free movement restrictions are often on such grounds as a migrant's overstaying, alleged marriage of convenience and due to immigration related offences for which migrants have been imprisoned resulting in their criminalisation.<sup>189</sup> This is an issue repeatedly evidenced in Cyprus case law.<sup>190</sup> The case of *Mitova Zoya Margaritova*<sup>191</sup> described below considered an EU national's detention for deportation purposes on the charge of a false marriage.

***Mitova Zoya Margaritova:*** *Zoya Mitova Margaritova*, an EU national from Bulgaria and a mother of a three-year-old child was detained for the purposes of deportation on the grounds that that she conducted a false marriage with a Pakistani national. While Zoya was detained, the child was being looked after by the father, the authorities claimed she was falsely married to, and cohabited with, Zoya since 2009. The Court rejected the claim for an interim order to stop her deportation and release her from detention. Eventually a DNA test on the father and the child proved that he was indeed the father. However, the mother had been detained on a groundless claim for two and a half months, without access to her child. In this case, it is highly questionable whether an alleged

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<sup>185</sup> Establishment of minimum rules concerning the definition of criminal offences and sanctions in the areas of particularly serious crime with a cross-border dimension resulting from the nature or impact of such offences or from a special need to combat them on a common basis

<sup>186</sup> In *Ruiz Zambrano* paragraph 42 the CJEU clarifies that Article 20 (TFEU) precludes national measures which could deprive Union citizens of the genuine enjoyment of the substance of the rights conferred by their status as EU citizens, Case C-34/09 *Gerardo Ruiz Zambrano v Office National de l'Emploi* [2011] ECLI: EU: C: 2011:124, Chapter 2 sections 2.6.1.B .2, 2.6.1.C

<sup>187</sup> Limited expulsion possibility on public policy and public security grounds of EU citizens and their families who have acquired a permanent residence right; limited expulsion possibility for EU citizens' who have resided in a MS for the previous 10 years, or who are minor children, to cases based on imperative grounds of public security

<sup>188</sup> Reinforcement of the existing procedural guarantees against expulsion, including their extension to cases of expulsion on grounds of non-compliance with residence conditions

<sup>189</sup> Nicos Trimikliniotis 'Migration and Freedom of Movement of Workers: EU Law, Crisis and the Cypriot States of Exception' (2013) *Laws* 2(4):440-468, 452 European Union Agency for Fundamental Rights (n.153)

<sup>190</sup> *Anghel Viorel v. The Republic of Cyprus*, Supreme Court Case No. 1064 /2012, 2 August 2012, ex parte application dated 17.07.2012. The AGI ordered the applicant's deportation before the expiry of three days from his arrest, *Shahbaz-ul-Hassan Shah v. Republic of Cyprus* Supreme Court Case 884/2012, 17 July 2012, Interim application dated 6 June 2012 for suspension of detention and deportation orders, the applicant was arrested because his student visa had expired.

<sup>191</sup> *Mitova Zoya Margaritova* (n.179)

marriage of convenience can be legally found to be a ‘threat to the public security’ under the provisions of Directive 2004/38/EC.

The issuance of detention and deportation orders was an issue also raised in the ECtHR conviction against Cyprus on July 23, 2013 in the landmark case of *M.A. v the Republic of Cyprus* for the lack of an effective remedy with automatic suspensive effect against a deportation order and detention for a Syrian national of Kurdish origin.<sup>192</sup> Arguably, the difficulties behind the problematic issue of detention and deportation of EU and non-EU nationals are due to the fact that citizenship acquisition is based on the discretionary power of Council of Ministers or the MI<sup>193</sup> and the limits of judicial review under Article 146 which do not allow the CYSC to perform the administrative function of decision-making<sup>194</sup> This means that there is not any mechanism for the enforcement of the CYSC’s decisions. The Court may only interfere if, after considering all relevant facts, it finds that the administration’s conclusions are unreasonable, they are flawed in fact or in law or that the decision was taken without proper investigation.<sup>195</sup> The only solution where the administration merely refuses re-examination after the annulment of its decision from the Court is to file a lawsuit for damages against the Government for failure to comply with the Court’s decision.<sup>196</sup>

Problems in the area of LTR in category (d) above deal with basic principles under the LTR Directive<sup>197</sup> which are equal treatment with nationals in a number of areas (Article 11); the conditional right to reside in another MS (Articles 14 and 15); greater protection against expulsion (Article 12) and most importantly accessing citizenship via the acquisition of LTR status. The problems in Cyprus, which have a negative impact on TCN researchers and scientists, take the form of wrong or incomplete transposition of the LTR directive, wrong application of the LTR directive and the authorities’ excessive discretionary powers when assessing TCNs’ LTR applications case by case. Additionally any benefits deriving from the LTR Directive may be difficult to be accessed due to restrictive policies excluding many TCNs from accessing LTR since the requirement is

<sup>192</sup> *M.A.* (n. 179), see Chapter 4 section 4.3.3.

<sup>193</sup> See sections 3.6.1. and 3.6.3.D see Chapter 4

<sup>194</sup> Article 146 (6) of Cyprus Constitution

<sup>195</sup> *Nabil Mohamed Adel Fattah Amer v. Republic*, Revisional Appeal No 74/08, 26/1/11 Decision of 26.1.2011

<sup>196</sup> *Deepa Thanappuli Hewage v. Republic*, Case No 869/2002, Decision of 31.3.2004, *Deepa Thanappuli Hewage v. The Republic*, Case No 26/2008, Decision of 18.10.2010, *Nimal Jayaweera v. Republic*, Decision No 27/2008, Decision of 23.2.2010

<sup>197</sup> Dir 2003/109/EC OJ L 16/44 of 23.1.2004 replaced by the Recast Dir 2011/51/EU [2011] OJ L132, (n148) see Chapter 4 section 4.3.3.A

legal and continuous residence in Cyprus for at least five years, whereas temporary residence permits for employment purposes may be renewed (with some limited exceptions) for up to a maximum of four years.<sup>198</sup>

Two landmark cases reflect most of the above mentioned challenges. *Cresencia Cabotaje Motilla*<sup>199</sup> concerned a female migrant who after arriving in Cyprus in 2000 and lawfully working as a domestic worker for eight years applied to the Interior Minister for the LTR status, as provided by the Directive only to be rejected on the ground that the applicant's successive residence permits were limited as to their duration. *Andriy Popovich*<sup>200</sup> concerned a Ukrainian qualified mechanical engineer, who having resided in Cyprus for 12 years applied for the LTR status. His application was rejected on the grounds that it do not satisfy the prerequisite of having stable and regular economic resources as stipulated by Article 18(I) of the Cypriot Law 8(I)/2007 that is Art 5 1(a) of the Directive.

The facts of the cases are presented below.

***Cresencia Cabotaje Motilla:*** The first migrant to apply for the LTR status was a female migrant who arrived in Cyprus in 2000 and was since lawfully employed as a domestic worker. On 25 Jan 2006 with the deadline for the LTR Directive transposition expired and transposed by amending the existing Aliens and Immigration Law Cap. 105 Motilla applied to the Interior Minister (IM) for LTR status as provided by the Directive. The IM rejected her application on the ground that the applicant's successive residence permits were limited *as to their duration under* Article 18Z (2) of the Cypriot Law, as amended by Law 8(I)/2007 purporting to transpose Directive 2003/109/EC Article 3(2) (e). The CYSC, by a majority decision of nine judges against four, rejected Motilla's appeal confirming the Interior Minister's decision, on the ground that the fixed term duration of the applicant's visas fell within the exception of Article 18Z(2) of the Cypriot Law transposing Directive Article 3(2)(e) which wrongfully referred to *persons whose residence permit has been officially restricted as to its duration*.

In its decision, the CYSC interpreted the LTR Directive as meaning that granting of LTR is restricted in cases of temporary residence and MSs are allowed to limit, through "formal restrictions", the application of this right for "those categories of aliens who, by virtue of their nature and the defined and limited purpose of their residence, cannot have the

<sup>198</sup> RoC, Civil Registry and Migration (n. 145)

<sup>199</sup> *Cresencia Cabotaje Motilla v. Republic of Cyprus through the Interior Minister and the Chief Immigration Officer*, Supreme Court Case No. 673/2006 (21 Jan 2008)

<sup>200</sup> *Andriy Popovich v. the Republic of Cyprus*, Case no. 1699/2011, 13 March 2013

possibility/potential of permanent residence which would otherwise create a reasonable expectation of “settlement” and continuation of residence in the spirit of the directive”. Following pressure from the EU Commission the national legislator amended the law as it was transposed deleting the words ‘*as to its duration*’ in 2009.<sup>201</sup>

The case demonstrates the extent of the authorities’ residual powers reaching beyond those provided by the regulations in the form of the wide margin of discretion afforded, also recognized by CYSC case law<sup>202</sup> rendering the acquis regulating TCN migration weak. It also indicates that referral of the case to the CJEU for an interpretation of the Directive regarding the definition of “formally limited residence permit” could have had a decisive impact on its outcome because a CJEU judgment would be binding on the national court and on all other EU national courts when applying the same Directive as in *Singh*<sup>203</sup>.

**Andriy Popovich:** The applicant of Ukrainian citizenship applied for the acquisition of the LTR status in the RoC dated 1/3/2011 after arriving in Cyprus in 1998 to work and after receiving a temporary residence and work permit which he renewed several times up until 2011.

The applicant had completed 12 years of lawful stay, the last five of which uninterruptedly, had two children born in Cyprus, was a qualified mechanical engineer, holder of a certificate of basic knowledge of Greek and an employment contract of 20 months’ duration. He had never resorted to the RoC welfare system, paying his social insurance contributions regularly and lived in rented accommodation with his family.

His application was rejected on the ground that he did not have stable and regular economic resources considering his weekly salary of €360 and the fact that he did not have his own accommodation.

The applicant’s application for judicial review was successful whereby the CYSC held that neither the LTR Directive nor the law adopting it provides for the acquisition of a house as a prerequisite for LTR. Additionally, the Court rejected the authorities’ argument that the permits granted to the applicant contained a time restriction which justified his exclusion from the scope of the law, because there was no condition in the applicant’s permit formally restricting its duration that would justify exclusion from the Directive’s scope.

<sup>201</sup> Law 2 /143 of 2009, November 2009

<sup>202</sup> *Nabil Mohamed Adel Fattah Amer v. Republic*, Revisional Appeal No 74/08, 26/1/11, *Ashal Naveed Peter v. The Republic*, Application 486/2009, 6.6.2011

<sup>203</sup> Case C-370/90 *Singh* [1992] ECR I-4265, see Chapter 2 section 2.7.1.C

In the light of the above, in the area of Long Term Residence (LTR) the task of increasing the level of integration of TCNs is extremely challenging for Cyprus. This coupled with wrong or incomplete transposition of the LTR directive the way the immigration authorities interpret the Directive<sup>204</sup> and incorrect application<sup>205</sup> may have a negative impact on a vast majority of TCNs causing serious barriers to acquiring the LTR status and their subsequent integration.

However, Cyprus' non-proactive migration policy is also reflected towards attracting HS migrants. As already mentioned Cyprus has transposed the Blue Card Directive into national legislation, but the quota has been set to zero since then, due to the economic crisis and the dramatic rise in unemployment. Cyprus is one among a few MSs<sup>206</sup> which imposed admission volumes restricting the number of HS migrants.<sup>207</sup> Although the Europe 2020 Strategy emphasises the importance of a rational migration policy that recognises that migrants can bring economic dynamism and help in job creation as well as filling any gaps in the labour market<sup>208</sup>, Cyprus has not yet put in place such a national migration policy.<sup>209</sup> The previous 'National Action Plan 2010-2012',<sup>210</sup> which represented the country's policy framework towards the integration of legally residing migrants in Cyprus did not include the HS migrant category.<sup>211</sup> Although no new National Action Plan on the integration of legal migrants has been adopted since, the European Commission has been informed that an updated integration action plan for the period 2016-2018 is under preparation.<sup>212</sup>

Arguably the impetus for improvements and reform has been the country's need to comply with EU standards, the monitoring work and recommendations by various bodies established by the Council of Europe such as the European Commission against Racism and Intolerance (ECRI)<sup>213</sup>, which also focuses on integration policies in MSs and

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<sup>204</sup> In *Andriy Popovich*, the CYSCt criticized the way the immigration authorities are interpreting 'adequate means'(n.200)

<sup>205</sup> See, for example, Infringement number 2008/4229, Decision date 16/6/2016

<sup>206</sup> The other MSs are Bulgaria, Estonia, Greece and Romania

<sup>207</sup> Commission Communication to the European Parliament and the Council on the implementation of Directive 2009/50/EC on the conditions of entry and residence of TCNs for the purpose of highly qualified employment', Brussels, 22.5.2014 COM (2014) 287 final

<sup>208</sup> Commission Communication 'Communication on Migration' Brussels, 4.5.2011 COM (2011) 248 final

<sup>209</sup> European Union Fundamental Rights Agency (FRA), 'Fundamental Rights: Challenges and Achievements in 2014' Annual Report (Luxembourg: Publications Office of the European Union, 2015) p.96

<sup>210</sup> Ministry of Interior, Proposal to the Council of Ministers, 'National Action Plan for the Integration of Migrants lawfully residing in Cyprus 2010-2012', 8 October 2010; Council of Ministers, Proposal number 1066/2010, decision no. 71104, 13 November 2010.

<sup>211</sup> Trimikliniotis and Demetriou (n. 145) p.11

<sup>212</sup> Reference to a new plan for the years 2014-2016 can be found in a document sent by the RoC to the UN - See Permanent Mission of the RoC in Geneva (2014). Note concerning the General Assembly Resolution A/RES/68/179 of 28 January entitled 'Protection of Migrants' Reference-Resolution.:A/RES/68/179) Ref.: 2411.001.004.001 (203/81/3), (10 June 2014), [www.ohchr.org/Documents/Issues/Migration/GA69thSession/Cyprus.pdf](http://www.ohchr.org/Documents/Issues/Migration/GA69thSession/Cyprus.pdf). See also ECRI (n. 178).

<sup>213</sup> ECRI (2011), ECRI (2016) (n170)

developments at the level of the CJEU followed by the CYSC. The above driving forces for improvement have resulted in a large increase in the number of persons acquiring citizenship with 1010 persons naturalised in 2014 compared to 328 in 2013.<sup>214</sup>

Overall application and monitoring of the conditions for the acquisition and loss of EU citizenship having due regard to EU law<sup>215</sup>, a new integration plan for TCNs within the spirit of the LTR Directive and a more open HSM policy would help in building a more inclusive society benefitted by legal economic and HS migration.

### 3.8. Conclusion

The examination of the organization and structure of the Cyprus research system and its main providers and performers as well as the challenges facing the country's research environment has shown that the country needs to put in place a more efficient governance structure of the R&I system with a focused strategic direction, vision, design and operation.

Following the economic crisis and the fiscal adjustment imposed on Cyprus in 2011, the economy and public sector are undergoing transformation. This provides an opportunity for Cyprus to revisit and address more effectively country-specific challenges: a narrow research culture due to the relatively recent establishment and development of the research system; the weak linkages between the public and private sectors involved in research and the business sector; the low investment of the private sector in RTDI and the allocation of reliable funding by the State to support the growing R&I needs and to curb potential loss of human capital (brain drain).

On the one hand, Cyprus' EU accession has had a positive impact on the development of a better research environment and certainly the main driving force behind efforts to change the culture, modernise the State and address national migration policy challenges. On the other hand, the application of the EU migration law *acquis* providing for a clear territorial limit to the enjoyment of Union citizenship rights by Union citizens due to Cyprus' political problem is a major mobility hindrance.

Regarding the evaluation of the EU migration law provisions for EU and non-EU migrant scientists, researchers, and the HS as this is implemented in the Cypriot legal framework, despite good rules on free movement and often verbatim transposition there are still flaws in their implementation and correct application by the Cypriot administrative and immigration authorities. These do not only result in numerous detrimental

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<sup>214</sup> This figure includes naturalisation of EU as well as TCNs - See ECRI (n. 170)

<sup>215</sup> As clarified in Case C-135/08 *Rottmann v Freistaat Bayern*, [2 March 2010] ECR I-01449, paras 39 and 41, see also Case C-192/99 *The Queen v Secretary of State for the Home Department, ex parte: Manjit Kaur* [2001] ECR I-1237 and Case C-369/90 *Micheletti* [1992] ECR I-4239.

consequences for EU citizens and their TCN family members, but they constitute negative factors in the setting up of a more attractive and effective research environment.

Application of Schein's organisational culture theory indicates that the State as an organisational culture leader and research initiator across the national research environment faces difficulties and challenges in bringing about the evolution and strengthening of its organisational culture.<sup>216</sup> The prolonged delay in making the necessary reforms for a new organisational and administrative culture causes flaws in the implementation of the EU migration law and policy at the national level and impacts negatively particularly on the mobility of EU nationals' family members, non-EU scientists and researchers and the HS in the country. Arguably the setting up of an attractive research environment is challenging for Cyprus.

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<sup>216</sup> See Chapter 1 section 1.3.1.F



## Chapter 4: Empirical Findings on the Application of EU law and Policy in Cyprus

### 4.1. Introduction

This chapter provides an insight into the Cypriot legal and policy framework, which impacts on scientists' and researchers' mobility in the country. It reflects on empirical findings, drawn from interviews with EU and non-EU scientists and researchers and key informants<sup>1</sup>. The aims of this chapter are twofold. The first aim is to analyse the impact of the Cypriot national legal rules, policies and practices, on migrant scientists in Cyprus. The second aim is to potentially identify scientific mobility problems and challenges, arising from the various country specific factors affecting the research environment.

Historical, political-legal and socio-economic factors constitute external and national challenges for Cyprus to align its domestic law and research policy with the EU law migration law acquis, policy and implementation within the country's regulatory framework. The perpetuation of the island's protracted conflict between the Greek and Turkish Cypriot communities culminating in the island's partition following the 1974 Turkish invasion was a major external influence. The aftermath of the partition was an enforced separation of the two communities.<sup>2</sup>

In this difficult political setting, a second external challenge for Cyprus has been its 2004 EU accession. Cyprus signed the EU Accession Treaty<sup>3</sup> as a divided island on the basis of its 1960 Constitution, which had already incorporated the Establishment Treaty<sup>4</sup> and annexed the Treaty of Guarantee<sup>5</sup> and the Alliance Treaty.<sup>6</sup> Described to be complex,

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<sup>1</sup> Note that for confidentiality purposes, no names are disclosed in the analysis. First Category coded as: Interview No \_\_, for scientists and researchers. Second Category coded as: Interview KI No \_\_, for key informants.

<sup>2</sup> Olga Demetriou, 'EU and the Cyprus Conflict - Perceptions of the Border and Europe in the Cyprus Conflict' (2005) WP Series in EU Border Conflicts Studies No 18, p.11

<sup>3</sup> EU Accession Treaty of the RoC: Ratifying law No 35(III)/2003, Official Gazette No 3740, 25.7.2003, OJ L 236, 23.9.2003 Document 12003T/TXT

<sup>4</sup> Treaty No 5476 of the UK of Great Britain and Northern Ireland, Greece and Turkey and Cyprus concerning the Establishment of the RoC, Nicosia, 16 August 1960

<sup>5</sup> Treaty No 5475 of the RoC of the one part, and Greece, Turkey and the UK of Great Britain and Northern Ireland of the other part, Nicosia, 16 August 1960.

<sup>6</sup> Treaty No 5712 of Greece, Turkey and Cyprus (with Additional Protocols), Nicosia, 16 August 1960.

rigid, unworkable and unique<sup>7</sup>, the 1960 Constitution would prove to be an additional challenge to amend and adapt for political and constitutional/administrative reasons.<sup>8</sup>

Cyprus' accession represents perhaps the most complicated enlargement case to date.<sup>9</sup> This is also reflected in the Accession Treaty 2003 and Protocols 3 and 10 attached to it, which provides four different territorial zones<sup>10</sup> : i) the island as a whole is under the EU jurisdiction; ii) the UK sovereignty areas enjoy a different status where not all EU rules apply<sup>11</sup>; iii) the demarcation line under the UN forces enjoys a different regime; iv) finally and most importantly the EU law *acquis* application has been suspended in those areas of the RoC which are not controlled by the Government as stipulated by Protocol 10.<sup>12</sup> Arguably Protocol 10 stipulations also affect the EU migration law *acquis* application in a country whose territory has been partitioned due to its current internal situation.<sup>13</sup>

Following its EU accession, Cyprus has had to adopt EU rules, policies and standards. The country had to adhere to the *acquis communautaire* as a result of its EU membership and the EU influence at national level regarding migration laws and policies. The former constitutes binding law while the latter take the form of not binding policies, however, both call for changes/reform, adaptation and integration into Cyprus legal order.<sup>14</sup> Attainment of the above goal requires the country's effective response to the new challenges created by the introduction, implementation and integration of EU policy and law into its public R&I system and internal legal system.

The present empirical findings indicate that despite Cyprus' EU membership there are still flaws in the implementation of the law pertaining to EU migration Directives and soft law initiatives at the national level due to internal integration and external challenges the country's system faces in this process. These constitute sources of difficulties, the impact of which is felt within the Cypriot scientific research environment where political

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<sup>7</sup> Stéphanie Laulhé Shaelou, 'Back to Reality: The Implications of EU Membership in the Constitutional Legal Order of Cyprus' in A. Lazowski (ed.) *The Application of EU Law in the New Member States- Brave New World* (TMC Asser Press, 2010), 451-502. See also Thomas Adams, 'The First Republic of Cyprus: A Review of an Unworkable Constitution' (1966) *The Western Political Quarterly* 19 (3): 475-490

<sup>8</sup> Under Article 182, those articles, incorporated from the Zurich Agreements and which are listed in Annex III of the Constitution, are considered to be fundamental and as such they cannot be modified.

<sup>9</sup> George Kyris, 'The European Union and the Cyprus Problem: A Story of Limited Impetus' (2012) *Eastern Journal of European Studies*, 3 (1): 87-99, p.86

<sup>10</sup> Heinz-Jürgen Axt and Nanette Neuwahl 'The Cyprus Ouverture' in Nanette Neuwahl (ed.) *European Union Enlargement Law and Socio-Economic Changes* (Thémis Inc, 2004) 126-127.

<sup>11</sup> Protocol 3 to the Act of Cyprus EU Accession 2003 (n. 3)

<sup>12</sup> Article 1 of Protocol 10 to the Act of Cyprus EU Accession (n. 3)

<sup>13</sup> Stéphanie Laulhé Shaelou, *The EU and Cyprus: Principles and Strategies of Full Integration Studies in EU External Relations* (Martinus Nijhoff, 2010), pp.125-126.

<sup>14</sup> In *Costa v Enel* [1964] ECR 585 the CJEU stated that the Treaty created its own legal system which became an integral element of the MS' legal order – see paras 3 and 7.

culture, realities, opportunities, and problems may potentially be encountered in other MSs, but with a substantial difference and diverse implementation results.<sup>15</sup>

In this context, the issue of law and policy framework pertaining to EU and non-EU scientists' and researchers' scientific migration and its implementation has an impact on the Cypriot research culture and research environment, being an integral part of it. At the same time it is also a determining factor for migrants' entry or exodus in the country and its attractiveness or not for the above mentioned stakeholders. Culture does not exist in isolation.<sup>16</sup> It is inseparably linked to law.<sup>17</sup> Legal systems derive from a country's history and culture, shaping people's identity and social practices<sup>18</sup> while culture shapes law and the practices that reproduce it.<sup>19</sup>

The connection between culture, law and policy and its impact on the research culture and environment in Cyprus coupled with the sources of difficulties identified in this chapter is reflected in the findings reported and related to the present thesis research question. This research question seeks to address the effectiveness and impact of the research landscape and policy in the field of research and free movement for EU and non-EU scientists' and researchers' migration/mobility in Cyprus by employing Schein's organizational culture theory.<sup>20</sup> Application of this theoretical model firstly indicates the crucial role of the State in introducing and accommodating EU law and research policy in the country demonstrating the external, internal and leadership organizational culture effects that influence the setting up of an attractive research environment in Cyprus. Secondly it contributes to bringing to surface those political, national, social and cultural variables that render the acquis, regulating the migration of TCNs weak and ineffective.

This chapter, divided in two parts, considers the reasons causing the flaws in EU law implementation in Cyprus and which take the form of external<sup>21</sup> and internal<sup>22</sup>

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<sup>15</sup> Tamara Jonjić and Georgia Mavrodi, 'Immigration in the EU: Policies and Politics in Times of Crisis 2007-2012', European Union Democracy Observatory, Robert Schuman Centre for Advanced Studies (Florence, 2012), p.8. See also Risto Lampinen and Petri Uusikylä, 'Implementation Deficit - Why Member States Do Not Comply with EU directives?' (1998) 21(3) Scandinavian Political Studies, 231-249

<sup>16</sup> Iris Varner and Katrin Varner, 'The Relationship between Culture and Legal Systems and the Impact on Intercultural Business Communication' (2014) 3(1) Global Advances in Business Communication p.3

<sup>17</sup> Austin Sarat and Thomas R. Kearns, 'The Cultural Lives of Law', in Austin Sarat & Thomas R. Kearns (eds.), *Law in the Domains of Culture* (University of Michigan Press, 1998), 10; Naomi Mezey, 'Law as Culture' (2001) *The Yale Journal of Law & the Humanities*, 13, (1): 35-67.

<sup>18</sup> Varner and Varner (n.16).

<sup>19</sup> Mezey (n.17). See also Paul Kahn, *The Cultural study of Law: Reconstructing Legal Scholarship* (University of Chicago Press, 2000), p.36 and Naomi Mezey 'Out of the Ordinary: Law, Power, Culture, and the Commonplace' (2001) 26 *Law & Soc. Inquiry*, 145-167.

<sup>20</sup> Edgar Schein *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass 2004), 10-15. See also Chapter 1 sections 1.3.1-1.3.2

<sup>21</sup> Ibid

<sup>22</sup> Ibid

challenges which the country needs to address with effective leadership<sup>23</sup>. The first section examines the territorial application of EU law provisions, perceived by respondents as an external challenge which impacts on migration laws and policies at the national level. The second section deals with those challenges pertaining to scientific migration which are perceived to be internal. It begins with the country's policy and practices in the area of Cypriot citizenship acquisition and their impact on the implementation of Directive 2004/38/EC (the Citizenship Rights Dir.). It then considers the transposition of EU law into national law and the resulting consequences. Next it examines the internal challenges in the area of researchers' and HS migration that arise from the implementation of the Directives 2005/71/EC (Researcher Directive), 2009/50/EC (Blue Card Directive) and 2003/109/EC (Long-Term Residence Directive) into national legislation. It finally considers the implementation of EU soft law initiatives such as the European Charter for Researchers<sup>24</sup> and the Code of Conduct for the Recruitment of Researchers.<sup>25</sup>

#### **4.2: External Challenges: Migration Laws and Policies<sup>26</sup>**

The implementation impact of EU Migration Directives<sup>27</sup> and soft law initiatives<sup>28</sup> on scientific mobility is a strong indicator of the State's ability to solve external adaptation and internal integration problems under decisive, consistent and effective leadership<sup>29</sup> and an optimal use of all resources human, financial and physical.

As an EU MS, Cyprus should comply with and implement EU law in such a manner that its people enjoy those rights emanating from it and mobility benefits. However, a major problem cited by all interviewees and key informants is the territorial application of EU law provisions as a consequence of the 1974 Turkish invasion. This was considered as having a detrimental impact on the country's EU membership since Cyprus' full integration into the EU and full application of the EU law *acquis* on the whole of Cyprus will happen in the event of a settlement between the Greek and Turkish Cypriot communities.<sup>30</sup> Such a settlement would potentially end the EU law *acquis* suspension in Northern Cyprus. It would contribute to the two Cypriot communities' reunification and integration while it would facilitate trade and the conduct of research between Greek and Turkish Cypriot scientists. Undoubtedly, this would provide political stability and economic development of the country as a whole.

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<sup>23</sup> Ibid

<sup>24</sup> See Chapter 2, section 2.3

<sup>25</sup> Ibid

<sup>26</sup> Chapter 2, section 2.6

<sup>27</sup> Ibid

<sup>28</sup> See chapter 2, section 2.3

<sup>29</sup> Schein (n. 20), p271.

<sup>30</sup> Article 4 of Protocol 10 of the EU Accession Treaty of the RoC. See also Lualhe Shaelou, (n. 13) 235

#### 4.2. 1 Respondents' Perception of the Territorial Application of EU Law Provisions

The island's *de facto* division since 1974 by the Turkish military has placed serious obstacles in particular in relation to mobility, enforcing the two communities' separation with virtually no contact between them. However, an important change that occurred after the finalization of Cyprus' EU accession process is the lifting of border restrictions.<sup>31</sup> Thus contact between the two communities' members became possible. This also resulted in an increase in the Turkish Cypriots' citizenship applications, especially once Cyprus became an EU MS.<sup>32</sup> Consequently while the signing of the EU Accession Treaty has provided an impetus for change of the status quo regarding mobility it has also triggered fears of a potential alteration of Cyprus' population ethnic make-up.

The exact position regarding movement between Cyprus' two sides is set out in the Green Line<sup>33</sup> Regulation, adopted in agreement with the RoC, enforced on the 1<sup>st</sup> May 2004.<sup>34</sup> Special rules are laid down concerning the movement of goods, services and persons crossing the line between the areas of the RoC in which the Government of the RoC exercises effective control and the areas in which it does not. Movement is only allowed through designated crossing points, stipulated by the Regulation. Since then there have been a series of amendments<sup>35</sup> providing more relaxed facilities for persons crossing the line and extension of the crossing points list. Nevertheless, the passport requirement and border controls was and is an issue of concern of EU citizens including scientists and researchers as these interfere with conducting research.

Respondents' quotes capture the above concern when they comment that:

*“There was one obstacle for my free movement being not allowed to enter the North of Cyprus to do research and/or access historical archives”.*<sup>36</sup>

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<sup>31</sup> Demetriou (n. 2) p.9

<sup>32</sup> Turkish Cypriots, who acquired identity cards and birth certificates of the RoC: 3 in 2000, 302 in 2003, 297 in 2006, 504 in 2010 and 538 in 2016, according to the Personal Communication with the Civil Registry and Migration Department and the Population Data Archives, July 13, 2017. Thus, Turkish Cypriots still have access to the RoC and the EU citizenship. However, the EU law application suspension in Northern Cyprus means that Union citizens, including Turkish Cypriots residing there, cannot invoke any rights derived from primary or secondary Union law against the North regime.

<sup>33</sup> The term 'Green Line' first established in 1964 refers to the cease fire line that *de facto* divides Cyprus. It is more than 180.5 km long and has an area of 346 km<sup>2</sup> and became impassable following the 1974 Turkey invasion.

<sup>34</sup> Council Regulation (EC) No 866/2004 of 29<sup>th</sup> April 2004

<sup>35</sup> Article 2 of Protocol 10 to the Act of Accession 2003. See also Council Regulation (EC) No. 293/2005 OJ L50 of 23.2.2005, Council Regulation (EC) No 601/2005 OJ L99 of 19.4.2005, Council Regulation (EC) No 1283/2005 OJ L203 of 4.8.2005, Council Regulation (EC) No 587/2008 OJ L163 of 24.6.2008, Council Regulation (EC) No 685/2013 OJ L196 of 19.7.13. Annual reports are submitted by the EU to the European Council on the Regulations application and implementation

<sup>36</sup> Interview 8 (CY4 Nov 2014), Interview KI 2 (CY 16 Oct 2014)

*“The island’s division is an obstacle to research activities in many ways and this does not benefit research”.*<sup>37</sup>

In the light of the above, Cyprus’ EU accession as a divided country necessitated a differentiated application<sup>38</sup> of the EU law acquis under provisions set out in Protocols 3 and 10 to the Accession Treaty.<sup>39</sup> According to Article 1 of Protocol 10<sup>40</sup>, the EU law acquis application has been suspended in those areas of the Republic which are not under the Government’s effective control. This provision affects the EU migration law acquis application providing for a clear territorial limit to the enjoyment of Union citizenship rights by Union citizens. Additionally, it does not only affect the transposition of all EU Migration Directives into national law but it also impacts on provisions under other law areas. For instance, Section 22 (3) of Law 7(1) 2007<sup>41</sup> confines the implementation of the right to equal treatment only in relation to Union citizens and their family members who reside in the territory in which the RoC exercises effective control. The same applies with Article 18 IZ (1a) Law N. 8(I)/2007<sup>42</sup> to TCNs who are LTRs. Of course, this rule affects other rights including that of residence and any other rights deriving from the EU Migration Directives.<sup>43</sup>

Respondents expressed concerns in relation to the problems facing scientific mobility, the conduct of research and the negative impact of the two scientific communities’ ‘isolation’ due to the island’s partition:

*“[...] this is a very difficult discussion. The acquis communautaire is suspended there, so what happens if somebody enters as a TCN a university in the occupied areas? First of all, we will never know. Secondly what the status is there we don’t know”.*<sup>44</sup>

*“Occasionally research projects [...] might demand collaboration between the two communities but collaboration is possible only with individual researchers from the North. It is a kind of isolating the two research communities”.*<sup>45</sup>

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<sup>37</sup> Interview KI 7 (CY 27 Jan 2015)

<sup>38</sup> This differentiation was confirmed by the CJEU in *Apostolides*, ‘based on the exceptional situation prevailing in Cyprus’; See C-420/07 *Meletis Apostolides v. David Charles Orams and Linda Elizabeth Orams*, ECLI:EU:C:2009:271 (Judgment 28 April 2009) para 34

<sup>39</sup> EU Accession Treaty - Protocols on Cyprus (n. 3). See also Chapter 3, section 3.7.

<sup>40</sup> Article 1 of Protocol 10 to the Act of Cyprus - EU Accession (n. 12)

<sup>41</sup> Law N. 7(I) of 2007 implementing Directive 2004/38/EE

<sup>42</sup> Law N. 8 (I) of 2007 implementing Directive 2003/109/EC

<sup>43</sup> The problematic issue of the territorial application of EU law provisions has been raised in landmark cases before the ECtHR. In *Loizidou v. Turkey*, *Cyprus v. Turkey* and *Xenides-Arestis v. Turkey* there was explicit reference to the freedom of movement restrictions.

<sup>44</sup> Interview KI 1 (CY 12 Sept 2014)

The present findings, however, are devoid of negative feelings from any of the two groups of interviewees in relation to research collaboration with their counterparts in the North. This is confirmed by the following comments from both categories of interviewees:

*“[...] it has nothing to do whether you are Greek or Turkish Cypriot but that is due to particular circumstances caused by Cyprus’ forceful division and you have the buffer zone where a meeting [of researchers] could be set up but this depends on the mood of the administration there to allow Turkish Cypriot researchers to attend such a meeting”.*<sup>46</sup>

*“The research results and experience of collaboration with individual researchers from the North are always positive”.*<sup>47</sup>

A note of hope was the fact that scientists and researchers do find a way to come together for the benefit of research in Cyprus regardless of the island’s division:

*“Greek and Turkish Cypriot researchers often work together and with international experts in the context of various EU and International Research Institutes projects<sup>48</sup> or on their own initiative<sup>49</sup>”.*<sup>50</sup>

The above indicate that, although the two scientific communities in Cyprus have been divided geographically across ethnic lines for almost half a century, initiatives of a bi-communal research nature promote and develop joint research projects between Greek and Turkish Cypriots researchers.<sup>51</sup> Based on the aspects of participants’ perceptions, scientific mobility, and scientific research conduct could create common grounds for more and substantial research collaboration between the two communities thus, compensating for the

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<sup>45</sup> Interview KI 7 (CY 27 Jan 2015). See, for example, UN Development Programme (UNDP) ‘Youth in Cyprus- Aspirations, Lifestyles & Empowerment’ Cyprus Human Development Report (2009), a product of collaboration between Greek and Turkish Cypriots at: <https://www.slideshare.net/unyouth/cyprus-human-development-report-2009-youth-in-cyprus-aspirations-lifestyles-empowerment-undp-2009>

<sup>46</sup> Interview KI 7 (CY 27 Jan 2015).

<sup>47</sup> Interview KI 7 (CY 27 Jan 2015)

<sup>48</sup> Projects, such as the Association for Historical Dialogue and Research (AHDR) ‘Multi-perspectivity and Intercultural Dialogue in Education (MIDE)’ funded by USAID through the UNDP- Action for Cooperation and Trust, and projects funded by PRIO Cyprus, an independent bi-communal Research Centre of the Peace Research Institute Oslo.

<sup>49</sup> See, for example, Nicos Trimikliniotis, and Umut Bozkurt, *Beyond a Divided Cyprus - A State and Society in Transformation* (Palgrave Macmillan 2012).

<sup>50</sup> Interview KI 7 (CY 27 Jan 2015) Interview KI 2 (CY16 Oct 2014),

<sup>51</sup> Charis Psaltis and Huseyin Cakal, ‘Social Identity in a Divided Cyprus’ in S. McKeown et al. (eds.), *Understanding Peace and Conflict Through Social Identity Theory*, Peace Psychology Book Series, (Springer International Publishing 2016), p.230, p.235, p.242. See also Peter Loizos, ‘Bi-communal initiatives and their contribution to improved relations between Turkish and Greek Cypriots’ (2006) *South European Society and Politics*, 11, 179–194.

lack of communal interaction in scientific and intellectual fields due to the country's partition.<sup>52</sup> Within this context, research has shown the importance of incentives for people and key actors to become involved in projects promoted and funded by various foreign and local donors<sup>53</sup> and non-governmental organizations<sup>54</sup> on many levels.<sup>55</sup>

The implication is that scientific research could potentially provide an additional avenue for more future engagement of scientists and researchers from both Cypriot communities until a comprehensive settlement is reached. Such a settlement would undoubtedly lead to the island's reunification and the establishment of a bi-zonal, bi-communal federation in which the two communities would enjoy political equality and all the rights deriving from the EU law *acquis* application.

### 4.3 'Internal' Challenges: Empirical Evidence on the Implementation of EU law into National Legislation

Based on the qualitative interviews' themes regarding the thematic area of 'internal' challenges facing the Cypriot domestic law and policy, problems arise in the management of the country's implementation of and attitude towards EU law and policies.<sup>56</sup>

The first challenge, as identified by the interviewees, relates to the Cypriot citizenship acquisition question, perceived to be a sensitive national issue, triggering protectionist measures. The second challenge reflects on the EU law misconstruction when transposed and implemented into national legislation which negatively impacts on incoming scientists, researchers and/or their family members if they are TCNs and occasionally on EU citizens alike. The third challenge relates to the country's attitude towards the HS and its decision to set a zero acceptance of HS migrants. The fourth challenge reflects on the application of EU soft law initiatives such as the European

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<sup>52</sup> Sezai Ozcelik, 'Border Creation in Cyprus: Contested History and the Psychodynamic Perspective of Vamik Volkan' (2013) *Peace and Conflict Review*, 7 (2): 1-11

<sup>53</sup> For example, the Civil Society in Action Programme funded by EuropeAid, projects funded by Norway through Cyprus PRIO, collaborative events funded by Germany's Friedrich Ebert Foundation, joint projects between Greek and Turkish Cypriots in different areas including research funded by the Stelios Philanthropic Foundation in Nicosia Cyprus.

<sup>54</sup> For example, MIGNET - Transnational Digital Networks Migration and Gender, a project by Symfiliosi / Uzlaşma/Reconciliation Cyprus, a non-profit non-governmental non-partisan organization in Cyprus at: <http://symfiliosi.org/projects/mignet-trasnational-digital-networks-migration-and-gender/>

<sup>55</sup> Maria Hadjipavlou and Bulent Kanol, 'The Impacts of Peacebuilding Work on the Cyprus Conflict' (2008), CDA Collaborative Learning Projects 54, Diana Chigas, 'Putting Our Experiences in Perspective' Booklet 2: Civil Society – rebuilding peace worldwide: Cypriot Civil Society Strengthening Programme, (2008) International Civil Society Forum, INTRAC, NGO Support Centre and The Management Centre (now MCMed).

<sup>56</sup> Although some of these problems were not reported by all participants, they occurred frequently during the narratives, and thus were significant in their own right to be mentioned.



Charter for Researchers<sup>57</sup> and the Code of Conduct for the Recruitment of Researchers in Europe.<sup>58</sup> The findings indicate a lack of awareness among interviewees about the existence and purpose of these initiatives suggesting a knowledge dissemination gap.

#### 4. 3. 1 Cypriot Citizenship Acquisition

Participants criticised the situation regarding naturalisation as still remaining very restrictive.<sup>59</sup> Their perception was that problems arise due to restrictive naturalization policies currently applied, exercise of wide discretion and state sovereignty. The comment of a key informant describes the situation neatly: “*Citizenship is not granted even if ‘they’ [migrants] are born in Cyprus*”.<sup>60</sup>

Although the criterion for attributing nationality based upon the principle of jus sanguinis (right of blood) has been adopted by a majority of countries, the jus soli rule (right of the soil) is still dominant in some countries while others including Cyprus follow a mixed approach to different degrees.<sup>61</sup> Cypriot citizenship acquisition is primarily due to Cypriot descent. Persons of non-Cypriot descent may apply to acquire citizenship via the modes described in detail in Chapter 3.<sup>62</sup> However, the acquisition or not of citizenship is within the prerogative the Ministers’ Council and/or the Interior Minister following their application review according to Article 109 of the Civil Registry Law No. 168(I)/2017. This stipulation first introduced in 1999 by Law 65(I)/1999, was apparently targeting Turkish nationals and other foreigners who came to settle in the north following the 1974 Turkish invasion and who are seen as a threat to Cyprus’ demographic features.<sup>63</sup> Arguably, this nationality policy reflects a means of managing the above issues by policy makers.

The migration policy formulated in the 1990s was that the migrants’ stay was to be short-term and temporary.<sup>64</sup> This temporary work model for migrant workers coupled with

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<sup>57</sup> OJ L75/67 of 22/3/2005 (European Charter for Researchers). See Chapter 2, section 2.3

<sup>58</sup> OJ L75/67 of 22/3/2005 (Code of Conduct for the Recruitment of Researchers), see Chapter 2 section 2.3

<sup>59</sup> See ECRI, ‘Report on Cyprus (Fourth Monitoring Cycle)’ (Council of Europe, 2011), p.20; ECRI, ‘Report on Cyprus, (Third Monitoring Cycle)’, (Council of Europe, 2006), p.17; Nikos Trimikliniotis and Mihaela Fulfias-Souroulla, ‘Integration of New Female Migrants in Labour Market and Society: A State of the Art Report for the Case of Cyprus’ (2007) WP No. 11. See also Leandros Savvides et al., ‘Racism and Related Discriminatory Practices in Cyprus’ (2013) ENAR Shadow Report 2011-2012

<sup>60</sup> Interview KI 6 (CY 24 Jan 2015)

<sup>61</sup> Criton Tornaritis, *The Law Relating to Government of the Republic of Cyprus* (Nicosia Cyprus Research Centre 1982), 39 and Nicole Guimezanes ‘The Current Status of Nationality Law’ in OECD *Naturalisation: A Passport for the Better Integration of Immigrants?* (OECD 2011)

<sup>62</sup> See Chapter 3 section 3.6.2

<sup>63</sup> Nikos Trimikliniotis ‘Report on Citizenship Law: Cyprus’ (2015) EUDO Citizenship Observatory, Robert Schuman Centre for Advanced Studies in collaboration with Edinburgh University Law School, 9. See also Psaltis and Cakal, (n.51) p.231

<sup>64</sup> Nikos Trimikliniotis and Corina Demetriou, ‘Labour Integration of Migrant Workers in Cyprus: A Critical Appraisal’ in Mojca Pajnik and Giovanna Campani (eds.) *Precarious Migrant Labour Across Europe*, (Peace Institute, 2011), 73-96.

the threat of distorting the demographic balance of the Cyprus' population and altering its ethnic make-up contributed to the persistence of strict migration policies and reluctance to open up citizenship rules.<sup>65</sup> A key informant's quote captures the above underlying reasons when he comments that:

*“Any barriers to citizenship acquisition are likely to be justified under the terms of Cyprus’ political problem, the economic crisis and the high unemployment rates”.*<sup>66</sup>

A careful look at the participants' views suggests that the citizenship acquisition policy has become extremely politicised<sup>67</sup> and derives mainly from the country's long-standing political problem. Other related factors include population control so as not to alter the demography and an increase in Turkish Cypriots' citizenship applications following the opening of check points in 2003.<sup>68</sup> In this context, research suggests that for countries that have not enjoyed continuous independence for more than 60 years, or have been partitioned, the citizenship concept is still linked to an ethnic interpretation of nationality.<sup>69</sup>

Although nationality law is clearly within the RoC's competence, policy makers should take the impact of restrictive policies for national citizenship acquisition into serious consideration. The challenge for Cypriot policy makers is the adoption of a migration policy and system that would establish the preconditions for people who potentially meet the citizenship acquisition criteria. This is all the more important, given the European dimension of Cyprus nationality as an EU MS which will be discussed next.

#### **4.3.2. Empirical Evidence on the Implementation of Directive 2004/38/EC (Citizenship Rights Dir)**

EU citizens, including the HS and researchers, have the right to move and reside without restrictions within MSs' territory<sup>70</sup> by virtue of their nationality, since nationality is the primary EU citizenship indicator. Directive 2004/38/EC (the Citizenship Rights Dir.) on the right of citizens of the Union and their family members to move and reside freely within the territory of the MSs<sup>71</sup> was implemented via National Law N 7(I) of 2007.<sup>72</sup>

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<sup>65</sup> See Nicos Trimikliniotis and Corina Demetriou, 'Active Civic Participation of Immigrants in Cyprus' Country Report prepared for the European research project POLITIS, (Oldenburg 2005)

<sup>66</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>67</sup> Sanja Ivic, 'EU Citizenship as a Mental Construct: Reconstruction of Post-national Model of Citizenship', (2012) 20(3) European Review 419–437 p.429

<sup>68</sup> See note 32 above.

<sup>69</sup> Andre Liebich, 'Introduction: Altneuländer or the vicissitudes of citizenship in the new EU states' in R. Baubock et al. (eds.) *Citizenship Policies in the New Europe Expanded and Updated Edition* (IMISCOE Research Amsterdam University Press, 2009) 21-42

<sup>70</sup> Article 20 (2) TFEU

<sup>71</sup> See Chapter 2, section 2.6.1.B.2 and Chapter 3 section 3.6.2.A

<sup>72</sup> OJ L 158, 30 4 2004. See also Chapter 3 section 3.6.2.A

Key informants commented that EU law transposition into national law is not as efficient in Cyprus as they expect it to be. This concerned incomplete or incorrect transposition and implementation mostly on the entry and residence of EU citizens' family members and TCN family members as well as safeguards against expulsions.<sup>73</sup>

The Cypriot authorities claimed to have transposed the Directive correctly and fully and that measures have been taken for the purpose of compliance with and correct implementation of Directive Articles 10(1), 11(1), 12(1) and 13(1) in their letter responding to the Commission's concerns dated 25.07.2011.<sup>74</sup> For example, Directive Article 10(1) provides that the residence card is granted to TCNs who are EU citizens' family members within six months from the application submission. This provision was transposed verbatim via Article 12 (1) of National Law 7(1) 2007. An example cited refers to non-compliance with the six-month deadline foreseen in Directive Article 10(1) during which an applicant must be granted a certificate. A key informant commented:

*“Often spouses of EU citizens who are TCNs are granted residence card of a few months’ duration only, which causes a lot of problem”.*<sup>75</sup>

This is a particular type of obstacle to the free movement and residence right for EU citizens and their families encountered in Cyprus, relating to the final implementation, which means the actual application of EU laws at the practical level.<sup>76</sup> The following quote illustrates concerns that arise at the administrative operational level for the abovementioned issue:

*“Administratively I do see some things and some discrepancies that I wouldn’t like them to be there particularly with durations or rights”.*<sup>77</sup>

Directive Article 11(1) specifies the residence card's duration to be 5 years or an equivalent duration corresponding to the duration of the EU citizen's stay if this is shorter than five years. This provision was transposed verbatim via Articles 13(1) and 13(2), Part III of Law 7(I)/2007. Complaints have been made to the Commission regarding the

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<sup>73</sup> These observations are in line with issues identified as some of the problems and challenges for EU and non-EU citizens in Cyprus in Chapter 3, section 3.7.

<sup>74</sup> Nicos Trimikliniotis, 'Report on the Free Movement of Workers in Cyprus in 2012-2013' (2013) National Expert Report for the European Network on Free Movement of Workers within the European Union, p.41 at: [https://works.bepress.com/nicos\\_trimikliniotis/41/](https://works.bepress.com/nicos_trimikliniotis/41/)

<sup>75</sup> Interview KI 6 (CY 24 Jan 2015)

<sup>76</sup> Johan From and Per Stava, 'Implementation of Community Law: The Last Stronghold of National Control,' in Sv. S Andersen, & K. A. Eliassen, (eds.), *Making Policy in Europe - The Europeification of National Policy making*, (SAGE 1993), 55-67. See also Lampinen and Uusikylä (n.15).

<sup>77</sup> Interview KI 1 (CY 12 Sept 2014)

practice of non-compliance with a proper duration of the residence card.<sup>78</sup> For excessive delays in residence cards issuance for family members Cyprus received a formal notice from the Commission in May 2011.<sup>79</sup> This kind of difficulty has also been reported in a recent study by the European Parliament<sup>80</sup>, where excessive delays in obtaining a residence card and or registration certificates is found to be a recurring obstacle in Cyprus among other MSs.<sup>81</sup>

Key informants were also concerned about the tight admission criteria,<sup>82</sup> the exercise of strict immigration control<sup>83</sup> and the considerable administrative discretion in assessing cases which they considered negative factors for attracting scientists and researchers to Cyprus. Only one of the eight key informants interviewed stated that there is no problem once applicants follow the proper procedures:

*“[...] the problem is that the correct procedures have not been followed. It's not that the government is not doing their work correctly. If candidates were to apply through certified professionals in Cyprus, the whole procedure would be very well-streamlined and responses would be given within three months which is well faster than many other EU MSs and well proportionate”.*<sup>84</sup>

As opposed to the above the other key informants reported that they were aware of problems in the implementation procedures and that *“the correct procedures regarding applications are not being followed”*.<sup>85</sup> The above observation is also reflected in a number of cases before the Cyprus Supreme Court (CYSC) in which the decision to reject citizenship application by Cypriot nationals' spouses were annulled. For example, in *Emma Angelides*<sup>86</sup> the Court annulled the immigration authorities' decision to reject a citizenship application of a Cypriot national's spouse on the ground of the applicant's 15 days of illegal stay without a valid permit. The Court held that the authorities are unjustified in considering illegal those time periods which occurred a long time ago and

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<sup>78</sup> See, for example, Complaint to the European Parliament Ref. 1862/2009

<sup>79</sup> Infringement Number 20112064, closing of the case July 2014

<sup>80</sup> Directorate General for Internal Policies, Policy Department C (DG IP PD C): Citizen's Rights and Constitutional Affairs, Civil Liberties, Justice and Home Affairs Petitions 'Obstacles to the Right of Free Movement and Residence for EU Citizens and their Families-Comparative Analysis' PE 571.375 (September 2016), p.61

<sup>81</sup> Austria, Belgium, Czech Republic, Denmark, France, Italy, Malta, the Netherlands and Sweden, Ireland and the UK

<sup>82</sup> See Chapter 3, section 3.7

<sup>83</sup> See Chapter 3, section 3.7

<sup>84</sup> Interview KI 3 (CY 27 Oct 2014)

<sup>85</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>86</sup> CYSC, *Emma Angelides v. the Republic of Cyprus*, No. 1408/2010, 31 October 2012. See also Chapter 3, section 3.7

which had subsequently been covered by issuing renewed residence permits to the applicant.

An additional potential contributing factor to the difficulty in following the correct procedures has been provided by another key informant:

*“We were not ready in terms of processing all information and entering all data on a computer data basis. Now that they have computerised the system, information will reach the interested parties more easily. There has been a problem there”.*<sup>87</sup>

EU citizens and their TCN family members have frequently experienced difficulties in obtaining information regarding their free movement and residence rights. This has been reported as an issue in Cyprus and in at least another five Member States.<sup>88</sup> Provision of incorrect or confusing information to TCN family members was an additional obstacle reported.<sup>89</sup> A characteristic example concerns lack of awareness on the part of the Cypriot immigration authorities of Decision 565/2014202, which abolishes the visa requirement for TCN family members who hold a valid residence permit issued by Bulgaria, Romania or Croatia wishing to travel to Cyprus.<sup>90</sup> This practice is also in breach of Directive Article 5(2), under which a valid residence card possession exempts TCN family members from the visa requirement.

Based on the above, EU citizens and scientists do not experience significant obstacles in exercising their entry rights in Cyprus. By contrast, TCN family members in particular, encounter a number of obstacles in exercising their entry right, particularly in relation to residence cards issuance and duration. Regarding this issue, in its case law, the CJEU added that TCN family members not only have the right to enter MSs’ territory, but also have an entry visa right.<sup>91</sup> This distinguishes them from other TCNs, who have no such right.<sup>92</sup>

Despite good free movement rules, lack of their correct application by the Cypriot administrative and immigration authorities relates to conditions that are not in line with the Directive and often to its requirements misinterpretation. Additionally, they are not in line

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<sup>87</sup> Interview KI 6 (CY 24 Jan 2015)

<sup>88</sup> DG IP PD C (n. 80): Czech Republic, Greece, Ireland, Italy and Romania

<sup>89</sup> Ibid. Cyprus, Czech Republic, Denmark, Spain, Greece, Finland, Ireland, Italy, Poland, Portugal and Romania

<sup>90</sup> Ibid.

<sup>91</sup> Case C-503/03 *Commission v Spain* [2006] ECLI:EU:C:2006:74, para 42

<sup>92</sup> Commission Communication on guidance for better transposition and application of Directive 2004/38/EC on the right of citizens of the Union and their family members to move and reside freely within the territory of the Member States, COM (2009) 313 final, 2 July 2009, 6.

with the CJEU interpretation of the Directive.<sup>93</sup> This may arguably result in numerous detrimental consequences for EU citizens and their TCN family members. Consequently, the challenge for policy makers and administrative and immigration authorities is to apply and systematically monitor the conditions for the acquisition and loss of EU citizenship having due regard to EU law.<sup>94</sup> Monitoring is extremely important since EU citizenship is a dynamic concept<sup>95</sup> in an evolutionary process affecting and being affected by MSs' national law and culture. Another main problem related to the Directive 2004/38/EC adoption by Cyprus involves EU and non-EU nationals' expulsion and will be discussed the next.

### 4.3.3 Empirical Evidence on Wrong/Incomplete Transposition of EU Law into National Law

Frequently, the restrictive practices, excessive national discretion, and cumbersome and lengthy implementation procedures result in EU and non-EU nationals' detention and deportation.<sup>96</sup>

Key informants were asked to comment on the question of the high numbers of deportations of TCNs and EU nationals recorded. Their comments reflect the fact that although deportations are disapproved still there is an underlying feeling of protectionism attributed to the Cyprus political problem:

*“One must understand that half Cyprus is being currently occupied by Turkish forces, we cannot permit unauthorized immigration without criteria and I know that there have been certain criticisms regarding what is going on [...]”*<sup>97</sup>

*“[...] massive deportations are not desirable”*<sup>98</sup>

Other key informants commented that most deportation cases concern people who either entered Cyprus illegally or citizenship applicants who remained in Cyprus

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<sup>93</sup> See, for example, Case C-127/08 *Metock* [2008] ECLI:EU:C:2008:449, Case C-456/12 *O. v Minister voor Immigratie, Integratie en Asiel and Minister voor Immigratie, Integratie en Asiel v B* [2014] ECLI:EU:C:2014:135, Case C-244/13 *Ogieriakhi* [2014] ECLI:EU:C:2014:2068, Case C-202/13 *McCarthy and others* [2014] ECLI:EU:C:2014:2450. See also Chapter 2 sections 2.6.1.C and 2.6.2.C

<sup>94</sup> As clarified in Case C-135/08 *Rottmann v Freistaat Bayern*, [2 March 2010] ECR I-01449, paras 39 and 41, see also Case C-192/99 *The Queen v Secretary of State for the Home Department, ex parte: Manjit Kaur* [2001] ECR I-1237 and Case C-369/90 *Micheletti* [1992] ECR I-4239.

<sup>95</sup> Theodora Kostakopoulou, 'EU Citizenship and Member State Nationality: Updating or Upgrading the Link?' in Jo Shaw (ed.) *Has the ECJ Challenged Member State Sovereignty in Nationality Law?* (2011) EUI WP, RSCAS 2011/62, 21-25. See also Chapter 2, section 2.6.1.C

<sup>96</sup> See Chapter 3 section 3.7

<sup>97</sup> Interview KI 3 (CY 27 Oct 2014)

<sup>98</sup> Interview KI 5 (CY 15 Dec 2014)

illegally.<sup>99</sup> Although national legislation<sup>100</sup> allows the rejection of citizenship applications by persons who entered or remained in Cyprus illegally this provision interpreted restrictively, leads to the automatic rejection of all citizenship applications by Cypriot nationals' spouses where an 'illegal' stay of even a few days had elapsed. This coupled with the national law provision that vests the Interior Minister with excessive discretion to issue visas<sup>101</sup> may lead to citizenship application rejection and detention and deportation orders issuance. Arguably this may have an impact on Cypriot national's spouses who may be TCN scientists, researchers or highly skilled as well.

In a number of cases before the CYSC, the decision to reject citizenship application by Cypriot nationals' spouses and issuance of detention and deportation orders against them were annulled by the CYSC in the light of the CJEU interpretation of the Directive.

In *Guilan Zhou* the CYSC held that the applicant's citizenship application rejection due to previous periods of illegal stay had to be reviewed in the light of *Ergat v. Stadt Ulm*<sup>102</sup>, which required that the issue of illegal stay must be seen not in isolation or in an absolute manner but in combination with other relevant data.<sup>103</sup> The applicant, a Chinese national, came to Cyprus in 2003 to attend college. In 2004 she married a Cypriot and since then secured repeated residence permits either as a Cypriot national's visitor spouse or for work. In 2008 her citizenship application as a Cypriot citizen's spouse was rejected due to various periods during her previous stay without a visa. Her judicial review application of this decision was rejected. Her reapplication for citizenship and a visa as a Cypriot citizen's visitor spouse secured her a visa until 2016. On her husband's death in 2013 the immigration authorities cancelled her visa on the ground that she was no longer living with her husband. The applicant was then found to be working without a permit and was ordered to leave Cyprus with a detention and deportation order issued against her.

The authorities' justification for the detention and deportation orders issuance was found unconvincing by the CYSC since the applicant continued to be a Cypriot citizen's spouse, lawfully residing in Cyprus for many years and the detention and deportation orders were issued in breach of good administration, good faith and proportionality principles.

Administrative decisions, detention and deportation can be appealed at the CYSC by way of administrative recourse under Article 146 (1) of the RoC Constitution.<sup>104</sup>

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<sup>99</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>100</sup> Civil Registry Law N.41(I)/2002, Art 110 (2)(d)

<sup>101</sup> Cyprus, Aliens and Immigration Law Cap 105 Article 6(2)

<sup>102</sup> Case C-329/97 *Ergat v Stadt Ulm* [2000] ECR I-1487

<sup>103</sup> *Guilan Zhou v The Republic of Cyprus*, No. 1079/2014, 23 December 2014, Case No. 1079/2014

<sup>104</sup> See, for example, the CYSC judgment of 30 December 2004 in *Elena Bondar* appeal no. 12166 against the refusal of an application for a writ of habeas corpus, (2004) 1 (C) CLR 2075.

Regarding this issue, key informants referred to the lack of an effective remedy with automatic suspensive effect against a deportation order and detention as in *M.A. v the Republic of Cyprus*. The case concerned a Syrian Kurd's detention by Cypriot authorities and his intended deportation to Syria following a 2010 police operation, while protesting against the Cypriot Government's asylum policy with other compatriots. Asylum proceedings were still pending regarding an application he had previously made. The applicant was not deported only because of an interim measure issued by the ECHR under Rule 39 of its Rules of Court to the RoC indicating that he should not be deported.<sup>105</sup>

The legal debate in this case focusses on the fact that under domestic law a recourse does not have automatic suspensive effect and on the lack of any effective safeguards which could have protected the applicant from wrongful deportation at that time. In order to suspend deportation an application must be made seeking a provisional order. The CYSC has the power to issue provisional orders, suspending the decision enforcement taken by the administrative authority, pending the hearing of the case on the merits. A provisional order however, is an exceptional discretionary measure, decided on a case-by-case basis.<sup>106</sup> Moreover, the applicant's detention orders issued in June 2010 had been unlawful, as the orders were issued by mistake at a time when he had lawful resident status because the re-examination of his asylum application was still pending.<sup>107</sup>

The seriousness of the issue is depicted in a key informant's opinion in his capacity as a national judge:

*"I think this is something we should consider very seriously, how to introduce this remedy in order to be more aligned and complying with our EU obligations. I think in this field we should improve the situation so that people should not be deported while waiting the court's judgment".*<sup>108</sup>

This is indeed an issue for concern and a negative factor for attracting TCN researchers and their families. Interviewees' perceptions indicate that the safeguards protecting against expulsion under Directive Art.28 are not provided as authorities have considerable discretion in assessing specific cases, and as no clear guidelines are in place.<sup>109</sup> Incorrect and or incomplete transposition and application of EU Law into national

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<sup>105</sup> *M.A. v the Republic of Cyprus*, ECtHR case, application no. 41872/10 (23 July 2013). See Chapter 3 section 3.7 paras 112, 134, 139

<sup>106</sup> Rule 13 of the Supreme Constitutional Court Rules 1962

<sup>107</sup> The Government admitted in their 20 September 2011 observation that the applicant had been a legal resident of the RoC and that a mistake was made by the authorities. See also *M.A.* (n. 105), para 209

<sup>108</sup> Interview KI 8 (CY 27 Jan 2015)

<sup>109</sup> DG IP PD C (n. 80): Slovenia, Bulgaria, Portugal, including Cyprus have no publicly available guidelines.



law leads to legal uncertainty for EU citizens and their TCN family members as well as TCN scientists and researchers. This has a negative impact on the country's research culture and environment since the problems arising within the legal and policy framework coupled with the State's protective attitude prevent its flourishing, an issue also reflected in the following sections.

#### **4.3.3. A. Empirical Evidence on the Implementation of Directive 2005/71/EC (Researcher Dir)**

Directive 2005/71/EC<sup>110</sup> of 12 October 2005, on a specific procedure for admitting TCNs for scientific research purposes was implemented via Law N.29 (I)/2009 "Aliens and Immigration (Amending) Law of 2009". The Competent Authority for granting an approval of research organizations wishing to host TCNs researchers under the Directive is the Research Promotion Foundation (RPF)<sup>111</sup> nominated by the Ministers' Council. Known as the 'Cypriot EURAXESS Service Centre', the RPF provides all the required information to incoming researchers<sup>112</sup> Furthermore, the RPF sets clear conditions for the fellows that it funds, including salaries and other benefits visiting the host organisation during the funding duration twice to ensure fair treatment of the individual in line with the employment conditions.<sup>113</sup>

Given that there is no collective agreement covering university researchers and no trade union representation within public and private HEIs a perspective on research careers from that point of view is impossible.<sup>114</sup> Although the trade union movement is very well-developed in Cyprus, there is no trade union representation within HE. However, regarding researchers' careers, a collective agreement that would cover researchers in HE could provide a benchmark for employment terms and conditions while results in terms of higher wages and improved job security, could potentially be the outcomes of such a trade union's actions.<sup>115</sup>

Key informants expressed concerns about whether researchers' free movement rights are properly implemented and promoted, emphasizing simultaneously massive delays in the implementation process and inefficient treatment of incoming TCN

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<sup>110</sup> OJ L289/15, 12 10 2005. See Chapter 3 section 3.6.2.B

<sup>111</sup> For RPF, see Chapter 3 sections 3.2 and 3.6.3.B

<sup>112</sup> Euraxess Cyprus, [http://www.euraxess.org.cy/services\\_incoming\\_practical\\_info.shtm](http://www.euraxess.org.cy/services_incoming_practical_info.shtm)

<sup>113</sup> Supporting Early Career Researchers in Higher Education in Europe 'Cyprus – Country Report', Industrial Relations and Social Dialogue, EU DGV Project VS/2013/0399, (2013) <http://www.ucea.ac.uk/en/empres/rs/ecr.cfm>

<sup>114</sup> Ibid

<sup>115</sup> Roberto Pedersini, 'Trade Union Strategies to Recruit New Groups of Workers' EurWork Report (2010)

researchers.<sup>116</sup> A characteristic example refers to problems regarding distinctions between permits for TCN researchers and other types of permits provided by a key informant:

*“If you have an incoming researcher from a third country you cannot place her or him in the same queue or under the same procedure with an asylum seeker or with a foreign worker who is coming in to be a domestic assistant”.*<sup>117</sup>

Discrepancies particularly with work contacts, durations or rights were also cited along with the need for more attention to the responsibilities of individuals in certain positions especially when it concerns a European partnership for researchers at a European level.<sup>118</sup> Respondents emphasized the need for a systematic monitoring and reviewing of the implementation process of researchers’ free movement stating that:

*“[...] from the general approach on the different directives’ implementation [...] in Cyprus, on paper it may look good, in practice I very much doubt if it is actually properly followed or implemented. I doubt if researchers’ rights are properly monitored and safeguarded. The fact that there has been no system of process monitoring or reviewing is indicative that this is not actually followed. This is completely lacking at present”.*<sup>119</sup>

As mentioned in the previous sections<sup>120</sup>, the lack of a systematic monitoring of the EU acquis application is a recurrent weakness of the State and its absence may arguably have a decisive impact of public administration on policy outcomes impacting negatively on the country’s research culture and research environment.

The lack of a proper monitoring mechanism of researchers’ rights has been commented on by national migration experts<sup>121</sup> while accessing research funding in combination with an under-developed mobility policy and weak political support are common barriers to researchers’ mobility. In this context the significance of sharing experiences and best practices between authorities and relevant stakeholders together with the involvement of the ministries concerned in MSs is important. For example, the setting up of specific working groups at a national level to monitor the Directive implementation

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<sup>116</sup> Interview KI 1 (CY 12 Sept 2014) and Interview KI 2 (CY 16 Oct 2014)

<sup>117</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>118</sup> Interview KI 1 (CY 12 Sept 2014), Interview KI 2 (CY 16 Oct 2014) and Interview 5 (CY 24 Oct 2014)

<sup>119</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>120</sup> See section 4.3.2.

<sup>121</sup> Trimikliniotis (n. 74) p.102

are reported as good practices in MSs such as Germany, Belgium and Portugal.<sup>122</sup> Such good practices arguably influence the Directive impact in MSs and have the potential to be transferred to Cyprus' context.

On 12 May 2016 a new Directive, Directive 2016/801214 entered into force, recasting Directives 2004/114/EC215 on students<sup>123</sup> and 2005/71 on researchers<sup>124</sup>. MSs had until 23 May 2018 to transpose the Directive into national law. The new Directive effective implementation is paramount as it will provide an opportunity for Cyprus to revisit and amend those areas in need of amendments. This implementation will potentially have positive effects on five key aspects: prolonged residence to find work after graduation/research completion; facilitation of the movement of TCN researchers between the MSs; the right to bring their family members with them during their research period and the right for them to work during their stay; minimum requirements for MSs to adhere to, allowing them to legislate on more favourable conditions should they so wish; simplified procedures and enhanced transparency.

#### **4.3.3. B. Empirical Evidence on the Implementation of Directive 2009/50/EC (Blue Card Dir.)**

Directive 2009/50/EC (Blue Card Dir-BCD.) on the entry conditions and residence of TCNs for highly qualified employment purposes<sup>125</sup> was implemented via National Law N41 (I) 2012 with a considerable delay.<sup>126</sup> However, although Cyprus has transposed the Directive into national legislation, the quota has been set to zero, since then, due to the ongoing economic crisis.<sup>127</sup> Consequently, there have been no practical arrangements as of today, regarding EU Blue Cards issuance/statistical information.<sup>128</sup> Additionally very little research exists on the subject of HS migrants in Cyprus.<sup>129</sup> While Cyprus is one among a

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<sup>122</sup> International Centre for Migration Policy Development (ICMPD), 'LOT 2: Assess, the implementation and impact of the "Scientific Visa" package (Researchers Directive 2005/71/EC and Recommendation 2005/761/EC) 'Assessment for the Directive 2005/71/EC: Executive Summary' (2011) p.4

<sup>123</sup> OJ L 375, 23.12.2004. See also Chapter 2 section 2.6.2.B.1 and Chapter 3 section 3.6.2.B.

<sup>124</sup> OJ L289/15, 12.10.2005

<sup>125</sup> OJ L 155, 18.6.2009. See Chapter 2, section 2.6.2.B.2 and Chapter 3 section 3.6.2.C

<sup>126</sup> See Chapter 3 section 3.6.2.C

<sup>127</sup> EMN, Country Factsheet: Cyprus 2012 (2012)

<sup>128</sup> See EMN, Ad-Hoc Query on Council Directive 2009/50/EC of 25 May 2009 on the conditions of entry and residence of TCNs for the purposes of highly qualified employment on 21<sup>st</sup> January 2014.

<sup>129</sup> Nicos Trimikliniotis and Corina Demetriou 'Migrants and their Descendants: Social Inclusion and Participation in Society, Cyprus, 2015', (2015) FRANET University of Nicosia and Symfiliosi, 37, Vera Pavlou, 'Highly Skilled Indian Migrants in Cyprus', (2013), Robert Schuman Centre for Advanced Studies, European University Institute, CARIM-India RR 2013/42

few MSs<sup>130</sup>, which imposed admission volumes restricting the HS migrants' number, this possibility has been foreseen in line with Article 79(5) of the TFEU.<sup>131</sup>

Still one positive outcome is that the BCD has introduced a HS TCNs programme in countries such as Romania and Poland including Cyprus where none existed before.<sup>132</sup> This is because the only policy framework developed is the one on the legally residing migrants' integration in Cyprus outlined in 'The National Action Plan 2010-2012'<sup>133</sup>, which explicitly refers to different TCNs' categories legally residing in Cyprus, recognised refugees, individuals under international protection status and asylum seekers. Although the plan has been characterised as pioneering for the Cypriot context, among other criticisms it does not include the HS migrant category.<sup>134</sup> On its 2013 expiration, a new action plan was proposed and adopted but no plan was compiled or adopted since.<sup>135</sup> Consequently and in the context of Cyprus such a programme would potentially have a positive impact on attracting and recruiting HS labour in the country when applied in practice. MSs that have such national policies in place have a higher share of HS migrants in their migrant population than some of the MSs that do not.<sup>136</sup>

Respondents were asked whether they approved of the Government's stand towards HS migration and to justify their answers. In total 23 out of 28 disagreed with the Government's policy.

To justify the State's 'policy' towards HS migrants, arguments are put forward by those defending the Government's stand driven by domestic, political and economic concerns.

*"Under the EU Treaties we are allowed to do so and we do have a phenomenal financial crisis unknown to other Member States. According to the Eurostat statistics it can be scientifically proven [...] we also have this overriding objective of trying to secure*

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<sup>130</sup> Bulgaria, Estonia, Greece and Romania

<sup>131</sup> Commission Communication on the implementation of Directive 2009/50/EC on the conditions of entry and residence of TCNs for the purpose of highly qualified employment ("EU Blue Card") Brussels, 22.5.2014 COM (2014) 287 final

<sup>132</sup> Martina Belmonte 'The EU Blue Card- Is There a Need for a More Comprehensive Approach?' (2015) Institute for European Studies, Policy Brief, Issue 2015/3, Pavlou (n.129) p.1

<sup>133</sup> Ministry of Interior of Cyprus, 'National Action Plan for the Integration of Migrants lawfully residing in Cyprus 2010-2012', Proposal to the Council of Ministers No 1066/2010, 8 October 2010. See also Decision no. 71104, 13 November 2010.

<sup>134</sup> Trimikliniotis and Demetriou(n.129) p.11

<sup>135</sup> Ministry of Interior of Cyprus, 'The Integration of Migrants as a Tool for Reinforcing Social Cohesion and Development', Proposal to the Council of Ministers No 256A/2013, 19 February 2013. Reference to a new plan for the years 2014-2016 can be found in a document sent by the RoC to the UN - see Cyprus, Permanent Mission of the RoC in Geneva (2014), Note concerning the General Assembly Resolution A/RES/68/179 of 28 January entitled 'Protection of Migrants', 2411.001.004.001 (203/81/3), 10 June 2014, [www.ohchr.org/Documents/Issues/Migration/GA69thSession/Cyprus.pdf](http://www.ohchr.org/Documents/Issues/Migration/GA69thSession/Cyprus.pdf)

<sup>136</sup> COM (2014) 287 final, (n. 144)

*employment for Cypriots and EU citizens due to the extremely high unemployment rates and all this actually is to the fault of the EU due to the bail-in”.*<sup>137</sup>

*“High unemployment rates and the negative effects of the economic crisis are very convincing arguments”.*<sup>138</sup>

*“I think the Cypriot stand and attitude towards this Directive stems out of the situation we are now going through as a country and as an economy. Opening up with the BCD more than we should, could potentially build adverse effects and this is what the governmental machine or the whole system does not want. Also, I will be very honest for image purposes too”.*<sup>139</sup>

The opposite opinion arguing that it is an excuse for the system to appoint ‘their own’ and that it is detrimental for a country going through a financial crisis is documented in the following quotes:

*“[...] I think this in fact was the logic before the crisis. [...] this is just an additional excuse to operate a policy which was there in place before and now they think they have a justified reason for this. I think it is unjustified”.*<sup>140</sup>

*“That is completely wrong, that is the worst thing to do as a country because if you are in deep financial crisis you want to bring in HS talented people. As a high growth entrepreneur, I need the best of the best [...]”.*<sup>141</sup>

A look at the above statements shows how diverse are the interviewees’ views. The idea that the financial crisis is used as an opportunity to impose a restrictive national HSM policy is the perception of the majority of the empirical sample. They believe that a move towards protectionism was not the appropriate political response to the financial crisis at the national level. They argued that the Government’s development of HSM policy should involve individuals with expertise from all sectors: the public, the academia, the industry and entrepreneurs, a view shared by many academics and national migration experts.<sup>142</sup>

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<sup>137</sup> Interview KI 3 (CY 27 Oct 2014)

<sup>138</sup> Interview KI 5 (CY 15 Dec 2014)

<sup>139</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>140</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>141</sup> Interview 11 (CY 27 Nov 2014)

<sup>142</sup> See Trimikliniotis and Demetriou (n. 146)

While immigration policies are seen as part of a country's sovereignty, HS migration for employment purposes is also linked to a country's trade and economic policy.<sup>143</sup> In the light of economic and trade needs that countries face in a globalised environment, empirical studies highlight the strong direct and indirect links between migration and trade policy<sup>144</sup> related to increased trade capacity, competitiveness and employment.<sup>145</sup> In this respect, the application of flexible migration systems to categories of HS and business-related TCNs allows countries to improve their negotiating position in trade matters, attracting investment and generating economic growth.<sup>146</sup> Thus, participants were in favour of a more open HSM policy which they considered a stimulus during the economic crisis the country is going through.

At the same time, there were participants who considered the national stand towards HSM a movement to appease the public opinion of feeling a threat from incoming migrants who will 'take over their jobs'. Additionally, a few interviewees suggested that it could be a policy to avoid negative criticism of public opinion at a time when many Cypriots emigrate to find work. This is captured in the following quote:

*"Can you imagine the level of acceptance of Cypriot society of something like that? When in fact you know that there are many, many families sending out their young and bright minds abroad and then we import highly skilled people from elsewhere".<sup>147</sup>*

Although the participants' view of the 2013 financial crisis was overwhelmingly negative, given its negative consequences and the 3- year Economic Adjustment Programme (2013-2016) imposed on Cyprus,<sup>148</sup> the majority's perspective was that restricting HSM is not a solution. Recovery efforts from the economic crisis and the brain threat of the HS to other countries<sup>149</sup> requires a more open approach with an application of new migration techniques regarding human resources. The Government's efforts to recover from the crisis with ongoing financial and public sector reforms have resulted in the

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<sup>143</sup> Charles B. Keely 'Globalization Transforms Trade-Migration Equation' (2003) 41(1) International Migration 87-92, p.91

<sup>144</sup> European Commission, European Migration Network 'Admitting Third-country Nationals for Business Purposes' (Spain 2014), 73, Robert Lucas 'International Labour Migration in a Globalizing Economy' (2008) Carnegie Papers, Trade, Equity, and Development Program No 92, p.14

<sup>145</sup> Keely, (n. 143) and Lucas (n.144), pp.6-7, see also Anna-Lee Saxenian, 'Silicon Valley's New Immigrant Entrepreneurs', Public Policy Institute of California, (San Francisco, CA 1999)

<sup>146</sup> European Commission (n. 156)

<sup>147</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>148</sup> European Commission, 'The Economic Adjustment Programme for Cyprus', (2013) Occasional Papers 149.

<sup>149</sup> Lena Tsipouri and Sophia Athanassopoulou, 'ERAWATCH Country Reports 2013: Cyprus', (2014) European Commission JRC Science and Policy Reports EUR 26756. See Tsipouri et al., Research and Innovation Observatory- RIO Country Report 2015: Cyprus (No. EUR 27856 EN) Institute for Prospective Technological Studies, Joint Research Centre (2016). See Chapter 3 section 3.5 and Chapter 5 section 5.4.

bottoming out of the recession<sup>150</sup> and entail the active involvement of all stakeholders in changing the culture and contributing to the State's modernization.<sup>151</sup> Hopefully, in the HS migration area, in which remains much room for improvement, there will be reconciliation of policies with the challenges related to HS migration.

#### 4.3.3. C. Empirical Evidence on the Implementation of Directive 2003/109/EC (Long Term Residence Dir.)

The Directive 2003/109/EC concerning the TCNs' status who are LTRs,<sup>152</sup> was implemented via National Law N8 (I) 2007. To obtain a permanent residence permit, TCNs must have resided legally, and continuously within the Government controlled areas for five years prior to the relevant application submission, possess valid residence permits and be financially self-sufficient.<sup>153</sup>

Opinions of seven out of eight key informants were aware of existing problems, the most cited of which related to the exclusion of TCNs who have been admitted on temporary grounds from benefiting from Directive on LTR.<sup>154</sup> Cyprus applies a very broad reading of the exception contained in the provision and defines the TCNs' status as temporary, even though their residence permit may have been renewed repeatedly and regardless of the total duration of previous, lawful residence in Cyprus.<sup>155</sup>

A second problematic issue reported by the interviewees was the nature of the documentation requested to accompany LTR applications. A key informant commented that "*Some of the documents requested create problems*".<sup>156</sup> For example, in order to prove existence of appropriate and regular resources<sup>157</sup>, Cyprus requires evidence of contributions to the Social Insurance Fund<sup>158</sup> for the last five years, and a valid employment contract for at least 18 months, which at a practical level may cause obstacles

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<sup>150</sup> European Commission, 'The Economic Adjustment Programme for Cyprus Fourth Review – Spring 2014' (2014) Occasional Papers 197, p.3

<sup>151</sup> RoC, The Unit of Administration Reform, 'Mission' <http://www.reform.gov.cy/en/the-unit-of-administrative-reform/mission>

<sup>152</sup> OJ L 16/44 of 23.1.2004. See also Chapter 2 section 2.6.2.B.3 and Chapter 3 section 3.6.2.D

<sup>153</sup> RoC, Civil Registry and Migration Department, Migration Section, Long-Term Residence <http://www.moi.gov.cy/moi/CRMD/crmd.nsf/All/D0B62F3A3B68AFA8C2257D2C0037B99D?OpenDocument>

<sup>154</sup> Article 3(2)(e) of the Directive on LTR.

<sup>155</sup> See, for example, *Leelawathie Perera v. the Republic of Cyprus*, Case No. 467/2010 and *Andriy Popovic v. The Republic of Cyprus*, Case No. 1699/2011.

<sup>156</sup> Interview KI 6 (CY 24 Jan 2015)

<sup>157</sup> Article 5 (1) of the Directive on LTR.

<sup>158</sup> Social insurance contributions made by any individual employed or self-employed in Cyprus. An employer also makes contributions for his/her employees. The relevant rates are applied on the weekly wages or monthly salaries received and are subject to certain upper limits. The Social Security contributions of employees are withheld by the employer from the monthly salary paid to employees.

in a labour market characterised by short-term employment contracts.<sup>159</sup> Regarding this issue, it has been officially announced that a pending Aliens and Immigration Law amendment would remove the requirement of submitting an employment contract of open duration or for at least eighteen months along with the LTR application.<sup>160</sup> Following a Commission's warning letter, the fees for issuing and renewing LTR permits were reduced, as well as the number of documents requested for renewal.<sup>161</sup> The comments of key informants interviewed are indicative of the situation in relation to obtaining the LTR status:

*“As with citizenship acquisition, LTR or permit is equally difficult to be obtained even if all the criteria are there”.*<sup>162</sup>

*“The approach when it comes to EU workers and migrants in general is barriers to LTR even to citizenship”.*<sup>163</sup>

Given that EU LTR is the only way to legally reside and work in other EU MSs for TCN citizens who do not naturalise, scholars consider the LTR Directive a positive step towards membership and inclusion of those LTRs who are unable to become naturalised,<sup>164</sup> creating a status which can be considered as a subsidiary form of EU citizenship.<sup>165</sup> However, although three quarters of non-EU citizens in most countries have lived there the required 5-year time period to qualify only around half have acquired this status. Two thirds have secured this status in France, Italy, Spain, Sweden, the UK and the Baltics but hardly any in Cyprus, Bulgaria, Denmark, Ireland and Malta.<sup>166</sup>

Based on the participants' views, the above highlighted problems coupled with policies restricting permanent residence and citizenship make it extremely difficult to

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<sup>159</sup> Commission Report to the European Parliament and the Council on the application of Directive 2003/109/EC concerning the status of TCNs who are long-term residents Brussels, 28.9.2011 COM (2011) 585 final

<sup>160</sup> European Commission, 'Country Factsheet: Cyprus 2014' European Migration Network (2014)

<sup>161</sup> European Commission, 'Country Factsheet: Cyprus 2015' European Migration Network (2015)

<sup>162</sup> Interview KI 6 (CY 24 Jan 2015)

<sup>163</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>164</sup> Kees Groenendijk, 'The Long-Term Residents Directive, Denizenship and Integration', in A. Baldaccini, E. Guild and H. Toner (eds.), *Whose Freedom, Security and Justice? EU Immigration and Asylum Law and Policy* (Hart, 2007), p.429. See also Theodora Kostakopoulou, 'Why Naturalisation?', (2003) *Perspectives on European Politics and Society*, 4(1), 85–115

<sup>165</sup> Diego Acosta Arcaza, 'Civic Citizenship Reintroduced? The Long-Term Residence Directive as a Post-national Form of Membership' (2015) 21 (2) *European Law Journal* 200-219

<sup>166</sup> Thomas Huddleston and Elena Sánchez-Montijano, 'Integration Policies: Who Benefits?' (2015) Policy Brief Migration Policy Group (MPG), Barcelona Centre for International Affairs (CIDOB) p.3



obtain the LTR status. The landmark case of *Motilla*,<sup>167</sup> the first migrant to apply for LTR status, was an example cited by interviewees to illustrate the negative impact restrictive policies may have on a vast majority of TCNs excluding them from accessing LTR.

As it has already been mentioned in Chapter 3 section 3.7, *Motilla* applied to the Interior Minister for the LTR status after 8 years of lawful residence and employment in Cyprus. Her LTR application was rejected based on the Aliens and Immigration Law Cap 105 Article 18Z (2), as amended by Law 8(I)/2007 purporting to transpose Directive 2003/109/EC, which excludes from the law scope inter alia ‘persons whose residence permit has been officially restricted as regards its duration’. The above provision was intended to transpose Directive Article 3(2) (e). However, while the Directive states ‘persons whose residence permit has been formally limited’, the Cypriot law states ‘persons whose residence permit has been formally limited as to its duration’. By a majority of nine judges against four, the CYSC held that the fixed term duration of the applicant’s visas did indeed fall within Article 18Z (2) exception of the Cypriot Law i.e., Directive Article 3(2) (e) thus, confirming the Interior Minister’s decision to reject *Motilla*’s application for acquiring the LTR. The above *Motilla* reasoning was followed in other cases<sup>168</sup> pertaining to the LTRD until amendment by the national legislator in 2009.<sup>169</sup>

Restrictive policies towards immigrants on the citizenship acquisition and LTR status<sup>170</sup> and the Cypriot Government’s introduction of the ‘Scheme for Naturalisation of non-Cypriot Investors by exception’<sup>171</sup> in mid- 2013, later revised in 2014, have attracted negative criticism and prompted research into Cyprus’ immigrants’ naturalization procedures.<sup>172</sup> In this context, it has been commented that as an informal practice Cyprus distinguishes between two classes of migrants: elite migrants and others. When asked whether a different treatment applies to ‘elite’ migrants, key informants<sup>173</sup> were firm in their opinion that this is not the case. They explained that the citizenship acquisition

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<sup>167</sup> *Cresencia Cabotaje Motilla v. Republic of Cyprus* through the Interior Minister and the Chief Immigration Officer, Supreme Court Case No. 673/2006 (21 Jan 2008), see Chapter 3 section 3.7

<sup>168</sup> See, for example, *Shahajan Mohamed Rawuttar v Republic of Cyprus through the Ministry of Foreign Affairs, Migration Department* No 742/06, 24 September 2008 and *Imelda Bautista Balbin v Republic of Cyprus through the Ministry of Foreign Affairs, Migration Department* No 857/2006, 16 September 2008

<sup>169</sup> Law Amending the Aliens and Migration Law, Law 2 /143 of 2009, November 2009

<sup>170</sup> See for example, Trimikliniotis and Demetriou (n. 129) and ECRI (n. 59)

<sup>171</sup> Ministry of Interior of RoC, Council of Ministers Decision of 19.3.2014 on the basis of subsection (2) of section 111A of the Civil Registry Laws of 2002-2013, <http://www.moi.gov.cy/moi/moi.nsf/All/1562764E412F7B6DC2257B80005235CF>

<sup>172</sup> Nicoletta Charalambidou, ‘Naturalization Procedures for Immigrants Cyprus’ (2013) European University Institute, Florence Robert Schuman Centre for Advanced Studies EUDO Citizenship Observatory, Naturalisation Procedures Report, RSCAS/EUDO-CIT-NP 2013/2

<sup>173</sup> Interview KI 3 (CY 27 Oct 2014) and Interview KI 4 (CY 12 Nov 2014)

programme is a government policy following the financial crisis to attract potential foreign investors<sup>174</sup> and to provide incentive for foreign depositors to remain in Cyprus.<sup>175</sup>

Despite the key informants' assurances, according to the European Parliamentary Research Service (EPRS), granting residence permits to non-EU citizens who make substantial investments seem to be a common practice for certain EU MSs.<sup>176</sup> In the 2014 Resolution entitled 'EU Citizenship and Residence Permits For Sale', the Commission was called to issue recommendations and guidelines to prevent such investor citizenship schemes in the EU,<sup>177</sup> highlighting that the rights conferred by EU citizenship should not be bought or sold at any price.<sup>178</sup> This arguably suggests serious concerns over the concept and substance of EU citizenship and values which depends on a person's ties with Europe and the MSs or on personal ties with EU citizens. Cyprus is not an exception in introducing such schemes since other EU MSs such as Bulgaria, Ireland, Malta, and Spain have introduced similar programmes, offering fast-track access to residence status and even citizenship acquisition.<sup>179</sup>

In Cyprus, citizenship via such a scheme can be acquired amongst other requirements with a minimum of €5.000.000 direct investments, only by investors having a permanent privately-owned residence in Cyprus, at a purchase price of at least €500.000.<sup>180</sup> That said, arguably the issue of investor citizenship programmes consists an element which is not part of the LTRD. It is also not in line with the Directive's principal purpose, which is the integration of TCNs who are settled on a LT basis in the MSs, as identified and clarified by the CJEU.<sup>181</sup> The challenge facing Cyprus is a policy that builds on a positive approach of LT legal immigration to the country with basic underlying principles created by the LTRD legal framework.

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<sup>174</sup> Ministry of Interior (n. 183)

<sup>175</sup> Press and Information Office of RoC, 'Address by the President of the Republic to Russian Tycoons who invest in Cyprus' at the 2013 Global Russia Business Meeting in Limassol' (14 April 2013) <http://moi.gov.cy/MOI/pio/pio.nsf/All/D504BE23033C77D5C2257B4D00456181?OpenDocument>

<sup>176</sup> European Parliamentary Research Service (EPRS) of the European Parliament, 'EU Citizenship and Residence Permits For Sale' (January 15, 2014), <http://epthinktank.eu/2014/01/15/eu-citizenship-and-residence-permits-for-sale/>

<sup>177</sup> European Parliament, 'Resolution on EU Citizenship for Sale', 2013/2995(RSP), 16 January 2014, paragraph 11 <http://www.europarl.europa.eu/sides/getDoc.do?type=MOTION&reference=P7-RC-2014-0015&language=EN>

<sup>178</sup> Ibid para 8

<sup>179</sup> Sergio Carrera, 'How Much Does EU Citizenship Cost? The Maltese Citizenship-for-Sale Affair: A Breakthrough for Sincere Cooperation in Citizenship of the Union?' (2014) CEPS Paper in Liberty and Security in Europe No. 64, p7,p.13

<sup>180</sup> Ministry of Interior (n. 183)

<sup>181</sup> Case 508/10, *European Commission v Kingdom of the Netherlands* [2012] ECLI: EU: C: 2012:243, para 66; Case 571/10, *Servet Kamberaj v Istituto per l'Edilizia sociale della Provincia autonoma di Bolzano (IPES) and Others* [2012] ECLI: EU: C: 2012:233, para 90 and Case 502/10, *Staatssecretaris van Justitie v Mangat Singh* [2012] ECLI:EU:C:2012:636, para 45.

#### 4.3.3. D. Empirical Evidence on the Implementation of EU Soft Law Initiatives

The Research Promotion Foundation (RPF) provides information on researchers' rights and responsibilities,<sup>182</sup> set out in the European Charter for Researchers<sup>183</sup> and the Code of Conduct for the Recruitment of Researchers (C&C).<sup>184</sup> The C&C implementation is one of the cornerstones of EURAXESS Rights. The general purpose of these initiatives is to ensure a relationship between researchers and employers/funders that enhances good results in terms of generating, sharing and disseminating new knowledge and technological development, and researchers' career development and mobility.<sup>185</sup>

The Human Resources Strategy for Researchers (HRS4R)<sup>186</sup> supports the C&C principles implementation and provides for the 'HR Excellence in Research' logo award which may be considered evidence, though not the only one, of the C&C principles implementation. The aim of the HRS4R process for funding bodies is to integrate the C&C principles into their funding criteria requiring application by host institutions. The RPF is the Organization and Service Centre for the EURAXESS Network in Cyprus. The promotion and the implementation of the 'C&C' through its networking activities with the research institutes are among its responsibilities.<sup>187</sup> All Cyprus universities and research institutes have endorsed the 'C&C' but only the University of Cyprus and the Cyprus Institute of Neurology and Genetics (CING) have received the European Commission's 'HR Excellence in Research Logo'.<sup>188</sup> However, while all public and private HEI have endorsement declarations of the C&C only few respondents stated that they were aware of these initiatives.

Out of 20 respondents, 18 stated that:

*"[...] this is the first time I have heard about this. Maybe it is only paper".*<sup>189</sup>

*"What do you mean by charter and code? Ok I don't know about this document. I think there is a knowledge gap there".*<sup>190</sup>

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<sup>182</sup> Euraxess Rights, <http://www.euraxess.org.cy/rights.shtm>

<sup>183</sup> See Chapter 2 section 2.3

<sup>184</sup> Ibid

<sup>185</sup> Euraxess - Researchers in Motion, 'The European Charter & Code for Researchers', <https://euraxess.ec.europa.eu/jobs/charter>

<sup>186</sup> Euraxess 'The Human Resources Strategy for Researchers (HRS4R)', <http://ec.europa.eu/euraxess/index.cfm/rights/strategy4Researcher>

<sup>187</sup> Euraxess, Researchers' Report 2014 Country Profile: 'Cyprus' (2014) [http://ec.europa.eu/euraxess/pdf/research\\_policies/country\\_files/Cyprus\\_Country\\_Profile\\_RR2014\\_FINAL.pdf](http://ec.europa.eu/euraxess/pdf/research_policies/country_files/Cyprus_Country_Profile_RR2014_FINAL.pdf)

<sup>188</sup> Euraxess, 'HRS4R Acknowledged Institutions', <http://ec.europa.eu/euraxess/index.cfm/rights/strategy4ResearcherOrgs>

<sup>189</sup> Interview 15 (CY 5 Dec 2014)

<sup>190</sup> Interview 4 (CY 22 Oct 2014)

*“No, I haven't heard about the Charter and Code and this is another problem that there is no information about these developments”.*<sup>191</sup>

Interviewees from both categories considered this lack of knowledge or knowledge dissemination gap a serious problem. This finding is in line with an EU funded research project<sup>192</sup> into the Early Career Researchers in HE in 2013 and 2014 in which Cypriot interviewees commented that despite the initial enthusiasm for the initiatives, the interest in the C&C has somewhat faded, citing as a possible reason the financial challenges that have diverted attention away from other agendas.

In the context of the present research respondents suggested that lack of knowledge is attributed to the fact that the private and public institutions in Cyprus have recently been established and have only very recently started offering PhD degrees. As a result, they believe that the ‘C&C’ will sooner or later attract their attention and interest. However, interviewees made a point that the RPF should do more towards the ‘C&C’ promotion and implementation and added that such initiatives should become legally binding or at least they should be monitored. Other respondents considered that failure to implement the C&C should be dealt at a supranational level:

*“This is a basic EU initiative and this is a problem of the EU”.*<sup>193</sup>

*“I think this is the responsibility of the EU institutions in charge first and then the institutions which have signed this”.*<sup>194</sup>

Key informants were convinced that there should be a kind of reward for this soft law initiative implementation and some penalization for the opposite:

*“EU HEI should be penalized for not implementing the C&C correctly [...] It could be a reverse penalization meaning for example giving bonus points to those organizations [...] which have received the Commission’s accreditation [...] this could be a concrete measure which in such highly competitive calls could make the difference between getting the funding or not”.*<sup>195</sup>

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<sup>191</sup> Interview 19 (CY 23 Jan 2015)

<sup>192</sup> EU DGV (n. 125), with Finland, Germany, Italy, the UK, Cyprus and Romania as case studies

<sup>193</sup> Interview 5 (CY 24 Oct 2014)

<sup>194</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>195</sup> Interview KI 1 (CY 12 Sept 2014)

The message sent by the majority of respondents was that the problem of not being informed about developments that concern them should be solved. Interviewees commented that presently being informed about crucial developments such as relocation, and opening positions strongly depends on self-initiative. Since respondents consider knowledge dissemination a shared responsibility between the EU and the EU national contact points, they believe that both should act as the main incitements. Although progress on many ERA areas may be achieved through public awareness of C&C key principles for good practice<sup>196</sup> beyond the public awareness level a number of countries provide examples of national good practices and progress that Cyprus may emulate or learn from. These undoubtedly may serve as a model for generating policies and initiatives for Cyprus around all ERA priorities<sup>197</sup> that would impact positively on the country's research environment and research culture.

#### 4.4 Conclusion

This chapter presented the major themes that emerged from the participants' narratives pertaining to the EU law and policy implementation in Cyprus. There is awareness of a need of a stronger link between the dimensions that determine the strength of the organizational culture of the State/ organization: external adaptation<sup>198</sup>, internal integration<sup>199</sup> and leadership<sup>200</sup>, as linked to the theoretical framework adopted, among the relevant population sample. This weakens the State's organizational culture adaptation to the external challenges arising from the territorial application of EU law provisions, which impacts negatively on migration laws and policies at the national level and its EU membership. Secondly it impacts on the State's/ ability to provide timely solutions to 'internal' problems arising from the external environment. Thirdly it weakens the State's leadership commitment to addressing these challenges effectively. As a result, the expected benefits of EU law and initiatives as implemented or as translated into national law are not fully gained despite good free movement rules and often verbatim transposition.

Findings on the impact of Cypriot national legal rules, policies and practices on the free movement rights of EU and non-EU migrant scientists, researchers, and the HS indicate flaws in the implementation of the law pertaining to EU migration Directives and needs for further reforms. The constitutional crisis that occurred owing to Cyprus' political

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<sup>196</sup> European Commission, 'Recommendations on the Implementation of the ERA Communication by Member States and by the European Commission, Report of the Expert Group (2013) EUR 26538 EN

<sup>197</sup> See Chapter 2 section 2.5

<sup>198</sup> See Chapter 1 section 1.3.1

<sup>199</sup> Ibid

<sup>200</sup> Ibid

problem and the EU law provisions territorial application due to the island's division since 1974 proved to be major challenges to the State's survival and adaptation. These factors contributed to a migration policy formulation which discourages migrants' prolonged stay making it difficult if not impossible to obtain the LTR status and acquire Cypriot citizenship. Despite the need to comply with EU standards, Cyprus has not yet developed a comprehensive migration policy due to existing policies, official rhetoric and the lack of a broad consensus that continue to cause delays in passing and implementing vital laws and policies.

A major driving force behind EU legislative developments on TCN HS is the so-called 'global race for talent',<sup>201</sup> While the BCD was designed primarily to enhance European competitiveness by attracting HS TCNs,<sup>202</sup> this empirical evidence suggests that Cyprus has not adopted a proactive migration policy towards attracting HS migrants. Policy makers should take into consideration the conclusion of many studies that the presence of migrant workers in Cyprus has been beneficial for the economy as a whole.<sup>203</sup>

Concerning the various EU initiatives designed for research and scientific mobility promotion, interviewees and key informants spoke of lack of knowledge on their part about them. Based on the findings this could be attributed to the organizations who as endorsers of these initiatives and responsible EU national contact points should promote them more efficiently, learning at the same time from other countries' examples of good practices.<sup>204</sup>

Overall, the empirical findings on the impact of migration laws and policies confirm the importance and the need for political, national, social and cultural variables to be included, factors often unaccounted for in empirical work.<sup>205</sup> These variables might be rendering the *acquis*, regulating the migration of TCNs weak and ineffective and form challenges that need to be addressed at the national level.

Cyprus EU accession has led to a series of constitutional amendments to give Union law supremacy over the national Constitution law and the creation of new bodies over the past years but without an overall state structure change.<sup>206</sup> The empirical evidence presented in this chapter indicates that the State has not engaged methodically with a plan or measures to address external adaptation, internal integration and leadership challenges.

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<sup>201</sup> Marie De Somer 'Trends and Gaps in the Academic Literature on EU Labour Migration Policies' (2012) *CEPS Liberty and Security* No. 50, p.4

<sup>202</sup> Sona Kalantaryan and Iván Martín, 'Reforming the EU Blue Card as a Labour Migration Policy Tool?' (2015) Policy Brief, Migration Policy Centre, EUI, p.2

<sup>203</sup> See, for example, Louis Christofides, et al., 'The Impact of Foreign Workers on the Labour Market of Cyprus', *Cyprus Economic Policy Review* 1 (2): 37-49, p.48. See also Trimikliniotis and Demetriou (n. 129)

<sup>204</sup> European Commission (n. 196), p.4

<sup>205</sup> Timothy Hatton and Jeffrey Williamson, 'Are Third World Emigration Forces Abating?' (2011) *World Development*, 39 (1):20–32, p.25.

<sup>206</sup> From 1989 to 2016 there have been nine amendments, see <http://www.cylaw.org/nomoi/indexes/syntagma.html>

Although the period starting in March 2013 under a new Government marked a shift in that direction with developments that include the public administration and the human resource management reforms<sup>207</sup>, the delaying of structural reforms undertaken by the Government to change the culture and modernise the State weakens the strength of the organization's leadership dimension. This in turn impacts negatively on the organization's external adaptation and internal integration dimensions.

The State's commitment with collective and sustained efforts over the coming years for a new organizational and administrative culture, coupled with a definitely more positive impact on the part of policy makers towards addressing national migration policy challenges are strongly recommended. This is all the more important given the impact of culture and law and policy on scientific migration in areas of citizens' rights, researchers' rights, long term residence, HS migration, soft law initiatives implementation and more broadly on the country's research environment which encompasses both culture and law.

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<sup>207</sup> RoC 'The Unit of Administration Reform', <http://www.reform.gov.cy/en/public-administration-reform/restructuring-in-the-public-sector>



## Chapter 5: Problems and Challenges of Scientific Mobility in Cyprus

### 5.1. Introduction

This chapter focuses on scientific mobility problems and challenges in Cyprus based on the second stream of empirical findings drawn from interviews with EU and non-EU scientists and researchers and key informants with a twofold aim. The first aim is to identify the various restraints and barriers in the Cypriot research environment. The second aim is to explore the extent of influence/impact of the national research culture and environment on scientists and researchers.

A set of political and socio-economic factors affect the process of Cyprus' adaptation and organizational reform needed to set up an attractive and effective research environment in the country. These can be described as the sequence of events that shaped its political and legal history: its colonial past and cultural impact of this on the domestic public service culture;<sup>1</sup> the country's 1960 independence marked by bi-communal conflict;<sup>2</sup> the 1974 Turkish invasion and its socio-economic disastrous effects; the country's 2004 EU accession; and the 2013 financial crisis which almost led to the country's economic collapse. The difficulties facing Cyprus in making the necessary national reforms may be explained by a history of structural, endemic and administration problems as a result of external adaptation challenges caused by the above political and socio-economic factors in combination with internal integration and leadership organizational challenges the country's system faces.

The country has been asked to make reforms and improvements considered by the EU Commission to be at the heart of the ERA<sup>3</sup> and in compliance with the EU Law and Research policy.<sup>4</sup> Simultaneously to meet obligations under the Economic Adjustment Programme terms following Cyprus' bailout agreement with the EU, the European Central

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<sup>1</sup> Andreas Neocleous, *Neocleous's Introduction to Cyprus Law* (3<sup>rd</sup> ed. Andreas Neocleous & Co LLC, 2011), p.11, pp.15-16

<sup>2</sup> Nicos Trimikliniotis. '13 Nationality and citizenship in Cyprus since 1945: Communal Citizenship, Gendered Nationality and the Adventures of a Post-colonial Subject in a Divided Country' in Rainer Bauböck, Bernhard Perchinig and Wiebke Sievers (eds.) *Citizenship Policies in the New Europe*, (Amsterdam University Press, 2009). See also Andreas Neocleous (n. 1) p.8

<sup>3</sup> Commission Communication, 'Implementing the Community Lisbon Programme: More Research and Innovation', COM (2005) 488 (12 October 2005); Commission Communication, 'A Reinforced ERA Partnership for Excellence and Growth', COM (2012) 392, (2012), Hearing of Commissioner Carlos Moedas, European Parliament, (30 September 2014), <http://www.europarl.europa.eu/hearings-2014/en/schedule/30-09-2014/carlos-moedas>; European Commission 'Commission Decision on the signature of a Joint Statement to take action on working in partnership in achieving the European Research Area (ERA)', COM (2015) 4063, (19 June 2015)

<sup>4</sup> Commission Communication 'Common Actions for Growth and Employment: The Community Lisbon Programme', COM (2005) 330, (20 July 2005), Commission Communication, 'ERA Progress Report 2014', COM (2014) 575 final (15 September 2014). See also Commission COM (2005) 488, (n.3).



Bank, and the International Monetary Fund ‘Troika’ formally agreed in May 2013<sup>5</sup> that the country is required to make extensive long-overdue public administration reforms.<sup>6</sup>

Attainment of the above goals requires the country’s adaptation to the external pressure for reform. Thus, arguably the reform impetus is twofold and undoubtedly external. However, the empirical findings suggest a degree of consensus about the need to establish a new and meritocratic organizational culture that is, perhaps, surprisingly strong, and needs to be explained in terms of the existing weaknesses caused by several sources of difficulties within the Cypriot scientific research environment. The sources of difficulty identified in the present chapter take the form of challenges facing migrant and local scientists and researchers in Cyprus, stemming from their reported experiences within the national research environment<sup>7</sup> and as such relate to this thesis research question. This research question seeks to address the attractiveness, effectiveness, and impact of the research landscape, culture and policy for the migration/mobility for EU and non-EU scientists and researchers in Cyprus by employing Schein’s organizational culture theory.<sup>8</sup>

This chapter, divided in four sections, considers the features of the domestic research landscape perceived by participants to be negative, preventing the flourishing of the country’s research culture/environment, giving rise to a brain waste phenomenon and potentially exacerbating a brain drain occurrence.

The first section examines the restraints and barriers to the domestic research environment: lack of awareness of a strong, uniform research/organizational culture; chronic scarcity of funding; and the national research policies and practices as these are introduced and implemented by the State in the form of a National Innovation Policy (NIP)<sup>9</sup> and practices. The second section deals with the challenges facing meritocracy, concerning the public sector functional organization such as the perpetuation of bureaucracy, nepotism and corruption. The third section analyses the brain waste phenomenon as a result of which people, including native, EU and non-EU scientists and researchers, are not valued in the country. The fourth section focuses on the potential exacerbation of brain drain due to the choice of many people to emigrate, produced by the above-mentioned negative characteristics coupled with the unsuccessful applicability of reforms in the national research environment.

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<sup>5</sup> European Commission, ‘The Economic Adjustment Programme for Cyprus’ (2013) Occasional Papers 149, p.7

<sup>6</sup> IMF ‘IMF Completes Eighth Review of Cyprus’ EFF and Approves €126 Million Disbursement’ (2015) Press Release No. 15/433

<sup>7</sup> Although some of these problems were not reported by all participants, they occurred frequently during the narratives, and thus were significant in their own right to be mentioned.

<sup>8</sup> Edgar Schein *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass, 2004). See Chapter 1 sections 1.3.1-1.3.2

<sup>9</sup> See Chapter 1, section 1.3.1 F.

## 5.2 Restraints and Barriers to the Domestic Research Environment

Lack of research culture awareness,<sup>10</sup> chronic scarcity of funding<sup>11</sup> and the State's inability to form and implement national policies to influence the innovation/research process<sup>12</sup> are three themes illustrating negative characteristics of the national research environment in Cyprus based on the participants' descriptions. Although these features seem loosely connected, the present research indicates that they are interconnected and transversal and can have a negative impact on the overall effort of the State to carry out the necessary reforms in order to set up an attractive and effective research environment.

### 5.2.1 Research Culture Awareness

This feature addresses the participants' views regarding the attitudes and behaviours towards research and research culture encountered in the Cypriot public and private sectors and society. Participants reported that research culture in the country is not strong. Within their accounts there was recognition that this may be attributable to the fact that research culture in Cyprus is still developing. The earliest elements of a NIP appeared around the end of 1980s<sup>13</sup> while Cyprus had no tradition of research and development until the 1990s when the first state-owned universities were created<sup>14</sup> marking the beginning of research projects. However, participants also indicated other potential reasons that collectively contribute to making research culture in Cyprus weak and which may arise due to lack of research culture awareness. These are presented below.

The influence of people's attitudes, behaviours and beliefs is important in creating a 'research culture'<sup>15</sup>. Respondents found the *"lack of awareness of the importance of research culture and what long term benefits research could bring [...] in all sectors a negative factor"*<sup>16</sup> This arguably causes concerns to participants when they comment that *"we do not have a common base and thinking"*<sup>17</sup> and that *"[...] stakeholders involved have different mentalities regarding research"*<sup>18</sup> They also felt that *"politicians do not*

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<sup>10</sup> Interviews 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 16, 18 and 19 (CY Aug 2014-Jan 2015)

<sup>11</sup> Interviews 7, 8, 9, 10, 12, 15, 16, 18 and 19 (CY Aug 2014-Jan 2015)

<sup>12</sup> Interviews: 3, 5, 6, 7, 10, 11, 12 and 19 (CY Aug 2014- Jan 2015)

<sup>13</sup> Robin Murray, 'Flexible Specialization in Small Island Economies: The Case of Cyprus', in F. Pyke and W. Sengenberger, (eds.), *Industrial Districts and Local Economic Regeneration*, (International Institute for Labour Studies, 1992), 255-76

<sup>14</sup> Christophoros Christophorou, et al., *Cyprus Report Sustainable Governance Indicators 2016* (Bertelsmann Stiftung 2016) ; <http://www.sgi-network.org/2018/Downloads>, George Michailidis and Bernard Musyck, 'Smart Specialization Strategy in Cyprus', Expert Review for DG REGIO, February 2013, at: [http://www.structuralfunds.org.cy/uploadfiles/PPT\\_RS13\\_strategyCyprus.PDF](http://www.structuralfunds.org.cy/uploadfiles/PPT_RS13_strategyCyprus.PDF)

<sup>15</sup> OECD Science, *Technology and Industry Outlook 2014* (OECD, 2014), p.249

<sup>16</sup> Interview 3, (CY 20 Oct 2014)

<sup>17</sup> Interview 16 (CY 6 Dec 2014)

<sup>18</sup> Interview 11 (CY 27 Nov 2014)

*understand the role of research; they view the role of research superficially*<sup>19</sup> while “*Cypriot society does not really grasp what research does at university level*”.<sup>20</sup> This they argued “[...] *is also another obstacle for researchers to face and deal with*”.<sup>21</sup>

Participants further discussed the Cyprus State’s inability to nurture a research culture<sup>22</sup> and to actually promote and support innovation and research.<sup>23</sup> They argued that “[...] *the government just announces the interest to help research development in Cyprus, in reality they do not do anything*”<sup>24</sup> and that they were aware that “*from the State point of view research is not well promoted and supported*”.<sup>25</sup>

The above views indicate that basic assumptions such as objectives and ideals<sup>26</sup> about research which encompass what researchers do and why they do it<sup>27</sup> are not shared. This leads to conflicting assumptions and beliefs about research. Simultaneously leadership is unable to provide and communicate a unifying vision, support and guidance.<sup>28</sup> This raises a serious challenge to integration, collaboration, desired goals and successful reforms at all levels both in the public and private sector groups involved in research.<sup>29</sup> Thus political and socio-cultural factors coupled with internal integration and leadership organizational challenges affect the perception, analysis, and management of the developmental stage of research culture.<sup>30</sup>

### 5.2.2 Chronic Scarcity of Funding

The external pressures exerted after Cyprus entered into the bailout agreement are a catalyst to introduce changes that extend beyond the financial sector.<sup>31</sup> The agreement with

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<sup>19</sup> Interview 12 (CY 28 Nov 2014)

<sup>20</sup> Interview 16 (CY 6 Dec 2014)

<sup>21</sup> Ibid

<sup>22</sup> OECD (n. 15), p.252; Stephan Vincent-Lancrin, ‘Towards a Culture of Innovation: Motors and Brakes’, (2012) Presentation to India-OECD Initiative Collaborative Workshop on Education and Innovation, New Delhi India.

<sup>23</sup> OECD, *The OECD Innovation Strategy: Getting a Head Start on Tomorrow*, (OECD, 2010), p.189

<sup>24</sup> Interview 16 (CY 6 Dec 2014)

<sup>25</sup> Interview 5 (CY 24 Oct 2014) and Interview 10 (CY 10 Nov 2014)

<sup>26</sup> Robin Hill, ‘Revisiting the Term “Research Culture” (1999) HERDSA Annual International Conference, Melbourne, 12-15 July 1999, at: <http://www.reconstrue.co.nz/RevisitCult.pdf>

<sup>27</sup> Hill (n.26). See also Teresa Marchant ‘Developing Research Culture – Overcoming Regional and Historical Obstacles’ in P Miller & T Marchant (eds.) *Professional Doctorate Research in Australia: Commentary and Case Studies from Business, Education and Indigenous Studies* (Southern Cross University Press 2009), p.6.

<sup>28</sup> Schein (n. 8), p.88

<sup>29</sup> Teri Elkins and Robert Keller, ‘Leadership in Research and Development Organizations: A Literature Review and Conceptual Framework’ (August–October 2003) 14 (4–5) *The Leadership Quarterly*:587–606, pp 594,601

Bernard Bass, ‘Does the Transactional-transformational Paradigm Transcend Organizational and National Boundaries?’ (1997) *American Psychologist* 52 (2): 130-139.

<sup>30</sup> Schein (n.8), p.20

<sup>31</sup> European Commission, ‘The Economic Adjustment Programme for Cyprus First Review - Summer 2013’, (2013) *European Economy, Directorate-General for Economic and Financial Affairs Occasional Papers* 161, p.3

the creditors struck by the government elected in March 2013 imposed severe credit constraints, and demanded new policies and extensive reforms particularly, on the public sector and administration considering its large share of public expenditure<sup>32</sup> and the large number of state-owned enterprises (SOEs).<sup>33</sup> Consequently, research project funding was negatively affected by the economic crisis and the structural adjustment programmes, imposed by the Troika as a pre-condition for Cyprus receiving funds.

Within the participants' accounts there was a strong belief that chronic scarcity of funding is linked with ineffective design and implementation of national R&I policies on the part of successive government administrations and lack of research culture awareness. The following quotes illustrate the link and interactions between the three negative features of the Cypriot national research environment:

*"[...] there isn't a research culture and as a result the value of R&I is not appreciated and because they can't imagine they (R&I) will be useful to them not enough attention and funding is paid or given".*<sup>34</sup>

*"Funding is the biggest problem. [...] politicians remember researchers and their problems no other time than election time".*<sup>35</sup>

*"There is not an established research culture in Cyprus, there is limited governmental funding and sometimes you may discover that the process is not so clear with the way funding and the overall budgeting is allocated. There must be setting up of procedures, strategy and investment in setting up infrastructures and in productive sectors".*<sup>36</sup>

In addition, and in support of the above views, participants opined that the financial crisis is used as an opportunity to justify lack of research funding and that the R&I policy designing and implementation have not always been the result of independent, rational policy development.

### **5.2.3 National Research Policies and Practices**

The present feature addresses the participants' views and experiences of the ways in which Cypriot national research policies are introduced to, adopted by and implemented.

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<sup>32</sup> Ibid p.39.

<sup>33</sup> European Commission, 'The Economic Adjustment Programme for Cyprus Third Review – Winter 2014', (2014) European Economy, Directorate-General for Economic and Financial Affairs Occasional Papers 189, p.31.

<sup>34</sup> Interview 1 (CY 23 Sept 2014)

<sup>35</sup> Interview 5 (CY 24 Oct 2014)

<sup>36</sup> Interview 7 (CY 24 Oct 2014)

It focuses on their perceptions of the important role the government, funding agents and institutions should play<sup>37</sup> in Cyprus as the stakeholders involved in creating and sustaining a research culture and affecting the introduction of required reforms to the country's research environment and economy.<sup>38</sup> Thus the main focal points included the stakeholders representing the country's National Innovation System (NIS) whose actions and set of policies influence research culture directly and indirectly and the NIP development.<sup>39</sup>

Participants clearly accepted the notion that successive government administrations have demonstrated inefficiency in both formulating and implementing a well-organized, functioning and integrated NIP. They criticized the system's ineffectiveness, the slow pace of progress simultaneously recognizing three major shortcomings: absence of an explicitly identified strategy and tangible goals, absence of a clear consensus on the means by which goals will be met and the almost non-existent institutional linkages. In the participants' own words:

*"The problem is not to be found only in the academic or business sectors the problem goes beyond that, it goes to the country's strategy and there seems to be no 'strategy'".*<sup>40</sup>

*"There is no engagement and involvement of all sectors, academia, industry, entrepreneurs and the government, so you cannot have any collaboration".*<sup>41</sup>

*[...] there are disagreements when having to make decisions about where to go and how, especially when it comes to new ideas".*<sup>42</sup>

The new Government's overall efforts to review the NIS focused on adopting a new politically endorsed agenda on RTDI called Smart Specialisation Strategy.<sup>43</sup> The Planning Bureau was founded in 1961<sup>44</sup> as the Government agency initially responsible for the preparation of development economy plans and assumed the task of introducing research policy measures. It was renamed in 2013 to Directorate General for European

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<sup>37</sup> Hill (n. 26)

<sup>38</sup> OECD *National Innovation Systems*, (OECD, 1997), p.10. See also Carl Dahlman and Claudio Frischtak, 'National Systems Supporting Technical Advance in Industry: The Brazilian Experience' in R. Nelson (ed.), *National Innovation Systems — A Comparative Analysis*. (OUP, 1993)

<sup>39</sup> Athanasios Hadjimanolis and Keith Dickson 'Development of National Innovation Policy in Small Developing Countries: The Case of Cyprus' (2001) *Research Policy* 30(5): 805–817, p.806

<sup>40</sup> Interview 11 (CY 27 Nov 2014)

<sup>41</sup> Interview 11 (CY 27 Nov 2014)

<sup>42</sup> Interview 7 (CY 24 Oct 2014)

<sup>43</sup> RoC, 'National Strategy for Research and Innovation',

[http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page34\\_en/page34\\_en?OpenDocument](http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page34_en/page34_en?OpenDocument). See also Chapter 3 section 3.2

<sup>44</sup> Council of Ministers, Decision Number 854 of June 15<sup>th</sup>, 1961. See Chapter 3 section 3.2

Programs for Coordination and Development (DGEPCD)<sup>45</sup> with the Research Promotion Foundation<sup>46</sup> (PRF) as the executive arm of the R & I with core competence preparation of projects and funding under the Strategy priorities. Additionally, a new National Committee on Research, Innovation and Technological Development (NCRITD)<sup>47</sup> was set up in 2013 with the aim of reviewing the NIS and producing a report for a new RDI structure and governance. The report was submitted to the President in March 2014<sup>48</sup> proposing the creation of a new system integrating research, innovation and entrepreneurship. It identified complex and lengthy procedures in the system of incentives; a lack of policies promoting cooperation between academia and businesses; and the current governance of the R&D system not robust enough.<sup>49</sup> However, the Government announced that, for the time being, it will continue with existing structures taking into account the Committee's findings.<sup>50</sup>

Regarding the above and the official announcements about the NRI system review and the setting up of a new NCRITD,<sup>51</sup> interviewees doubted the Government's commitment to upgrading and strengthening research in Cyprus. Some of the respondents had the impression that all this is just on paper:

*"The NCRITD and the Cyprus Scientific Council only met once. It is as if they do not exist".<sup>52</sup>*

*"A lot of these policies are fine on paper, but no one thinks how these policies are going to be implemented especially in small states like Cyprus. They could spend millions devising these policies, but they are not implemented".<sup>53</sup>*

Interviewees have expressed their disappointment at not witnessing project materialization towards upgrading research activities in the country. These projects are being constantly postponed, although considered to be a basic infrastructure for research,

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<sup>45</sup> See [http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page01\\_en/page01\\_en?OpenDocument](http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/page01_en/page01_en?OpenDocument). See also Chapter 3 section 3.2

<sup>46</sup> See Chapter 3 sections 3.2 and 3.6.3. B

<sup>47</sup> Lena Tsipouri et al., Research and Innovation Observatory- RIO Country Report 2015: Cyprus (No. EUR 27856 EN) Institute for Prospective Technological Studies, Joint Research Centre (2016), p.7

<sup>48</sup> European Commission, 'Country Report Cyprus 2015' Commission Staff Working Document Brussels, 26.2.2015 SWD(2015) 32 final, [http://ec.europa.eu/europe2020/pdf/csr2015/cr2015\\_cyprus\\_en.pdf](http://ec.europa.eu/europe2020/pdf/csr2015/cr2015_cyprus_en.pdf)

<sup>49</sup> European Commission, 'Country Report Cyprus 2016 Including an In-Depth review on the prevention and correction of macroeconomic imbalances' Commission Staff Working Document Brussels, 7.4.2016 SWD(2016) 120 final, [http://ec.europa.eu/europe2020/pdf/csr2016/cr2016\\_cyprus\\_en.pdf](http://ec.europa.eu/europe2020/pdf/csr2016/cr2016_cyprus_en.pdf)

<sup>50</sup> Republic of Cyprus, 'Presidency - Unit for Administrative Reform - December 2015' (2016) [https://issuu.com/presidency-reform-cyprus/docs/progress\\_report\\_-\\_december\\_2015\\_-\\_f/7](https://issuu.com/presidency-reform-cyprus/docs/progress_report_-_december_2015_-_f/7)

<sup>51</sup> See Chapter 3 section 3.2

<sup>52</sup> Interview 11 (CY 27 Nov 2014)

<sup>53</sup> Interview 5 (CY 24 Oct 2014)

innovation and technology promotion, providing jobs to university graduates and researchers. One such initiative in Cyprus is the Science Technology Park (STP) in the form of a Knowledge Park for R&I and technology purposes. The materialization of this project has caused much controversy since its 2004 official announcement<sup>54</sup> and then plans stagnated. However, the present Government, re-examining the initial plans,<sup>55</sup> announced an ‘Initial Expression of Interest from Investors, wishing to undertake the STP establishment and operation’ in 2013.<sup>56</sup> It would appear that the STP establishment may finally come to fruition.

Due to the RPF significance, in the scientific and technological research promotion and knowledge dissemination to the Cypriot research community interviewees were asked to express their views on its role. Their opinions were highly critical of its effectiveness commenting on the acute lack and/ or blocking of funding and scarcity for research proposals calls for the various competitive programmes by the RPF. More than 50% of the interviewees believe that there is an attitude favouring academics and researchers from the public HE sector over those coming from the private HE sector and companies. Respondents describe the RPF as a *sort of semi-state manipulative thing*<sup>57</sup> believing that they have more chances of getting a European project through collaboration even from the UK or the USA than from their own country.<sup>58</sup> They argued that they disapprove of the way the Foundation is operated and managed, however, they simultaneously emphasized that this has nothing to do with the people working there.

Overall, some respondents expressed the opinion that progress has been made to eliminate or reduce many negative characteristics of the national research environment partly because of the new government and, partly, because of the positive contribution of the implemented EU legislation and the imposed structural reforms. However, they believe progress is still proceeding slowly and argue that there is ample room for further improvement.

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<sup>54</sup> Announcement in the Opening speech by the former Minister of Commerce, Industry and Tourism at the Cyprus Chamber of Commerce & Industry and the Employers & Industrialists Federation of Cyprus Seminar with the assistance of the French Riviera Chamber of Commerce & Industry for the establishment of a Technology Park in Cyprus, 6 September 2004, Nicosia, [http://kypros.org/hightech/omilies/speech\\_minister\\_06092004\\_technopark.htm](http://kypros.org/hightech/omilies/speech_minister_06092004_technopark.htm)

<sup>55</sup> Ministry of Energy, Commerce, Industry and Tourism of RoC, ‘Notes regarding the Science Technology Park (S.T.P.)’ This information was published in Greek in the Cyprus Government Gazette, dated 11 January 2013, (Number 4524) – Third Annex – Part II – For Spatial Planning Area IX – – Pentakomo – ΔΠ/AN 2013/ΑΕΜ IX/08, [http://www.mcit.gov.cy/mcit/mcit.nsf/All/582B60EF52379EA8C2257C45004BCD85/\\$file/STP%20MapZonesEnglish%20Dec13.pdf](http://www.mcit.gov.cy/mcit/mcit.nsf/All/582B60EF52379EA8C2257C45004BCD85/$file/STP%20MapZonesEnglish%20Dec13.pdf)

<sup>56</sup> Ministry of Energy, Commerce, Industry and Tourism of RoC, ‘General Informative Document for the Cyprus Science Technology Park (STP)’ [http://www.mcit.gov.cy/mcit/mcit.nsf/All/582B60EF52379EA8C2257C45004BCD85/\\$file/ScTechParkGeneralInformatWEBMCITApril14.pdf](http://www.mcit.gov.cy/mcit/mcit.nsf/All/582B60EF52379EA8C2257C45004BCD85/$file/ScTechParkGeneralInformatWEBMCITApril14.pdf)

<sup>57</sup> Interview 5 (Cyprus 24 October 2014)

<sup>58</sup> Interview 9 (Cyprus 6 November 2014)



Based on the participants' views discussed above, the survival of research culture, its development and adaptation to a country's environment relates to the country's NIP and the stakeholders involved in its formulation and implementation.<sup>59</sup> In Cyprus, findings support the view that national research policies and practices are not integrative and coherent and do not reflect strong research culture awareness.

### 5.3 Challenges Facing Meritocracy

The present feature attempts to present the participants' views regarding meritocracy challenges in the public sector and administration. Public sector bureaucracy,<sup>60</sup> nepotism,<sup>61</sup> and corruption,<sup>62</sup> are strong themes illustrating the challenges facing meritocracy in the Cypriot national environment based on the participants' accounts. These challenges raise major difficulties for the setting up of an attractive research environment with a negative impact on scientists in Cyprus and those scientists who consider migrating to the country for employment purposes. Simultaneously, they are undermining institutional functioning and the public's trust in political leadership in and out of the government.<sup>63</sup>

#### 5.3.1 Bureaucracy

This is one of the challenges facing the public sector, affecting not only respondents' professional life but also their free movement. Bureaucracy is described as a rational system or organized structure of appointed officials designed to permit the efficient and effective execution of public policy.<sup>64</sup> Consequently, bureaucracy plays an important role in policy making at all governmental levels and at all stages of the policy process including implementation and service delivery.<sup>65</sup> As a post-colonial country, Cyprus inherited well-organised and bureaucratic administrative structures from the British colonial rule period which in the past served it well.<sup>66</sup> However, participants note that since Cyprus' independence the country has remained with a mainly centralized bureaucratic

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<sup>59</sup> See OECD, *Dynamising National Innovation Systems* (OECD, 2002), p.18, p.55

<sup>60</sup> Interviews: 3,6,7,9,10, 11, 18 and KIs: 1, 2, 4, 6, 7 (CY Aug 2014 - Jan 2015)

<sup>61</sup> On nepotism, see Interviews: 1, 2, 5,6, 8, 11, 12, 16, 17, 18, 19 and Interviews KIs: 1,2,3,4,5,6 (CY Aug 2014-Jan 2015)

<sup>62</sup> On corruption, see Interviews: 1,2,5 6 7 9 10 11,15, 16, 17, 18 and Interviews KIs: 2,4,6 (CY Aug 2014 - January 2015)

<sup>63</sup> Transparency International, 'Cyprus assessment by Transparency International-Cyprus', (2013) <https://www.transparency.org/gcb2013/country/?country=cyprus>

<sup>64</sup>George Tasié, 'Bureaucratic theory and administration', Public Sector Administration and Management, (Pelanduk Publications, 1997), 53-62

<sup>65</sup> Steven Peterson, 'Close Encounters of the Bureaucratic Kind: Older Americans and Bureaucracy' (1986) American Journal of Political Science 30 (2): 347-356

<sup>66</sup> Christophorou, et al., (n. 14), p.28



public sector and rigid organisational structures and procedures.<sup>67</sup> Thus, the understanding of the term bureaucracy used by our respondents is quite different from the description given above, indicating negative aspects of bureaucracy.

*“What we had was what the British had left to us. Unfortunately, most of the public sector did not develop up to the expected or required standard creating unnecessary and tiresome government bureaucracy”.*<sup>68</sup>

Interviewees were of the opinion that, when relocating to Cyprus, they encountered bureaucracy in various forms such as tiresome, burdensome, unclear procedures, hierarchy and unwillingness on the part of government officials to provide assistance.<sup>69</sup> They experienced a negative bureaucratic mentality as to the way things are carried out and were distressed by this situation. The same attitude was observed with incoming researchers who find things very difficult at the beginning, both administratively and bureaucratically. As to the procedure for recognition of HE qualifications and diplomas, a characteristic example is reported by a key informant who was very critical of the process followed, commenting that:

*“I get the impression that the Cyprus Council for the Recognition of Higher Education Qualifications (KYSATS) is very bureaucratically organized and run following a very formalistic approach in examining and recognizing degrees from abroad. Instead of allowing and facilitating skill recognition so that people can work in Cyprus they have to go through this bureaucratic process often in delays or having to go through appeals or go to court. This allows for human exploitation”.*<sup>70</sup>

When asked about hierarchy, key informants stated that public servants' fear of losing their position when taking initiative means that they constantly need approval by a chain of senior officers resulting in a low public administrative service standard.<sup>71</sup> Additionally, the complicated, inflexible and slow procedures required for decision-making causes the system to be very slow:

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<sup>67</sup> Andreas Mylonas 'Case Study on Performance Appraisal System in the Cyprus Civil Service', (2004) Public Administration and Personnel Department of the Ministry of Finance of RoC, 1-6.

<sup>68</sup> Interview KI 4 (CY 12 Nov 2014) and Interview KI 7 (CY 27 Jan 2015)

<sup>69</sup> Interview 11 (CY 27 Nov 2014)

<sup>70</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>71</sup> Interview KI 4 (CY 12 Nov 2014) and Interview KI 6 (CY 24 Jan 2015)

*“Each individual holding a public post is afraid to take decisions or as we say put their signature under a document, this also causes serious delays”.*<sup>72</sup>

Respondents were convinced that, in contrast to the public sector the private sector is more flexible and efficient. Quoting from interviewees:

*“The private sector provides high quality services while the public sector is not that helpful. This is influenced by the fact that the human resources are quite limited at this particular point because of the embargo in promotions and new appointments”.*<sup>73</sup>

Interviewees stated that the freezing of public servants’ positions and new appointments as a financial crisis consequence only made things worse in providing good services with a negative impact on the country’s economy.

*“Public services being understaffed coupled with the bureaucratic way and mentality of doing things make the country uncompetitive in the market”.*<sup>74</sup>

On management a national public bureaucracy faces the pressures of any complex organization.<sup>75</sup> Action at the lower levels is governed in terms of scope and directions by decisions made at the higher levels. Consequently, bureaucracy is becoming dependent on the information flow and demands from the individuals responsible to administer this information to other colleagues to carry out the various tasks.<sup>76</sup> However civil servants more than ever before are now confronted with new information and often unfamiliar tasks. The quotes of key informants reflect these problems:

*“Our civil servants are handling too many things and often dealing with other new matters because it is demanded from them so what is of priority and has to be done right can wait for months, even if all that is needed is a typical approval”.*<sup>77</sup>

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<sup>72</sup> Interview KI 4 (CY 12 Nov 2014)

<sup>73</sup> Ibid

<sup>74</sup> Interview 18 (CY 20 Jan 2015)

<sup>75</sup> Sonia Ospina, ‘Managing Diversity in Civil Service: A Conceptual Framework for Public Organizations’ in IMDESA-IIAS (ed.), *Managing Diversity in the Civil Service*. (IOS Press, 2001) 11-29.

<sup>76</sup> Norton Long, ‘Power and Administration’ (1949) *Public Administration Review* 9 (4): 257-264

<sup>77</sup> Interview KI 6 (CY 24 Jan 2015)

*“[...] this particular service is still changing responsible officers every time who need to be informed again from scratch and this is continuous, so it creates problems and bureaucracy”.*<sup>78</sup>

*“Often there are people who have no idea of what needs to be done, so they want to bring in people from the private sector to do it, it all depends on how good a single civil servant is and how well trained and informed this person is”.*<sup>79</sup>

Although the word ‘bureaucracy’ has taken on a negative meaning for the respondents, their accounts suggest that reform introduction and implementation by the current administration coupled with management changes will impact positively on the public sector and the quality of services it provides.

### **5.3.2 Nepotism and Corruption**

When questioned on the presence of nepotism<sup>80</sup> and corruption<sup>81</sup>, interviewees and key informants believe that they do exist in the public sector and in many aspects of Cypriot social life at the expense of the brightest or the most suitable or needed.

This nepotism is different from the traditional biological nepotism definitions<sup>82</sup> based on kinship that is hiring or promoting family members over more qualified candidates. There is a new kind of nepotism that most often works silently and out of sight creating opportunities for those who have connections in a specific area or field increasingly leaving out those who do not.<sup>83</sup>

In support of the above perception of nepotism, interviewees commented that the lack of the most suitable people in high institutional positions is not coincidental due to the fact that underneath them there is a system of nepotism. Consequently, they argue this practice results in formalistic bureaucratic nepotistic approaches to filling positions, policy ineffectiveness and failure to regulate.

One of the key informants states that there is a nepotistic policy justified in the name of the recent financial crisis. He argues that:

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<sup>78</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>79</sup> Interview 18 (CY 20 Jan 2015)

<sup>80</sup> On nepotism, see Interviews 1, 2, 5,6, 8, 11, 12, 16, 17, 18, 19 and Interviews KIs 1, 2, 3, 4, 5, 6 (CY Aug 2014-Jan 2015),

<sup>81</sup> On corruption, see Interviews 1, 2, 5, 6, 7, 9, 10, 11, 15, 16, 17, 18 and Interviews KIs 1,2,4 (CY Aug 2014-Jan 2015)

<sup>82</sup> Nepotism is defined as discrimination in favour of certain individuals or groups of individuals. See Gary Becker, *The Economics of Discrimination* (University of Chicago Press, 1957), p.7. See also Chaim Fershtman et al., ‘Discrimination and Nepotism: The Efficiency of the Anonymity Rule’ (2005) *Journal of Legal Studies* 34(2): 371-394.

<sup>83</sup> Adam Bellow, *In Praise of Nepotism*, (Doubleday 2003), p.10

*“It is a policy of arranging jobs for ‘our boys and girls’ but the attitude is protecting ‘our people’. So, it’s all a kind of the logic of nepotism”.*<sup>84</sup>

On the topic of favouritism as a nepotism form, interviewees opined that unless you know a key person or a person on the inside called ‘Koumparo’ metaphorically, (meaning best man in Greek) or ‘meso’ (meaning medium) then your job is just not done. This finding is in line with that of Morano-Foadi which showed a similar situation of feudal structure of research groups in Italy, defined as *baron* system.<sup>85</sup> However, the difference between Morano-Foadi’s research and the present study is that the feature of nepotism is not restricted in research groups. In the Cypriot national environment nepotism and or favouritism is an entrenched characteristic encountered in all public life aspects. Quotes from interviews provide adequate descriptions:

*“If you don’t have a ‘koumparo’ a best man being a key entrepreneur or a manager etc. from the inside again you will find closed doors. This is something in both the Higher Private and Public institutions in Cyprus which they must fight”.*<sup>86</sup>

*“Political parties want to place their own people in hot positions over more competent candidates”.*<sup>87</sup>

*“I left the Public University because I felt that unless I knew somebody I would never progress”.*<sup>88</sup>

Respondents were critical of the perpetuation of a non- meritocratic hiring system which is based largely on partisan favouritism and which results in a restriction of employment choices to a favoured group and to less qualified candidates, on average, than an open, full search.<sup>89</sup> Interviewees commented that:

*“In the public service they do not actually evaluate the knowledge and experience and expertise of each person”.*<sup>90</sup>

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<sup>84</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>85</sup> Sonia Morano-Foadi, ‘Key Issues and Causes of the Italian Brain Drain’ (2006) *Innovation: The European Journal of Social Science Research* 19 (2): 209-223, pp.218,219; see Chapter 6 section 6.4.1.A

<sup>86</sup> Interview 2 (CY 15 Oct 2014)

<sup>87</sup> Interview 17 (CY 17 Dec 2014)

<sup>88</sup> Interview 18 (CY 20 Jan 2015)

<sup>89</sup> Becker (n. 82), p.69

<sup>90</sup> Interview 7 (CY 24 Oct 2014)

*“There is no evaluation by an expert committee in each field”.*<sup>91</sup>

*“Concerning personnel appointments and promotions people are not selected through the right channels”.*<sup>92</sup>

Corruption and lack of transparency in the public sector are perceived by interviewees and key informants as major problems impacting on people in detrimental ways. Although the term corruption is used to mean different things in different contexts in the context of the present research, corruption refers to the use of public office for private gains.<sup>93</sup> High-profile scandals in the country, following the financial crisis<sup>94</sup> and the appearance of a number of new corruption court cases<sup>95</sup> on receiving a bribe being a public official and on money laundering have made interviewees sceptical about trusting the system. Key informants interviewed have commented that:

*“Following the events that became public for bribes, corruption, political interventions etc. there is no trust anymore to the civil servants or the government”.*<sup>96</sup>

This lack of trust is shown in two recent Transparency International surveys<sup>97</sup> on the 2013 and 2014-2015 Corruption Perception Index. In 2013 over a sample of 400 Cypriots aged 18-65, 91% of respondents felt that political parties are corrupt/extremely corrupt. Results for 2014-2015 showed that 83% of Cypriots consider corruption a major problem in political parties, local government and the banking sector. Although the interplay between corruption and management practices for bureaucrats on larger budget projects remains open for future research<sup>98</sup> considerable research has shown that nepotism is an important corruption element.<sup>99</sup> Arguably some forms of nepotism are not also forms

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<sup>91</sup> Interview 5 (CY 24 Oct 2014)

<sup>92</sup> Interview 6 (CY 28 Oct 2014)

<sup>93</sup> Pranab Bardhan, ‘Corruption and Development: A Review of Issues’ (1997) *Journal of Economic Literature*, 35 (3): 1320-1346, 1322

<sup>94</sup> U.S. Department of State, Bureau of Economic and Business Affairs Report ‘Investment Climate Statements for 2016-Cyprus’ Doc 1324233 (2016)

<sup>95</sup> See *The Republic v Vergas, Malikides and Others* 2014, *The Republic v Kittis and Others*, No 693/14, 22/12/2014 and *The Republic v Rikkos Erotokritou and Others* No 9208/15, 25.9.2015, 1.3.2017

<sup>96</sup> Interview KI 4 (CY 12 Nov 2014)

<sup>97</sup> Transparency International-Cyprus (n. 63)

<sup>98</sup> Imran Rasul and Daniel Rogger, ‘Management of Bureaucrats and Public Service Delivery: Evidence from the Nigerian Civil Service’, WP ICG (June 2015), p.22 at:

<http://www.ucl.ac.uk/~uctpimr/research/CSS.pdf>

<sup>99</sup> Joseph Nye, ‘Corruption and Political Development: A Cost-Benefit Analysis’ (1967) *American Political Science Review* 61 (2): 417 – 427. See also Fiona Robertson-Snape, ‘Corruption, Collusion, and Nepotism in Indonesia’ (1999) *Third World Quarterly*, 20(3): 589-601

of corruption.<sup>100</sup> However, literature in public administration emphasizes that civil servants pursue their own self-interests<sup>101</sup> and that engagement in nepotism is profitable.<sup>102</sup> Empirical research also supports the notion that nepotism damages government policy efficiency<sup>103</sup> with a negative impact on societal variables such as health and education.<sup>104</sup> Corruption is equally detrimental since it lowers investment and as a result economic growth is lowered too.<sup>105</sup>

In the absence of an anti-corruption strategy developed by successive governments in Cyprus, in 2002 Europe's Group of States against Corruption (GRECO)<sup>106</sup> recommended the creation of a specialized body to provide advice on anti-corruption policy. On that recommendation Cyprus established a Co-ordinating body against corruption in 2003<sup>107</sup> officially announced by the RoC Attorney General.<sup>108</sup> Nevertheless, there is disappointment among people and the social media in Cyprus on the corruption issue calling for more effective action against such practices.<sup>109</sup> Respondents felt that lack of transparency resulting from favouritism, nepotism and corruption is a major problem stating that:

*"[...] you don't know to whom you are talking [...] there is always a secret agenda wherever you turn the page [...]"*<sup>110</sup>

*"There are researchers who get more help than others so there is no transparency"*<sup>111</sup>

*"I find that the public universities are 10 times more inflexible and 10 times less transparent having worked in a public university I was shocked regarding this"*<sup>112</sup>

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<sup>100</sup> Bellow (n. 83), pp.12-16

<sup>101</sup> James Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It*, (Basic Books 1989), p.xix

<sup>102</sup> Banuri Sheheryar, et al., 'Deconstructing Nepotism' (2012), The World Bank Development Research Group WP, <http://dx.doi.org/10.2139/ssrn.2248187>

<sup>103</sup> Roger Tangri and Andrew Mwenda, 'Corruption and Cronyism in Uganda's Privatization in the 1990s' (2001) *African Affairs*, 100 (398): 117-133

<sup>104</sup> Sören Holmberg, et al., 'Quality of Government: What You Get' (2009) *Annual Reviews of Political Science*, 12(1): 135-161, p.141

<sup>105</sup> Paolo Mauro, 'Corruption and Growth' (1995) *The Quarterly Journal of Economics* 110 (3): 681-712, p.683

<sup>106</sup> European Council, Group of States Against Corruption (GRECO) [http://www.coe.int/t/dghl/monitoring/greco/default\\_en.asp](http://www.coe.int/t/dghl/monitoring/greco/default_en.asp)

<sup>107</sup> GRECO, 'Second Evaluation Round 'Evaluation Report on Cyprus 2005', (2006), at; [http://www.coe.int/t/dghl/monitoring/greco/evaluations/round2/GrecoEval2%282005%293\\_Cyprus\\_EN.pdf](http://www.coe.int/t/dghl/monitoring/greco/evaluations/round2/GrecoEval2%282005%293_Cyprus_EN.pdf), See chapter 1, section 1.3.1.F

<sup>108</sup> International Co-operation against Corruption (ICAC), 'AG of the RoC announcing measures against corruption', <http://www.icac.org.hk/news/issue26eng/button3.htm>

<sup>109</sup> See, for example, Cyprus Mail February 5<sup>th</sup> 2014, <http://cyprus-mail.com/2014/02/05/our-view-without-pressure-the-parties-will-do-nothing-about-corruption/>

<sup>110</sup> Interview 6 (CY 28 Oct 2014)

<sup>111</sup> Interview 15 (CY 5 Dec 2014)

Participants reflecting on their experiences acknowledged that research promotion and improvement efforts should be established on cultivating a new meritocratic culture built on the country's strengths and not on any political or self-interest reasons. In the light of the findings on the occurrence of nepotism, and corruption, there are indications that these practices produce negative results and may have had significant long-term impacts on the national research environment and the country's economy.

#### 5.4 Brain Waste Phenomenon<sup>113</sup>

This feature aims to present the interviewees' perspectives regarding the brain waste phenomenon in Cyprus. Their accounts are indicative of brain waste aspects encountered in the Cypriot national environment with more than 50% of participating researchers and four out of seven key informants believing that this phenomenon exists in Cyprus.<sup>114</sup>

The brain waste phenomenon has been identified as 'external'<sup>115</sup> when there is the lack of utilization of the migrant HS professionals' skills and competences in the destination country.<sup>116</sup> Another conventional brain waste form emphasizes human resources misallocation also taking place within the receiving country.<sup>117</sup> By contrast it is defined as 'internal' when HS professionals in their home country are replaced by TCNs. An accompanying negative brain waste consequence is the de-skilling occurring when HS workers migrate into employment forms that do not require the levels of skills and experience applied in their former post.<sup>118</sup> This in turn results in the depreciation of personal human capital stock.<sup>119</sup> The causes of these brain waste forms and its negative consequences may be due to a host of possible circumstances with different theoretical models and research explaining various aspects of the phenomenon.<sup>120</sup>

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<sup>112</sup> Interview 18 (CY 20 Jan 2015)

<sup>113</sup> See Chapter 3 section 3.5

<sup>114</sup> Interviews 2,7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and KIs 1, 2, 4, 5 (CY Aug 2014-Jan 2015)

<sup>115</sup> Stefano H. Baruffaldi and Paolo Landoni, 'Effects and Determinants of the Scientific International Mobility: The Cases of Foreign Researchers in Italy and Portugal' (2010), Paper for the Triple Helix VIII Conference, p.3. See also Ruth Uwaifo Oyelere, 'Brain Drain, Waste or Gain? What we Know About the Kenyan Case' (2007) *Journal of Global Initiatives* 2(2):113-129 and Rasa Daugėlienė, 'The Peculiarities of Knowledge Workers Migration in Europe and the World' (2007) *Engineering Economics* 3(53): 57-64.

<sup>116</sup> Sonia Morano-Foadi and James Foadi, 'Italian Scientific Migration: From Brain Exchange to Brain Drain', (2003), University of Leeds, Centre for the Study of Law and Policy in Europe Research Report No. 8, 15. See also Uwaifo Oyelere (n. 115) and Daugėlienė (n. 115)

<sup>117</sup> Aaditya Mattoo et al., 'Brain Waste? Educated Immigrants in the US Labour Market', (2008) *Journal of Development Economics* 87 (2):255-269, p.257

<sup>118</sup> John Salt, 'International Movement of the Highly Skilled' (1997) OECD International Migration Unit Occasional Paper Vol. 3, p.5

<sup>119</sup> Armando Garcia Pires, 'Brain Drain and Brain Waste' (2015) *Journal of Economic Development* 40(1):1-34 p.1

<sup>120</sup> *Ibid.*, 3. Mattoo et al., (n.117) 258-259

### 5.4.1 Brain Waste and Cyprus

While there is some documentation on Cyprus regarding brain drain not much is known from the literature and data on the country with respect to the brain waste issue.<sup>121</sup> The research agenda and bibliography on Cyprus has been mostly focused on the country's national question and the conflict between Greek and Turkish Cypriots.<sup>122</sup> There has also been a considerable amount of literature on the island's multi-diasporic and multicultural character,<sup>123</sup> on Greek Cypriot emigration,<sup>124</sup> on immigrants in Cyprus<sup>125</sup> on Cyprus Law<sup>126</sup> and on Cyprus and the EU.<sup>127</sup> However there has been a lack on research specifically on scientists and researchers in Cyprus and the brain waste aspect. Undoubtedly this phenomenon and the difficulties it causes are not limited to Cyprus. Brain waste 'classic aspects' such as under-utilization<sup>128</sup> and human resources misallocation<sup>129</sup> are encountered in many other countries worldwide.

However, the present empirical findings suggest a brain waste type which is systemic in Cyprus and country-induced thus not existing only among migrant researchers in the country. This research outcome is quite different from the traditional view on brain waste which describes it as occurring after the skilled professionals and the highly educated leave the country of origin and then being unable to utilize their skills and education in the host country.<sup>130</sup> It also implies that the brain waste risk does not only

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<sup>121</sup> See Chapter 2 section 3.5

<sup>122</sup> See, for example, Russell King and Sarah Ladbury, 'The Cultural Construction of Political Reality: Greek and Turkish Cyprus Since 1974', (1982) *Anthropological Quarterly*, 55(1):1-16

<sup>123</sup> See for example, Janine Teerling 'Of Hubs and Hinterlands: Cyprus as an Insular Space of Overlapping Diasporas' (2012) *Island Studies Journal* 7(1): 19-48.

<sup>124</sup> See, for example, Floya Anthias, *Ethnicity, Class, Gender and Migration: Greek-Cypriots in Britain* (Aldershot 1992), Russell King et al., 'We Took a Bath with the Chickens': Memories of Childhood Visits to the Homeland by Second-generation Greek and Greek Cypriot 'Returnees' (2011) *Global Networks*, 11(1):1-23.

<sup>125</sup> See Nicos Trimikliniotis and Corina Demetriou, 'Active Civic Participation of Immigrants in Cyprus' Country Report prepared for the European research project POLITIS, (Oldenburg 2005). See also Nicos Trimikliniotis, 'Rethinking Migration, Discrimination and Multiculturalism in a Post-tourist Society, (2008) *Cyprus Review*, 20(2):13-16.

<sup>126</sup> See Neocleous (n.1). See also Georghios Piki, *Constitutionalism - Human Rights - Separation of Powers: The Cyprus Precedent* (Martinus Nijhoff Publishers, 2006)

<sup>127</sup> Constantin Stefanou, *Cyprus and the EU: The Road to Accession* (Ashgate, 2005).

<sup>128</sup> Uwaifo Oyelere (n. 115),p.123. See also Jeanne Batalova et al., 'Brain Waste in the US Workforce: Select Labour Force Characteristics of College-Educated Native Born and Foreign Born Adults' (2014) Migration Policy Institute <<http://migrationpolicy.org/research/brain-waste-US-state-workforce-characteristics-college-educated-immigrants>>

<sup>129</sup> See Mattoo et al (n.117), p.257

<sup>130</sup> Uwaifo Oyelere (n. 115),p.123. See also Barry Chiswick and Paul Miller, 'The International Transferability of Immigrants' (2007) *Human Capital Skills*, IZA DP 2670.



appear in the presence of illegal migration<sup>131</sup> and low international transferability of human capital.<sup>132</sup> Quoting from a key informant:

*“This was the case long before the crisis. Brain waste is not just people who have to do other jobs different or lower from their field of expertise. Brain waste is crossing all the borders of all Cypriot institutions and it is a major problem. [...] the public and the private sectors generate it”.*<sup>133</sup>

#### **5.4.2 Aspects of Brain Waste in Cyprus: Stagnation of Talent**

Experiences of brain waste and stalled career progression as a negative aspect of this phenomenon were reported by respondents who felt that their careers were not progressing in Cyprus. This was particularly true for those working in positions outside their field of expertise and those who felt that they are faced with no further career progression due to lack of proper evaluation procedures. Their feeling was so intense that they considered brain waste to be a more serious problem than that of brain drain. The following quote captures the problem in its totality:

*“Brain waste is a problem with a bigger impact than that of brain drain. People stay in their positions for years there are no chances to move up and there is no evaluation [...]”.*<sup>134</sup>

A shared feeling among interviewees is that the Cypriot background culture does not realize the potential value of research and research findings are left unutilized thus being wasted:

*“They don’t value research. [...] a lot of research just stays on the shelf. [...] There is no point if you do not use research findings for education or in practice”.*<sup>135</sup>

*“I don’t think people know what to do with research findings”.*<sup>136</sup>

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<sup>131</sup> Gordon H Hanson ‘Illegal Migration from Mexico to the United States’ (2006) *Journal of Economic Literature* 44, 869-924

<sup>132</sup> Chiswick and Miller (n.130), p.2

<sup>133</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>134</sup> Interview 19 (CY 23 Jan 2015)

<sup>135</sup> Interview 5 (CY 24 Oct 2014)

<sup>136</sup> Interview 1 (CY 23 Sept 2014)

*“I am not sure of whether they respect research. Another problem is that they do not know what research is, they do not understand that you have to spend time or even years on research”*.<sup>137</sup>

*“Based on reports we have done on Cyprus we need infrastructure, boosting and promotion of innovation and research. We have been saying the same things over and over for the last 10 years”*.<sup>138</sup>

Respondents describe a brain waste aspect related to the quality and types of qualification provided or chosen by individuals which are inadequate for the needs of Cyprus' economy. This might occur either because the economy is undergoing transformation<sup>139</sup> or because there is insufficient cooperation and linkages between the Cyprus Ministry of Education and Culture (MOEC), HEIs, the business sector, local industry and the labour market.<sup>140</sup> Assuming that in relation to productivity growth<sup>141</sup>, adoption and innovation require different types of human capital<sup>142</sup> then better targeted education policies in the origin country could benefit its human capital resources. Producing additional human capital away from fields useful in adopting modern technologies, and occupations that matter the most for the knowledge economy (engineers, scientists, researchers and academic personnel)<sup>143</sup> could be characterised as a brain waste form that is country induced. Public education provision towards country-specific skills such as law and teaching has a result the country of origin possibly training too few engineers and too many lawyers.<sup>144</sup> Consequently many talented people are driven or led to the wrong career choice thus giving rise to a supply and demand mismatch.<sup>145</sup> For instance, in Cyprus there is overproduction of certain professions such as teachers and lawyers<sup>146</sup> as confirmed by the following quote:

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<sup>137</sup> Interview 15(CY 5 Dec 2014)

<sup>138</sup> Interview 7 (CY 3 Nov 2014)

<sup>139</sup> A finding also supported by Olga Strietska-Ilina, *A Clash of Transitions: Towards a Learning Society* (Peter Lang International Academic Publishers, 2007), p.5

<sup>140</sup> See Chapter 3 section 3.4.

<sup>141</sup> Jess Benhabib and Mark Spiegel, 'Human Capital and Technology Diffusion', in Ph. Aghion and S. Durlauf (eds.), *Handbook of Economic Growth*, (Elsevier North Holland, 2005), 935-966,

<sup>142</sup> Corrado Di Maria and Piotr Strykowski, 'Migration, Human Capital Accumulation and Development', (2009) *Journal of Development Economics* 90(2):306-313, p.308

<sup>143</sup> Ahmed Tritah, 'The Brain Drain between Knowledge Based Economies: the European Human Capital Outflows to the US' (2008) *Economie Internationale/International Economics* 115, 65-118, p.99

<sup>144</sup> Panu Poutvaara, 'Public Education in an Integrated Europe: Studying to Migrate and Teaching to Stay', (2008) *Scandinavian Journal of Economics* 110(3):591-608, p.593

<sup>145</sup> A finding also supported by Bernd Wächter, 'Brain Drain: What We Know and What We Don't Know', Ulrich Teichler (ed.) *The Formative Years of Scholars*, (Portland Press, 2006)

<sup>146</sup> See Chapter 3, sections 3.2 and 3.4

*“[...] during the final years the best school students tend to go to study law or teaching. I believe that a lot of people who have the ability for innovative ideas for technology tend to do this. It has been cultivated for so long”.*<sup>147</sup>

The theme of the education system being unable to create those links with the academia and the market so as to bring positive results for the country was recurrent:

*“In the education system they miss out the biggest issue of not focusing on the industry needs. If you identify what the industry needs and what your existing needs are then you build around those opportunities and you can direct the education system towards those needs [...]”.*<sup>148</sup>

*“There are a lot of people who start their studies on subjects that have no future for them. That could change by scrapping the way the civil service and public education department hires and educates people, this generates massive amount of brain waste”.*<sup>149</sup>

Finally, there was a widespread perception among interviewees and key informants that brain waste is a phenomenon that penetrates and is maintained by the system as shown by the following quotes:

*“There is a massive wastage of talent of skills and there is a lot of resource wastage. We find this also in the way in which people are being utilized within different institutions [...] the people who have the ability of being in positions where they could affect change and use their talents to bring about best results are actually suppressed or pushed aside and this is standard policy [...]”*<sup>150</sup>

*“Is there a brain waste? Yes, we don't utilize the brains the way we should, we don't have the infrastructure to do it”.*<sup>151</sup>

*“You always see a recycling of the same people in crucial jobs. This makes you wonder whether they can do the job and whether someone else could do it more efficiently”.*<sup>152</sup>

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<sup>147</sup> Interview 2 (CY 15 Oct 2014).

<sup>148</sup> Interview 11 (CY 27 Nov 2014)

<sup>149</sup> Interview 18 (CY 20 Jan 2015)

<sup>150</sup> Interview KI 2 (CY 16 Oct 2014)

<sup>151</sup> Interview KI 4 (CY 12 Nov 2014)

<sup>152</sup> Interview 17 (CY 17 Dec 2014)

Interpretation of the participants' accounts on the brain waste phenomenon in Cyprus indicate that its form, occurrence, possible magnitude, the people affected in terms of lost and/ or unutilized labour, and possible negative impact on the country call for further research into its causes and whether it exists in the same form in other small countries. While Cyprus invests in education<sup>153</sup> because of the benefits education produces to its society, these benefits may be lost completely or in part, when individuals' potentials and abilities are not used to the full in jobs using their expertise.

## 5.5 Brain Drain Phenomenon

This feature aims to present the interviewees' perceptions regarding the occurrence of a potential brain drain phenomenon in Cyprus. Brain drain is traditionally viewed as the negative migration consequence of the very HS professionals, commonly occurring from developing to developed countries.<sup>154</sup> Developing countries lose innovative and productive capacity while the receiving developed countries benefit by increasing their highly educated-manpower thus experiencing a brain gain.<sup>155</sup> Despite the fact that Cyprus is not a developing country in a literal sense the brain drain can apply to this country as a proper research and innovation culture is still developing.<sup>156</sup> Thus the loss of human talent through brain drain can be a problem confronting human resource development in Cyprus with limited human resources for research<sup>157</sup>, an issue discussed and reflected in the following sections.

### 5.5.1 Brain Drain and Cyprus

Although there is no official documentation<sup>158</sup> in relation to the brain drain phenomenon in Cyprus, there are concerns about a serious or potential brain drain threat in several European Commission reports<sup>159</sup> on Cyprus (See Table 3 p194) and other reliable

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<sup>153</sup> See Chapter 3 sections 3.2 and 3.4

<sup>154</sup> Jagdish Bhagwati and Koichi Hamada, 'The Brain Drain, International Integration of Markets for Professionals and Unemployment: A theoretical analysis' (1974) 1 *Journal of Development Economics* 19-42, p.19

<sup>155</sup> Oyelere (n.115) p.123

<sup>156</sup> Universities and Colleges Employers Association (USAEE) 'Supporting Early Career Researchers in Higher Education in Europe: The Role of Employers and Trade Unions' <http://www.ucea.ac.uk/en/empres/rs/ecr.cfm>

<sup>157</sup> See Tsipouri et al., (n. 47), p.62. See also Chapter 3 section 3.4.

<sup>158</sup> Lena Tsipouri and Sophia Athanassopoulou, 'RIO Country Report 2014- Cyprus' (2015) European Commission, JRC Science and Policy Reports EUR 27302, also, the Mobility Patterns and Career Paths of Researchers in non-University Research Institutes (MORE) has no data for Cyprus due to the low response rate in the corresponding survey - European Commission DG Directorate C-European Research Area Universities and Researchers, Study on mobility patterns and career paths of EU researchers, Part I Mobility Survey of the HE sector, June 2010, 41.

<sup>159</sup> Ibid. See also Tsipouri et al., (n. 47), p.63. See, for example, European Commission 'Research and Innovation Performance in the EU, Innovation Union Progress at Country Level' (2014) EUR 26334, 61.

sources<sup>160</sup> including the World Organisation for Young Overseas Cypriots<sup>161</sup> the National Federation of Cypriots in the UK<sup>162</sup> and the Statistical Service of the RoC (See Tables 1, and 2 p192). There is also some brain drain documentation in research carried out in 2006<sup>163</sup> and 2008.<sup>164</sup> The former reports that for small states including Cyprus the brain drain is affected by country size while the latter reports the country with brain drain above 30%.<sup>165</sup> Research has shown that the brain drain is highly sensitive to country size and smallness and that the ease of emigration is stronger in small states making its people more sensitive to such factors.<sup>166</sup> In this perspective Cyprus has experienced three migration waves in its recent history. The first was associated with large-scale emigration of Cypriots abroad at the beginning of the 20<sup>th</sup> century in search of jobs and better living standards.<sup>167</sup> The second occurred during the 1950s and 1960s<sup>168</sup> while the third emigration wave occurred following the 1974 Turkish invasion of Cyprus, to countries such as the UK, the USA and Australia until the late 1980s.<sup>169</sup>

Following the economic crisis and the imposed fiscal adjustment in 2011 there is a strong indication of the young and the most talented scientists leaving Cyprus (see Tables 1 and 2 below).

**TABLE 1: Emigration**

Emigrants by citizenship 2011-2015					
Citizenship	2011	2012	2013	2014	2015
Total	4.895	18.105	25.227	24.038	17.183
Cypriot	242	1050	3579	2096	1025
EU	3.615	11.977	12.903	14.874	13.329
Non-EU	395	0	0	0	0

Source: Statistical Service of the RoC 'Population Statistics' Series II, Report No 52 (2016)

<sup>160</sup> Universities and Colleges Employers Association (USAE) 'Supporting Early Career Researchers in Higher Education in Europe, Cyprus Case Study' (2015), <http://www.ucea.ac.uk/en/empres/rs/ecd.cfm>

<sup>161</sup> The World Organisation for Young Overseas Cypriots, <http://www.nepomak.org>,

<sup>162</sup> The National Federation of Cypriots in the UK, <http://www.cypriotfederation.org.uk>

<sup>163</sup> Michel Beine et al., 'Brain Drain and its Determinants: A Major Issue for Small States' (2008), IZA DP No. 3398, p.3

<sup>164</sup> Maurice Schiff and Yanling Wang, 'Brain Drain and Productivity Growth: Are Small States Different?' (2008) IZA DP No. 3378, p.3

<sup>165</sup> Ibid

<sup>166</sup> Beine et al., (n.163), p.13

<sup>167</sup> Anthias (n. 124), p.6. See also Nicos Trimikliniotis and Corina Demetriou, 'Cyprus', in A. Triandafyllidou and R. Gropas (eds.) *European Immigration: A Sourcebook* (Ashgate, 2007), 45-58.

<sup>168</sup> Anthias (n. 124), p.6. Robin Oakley, 'Family, Kinship and Patronage: the Cypriot migration to Britain' in V. S. Khan (ed.) *Minority Families in Britain: Support and Stress* (Macmillan, 1979), 13-34.

<sup>169</sup> Nicos Trimikliniotis and Panayiotis Pantelides, 'The European Dilemma: Institutional Patterns and the Politics of 'Racial' Discrimination', Work Package 1: 'Mapping Discriminatory Landscapes in Cyprus: Ethnic Discrimination in Labour Market and Education' Reconciliation Cyprus 2003. See also Panayiotis Gregoriou et al., 'Immigration in Cyprus: An Analysis of the Determinants' (2010) Cyprus Economic Policy Review, 4(1):63-88.

**TABLE 2: Migration versus Emigration**

Migration of Long Term Immigrants to Cyprus		Emigrants
<b>Total</b>		
<b>2011</b>	<b>23.037</b>	4.895
<b>2012</b>	<b>17.476</b>	18.105
<b>2013</b>	<b>13.149</b>	25.227
<b>2014</b>	<b>9.212</b>	24.038
<b>2015</b>	<b>15.183</b>	17.183

Source: Statistical Service of the RoC 'Population Statistics' Series II, Report No 52, (2016)

The figures in Table 2 depict the emigration increase, following the beginning of the Cyprus financial crisis in 2012, of Greek Cypriots, EU and non-EU citizens and Long-Term Immigrants. The figures in Table 3 show that the number of emigrants from Cyprus outnumbered the number of immigrants to Cyprus. However, a comprehensive representation of patterns of migration or emigration of EU and non-EU scientists and researchers to and from the country is not always readily available in the RoC due to lack of official statistical data on these particular categories of people.

Exodus of young people from Cyprus has given rise to growing fears about a 'lost generation' of young people in Cyprus driven out by a lack of opportunities and bleak economic prospects. The trend of outflow of researchers, amplified by the crisis is also being highlighted in numerous EU policy reports on Cyprus which analyse and assess the policy and the national R&I system developments in relation to national policy priorities and the EU policy agenda with special focus on ERA and Innovation Union<sup>170</sup> (see Table 3 below).

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<sup>170</sup> See, for example, Tsipouri et al., (n. 47) and Tsipouri and Athanassopoulou (n.158).

**TABLE 3: Progress of Cyprus towards ERA**

**COUNTRY SNAPSHOT**

Progress of Cyprus towards ERA Roadmap												
Indicator	Performance					Growth						
	Name	Reference year	Score	Cluster	Lead/Gap (Δ %)	EU-28	Reference Period	CAGR	Trend (2005-2015)	Lead/Gap (Δ % pt)	EU-28	
Across Priorities	1 - Adjusted Research Excellence	2013	36.6	2	-17	44.4	2010-2013	8.7%		2.3	6.4%	
	2A - GBARD to transnatl coop (EUR/researcher)	2014	3,018	2	20	2,507	2010-2014	0.7%		-7.1	7.8%	
	2B - Roadmap for ESFRI projects	No national roadmap in place										
	3 - EURAXESS job ads per 1 000 researchers	2014	81.7	2	74	47.0	2012-2014	-1.4%		-9.2	7.8%	
	4 - Share of women among Grade A HES	2014	13.6%	4	-42	23.5%	2007-2014	4.6%		1.2	3.4%	
	5A - Research institute-private collaboration	2012	4.7%	3	-35	7.3%	2008-2012	11.2%		7.7	3.5%	
	5A - Higher education-private collaboration	2012	4.7%	4	-61	12.0%	2008-2012	-6.5%		-7.8	1.3%	
	5B - Share of papers in Open Access (Total)	2014	56.4%	2	8	52.2%	Not computed					
	6 - Collab papers w/non-ERA per 1 000 researchers	2014	86.5	1	71	50.7	2005-2014	8.4%		4.2	4.1%	
	Headline Composite	2016	46	3	-8	50	Not computed					
Priority 1	Adjusted Research Excellence <sup>(c)</sup>	2013	36.6	2	-17	44.4	2010-2013	8.7%		2.3	6.4%	
	GBARD as share of GDP <sup>(c)</sup>	2014	0.356%	3	-47	0.671%	2008-2014	-1.3%		-0.8	-0.5%	
	European Innovation Scoreboard	2015	0.451	3	-13	0.521	2008-2015	-0.6%		-1.3	0.7%	
	GBARD as share of government expenditures	2014	0.73%	4	-47	1.39%	2005-2014	-0.2%		0.6	-0.8%	
	R&D tax incentives as share of GBARD	2013	:	:	:	11.4%	Not computed					
	Share of GBARD allocated on project basis	2014	:	:	Not computed	:	2009-2014	:	Not computed			
	Patent applications per 1 000 researchers	2013	13.3	3	-55	29.8	2005-2013	-6.6%		-5.4	-1.2%	
	Researchers per 1 000 active population <sup>(c)</sup>	2014	2.04	4	-72	7.40	2005-2014	1%		-1.7	2.4%	
	Publications per 1 000 researchers <sup>(c)</sup>	2014	938	1	95	481	2005-2014	12.7%		11.1	1.6%	
	Priority 1 Composite	2016	49	2	-2	50	Not computed					
Priority 2	A - GBARD to transnatl coop (EUR/researcher) <sup>(c)</sup>	2014	3,018	2	20	2,507	2010-2014	0.7%		-7.1	7.8%	
	A - Collab papers w/ERA per 1 000 researchers <sup>(c)</sup>	2014	247.4	1	277	65.7	2005-2014	13.2%		9.5	3.6%	
	A - Public to public partnerships (EUR/researcher) <sup>(c)</sup>	2014	3,625	1	609	512	2012-2014	235.0%		192.9	42.1%	
	A - Co-invention rate w/ERA partners <sup>(c)</sup>	2011-13 <sup>(k)</sup>	28.7%	2	121	13.0%	2007-2013 <sup>(k)</sup>	10.3%		10.8	-0.5%	
	B - Roadmap for ESFRI projects	No national roadmap in place										
	B - Participation in developing ESFRI projects	2016	0.0%	3	-100	20.7%	Not computed					
	B - Participation in operational ESFRI landmarks <sup>(c)</sup>	2016	3.4%	3	-89	30.2%	Not computed					
Priority 2 Composite	2016	60	3	20	50	Not computed						

Source: European Commission, European Research Area (ERA) Progress Report 2016, Country Snapshot Cyprus

Table 3 above presents the six selected priorities in monitoring progress in achieving the ERA by the European Research Area and Innovation Committee (ERAC Secretariat, 2015) Priority 1: ‘Adjusted Research Excellence’ which refers to the effectiveness of Cyprus national research system performance shows that in 2014 Cyprus had among the lowest number of researchers per 1 000 active population.

Arguably, the brain drain negative impact is larger in a small country such as Cyprus which has suffered cumulative ‘loss of brains’ in the past.

In the context of Cyprus from the various scattered reports, research studies assembled in this research and participants’ accounts there is indication of the existence of human resources loss to brain drain. The implication is that Cypriot scientific emigration effects have not been investigated and analysed to a necessary degree at a national level that would help identify and address unique country-specific challenges.

### 5.5.2: Reasons for Brain Drain

This feature aims to present participants' perceptions regarding the reasons exacerbating the brain drain phenomenon in Cyprus. Perceived reasons in their accounts were the inefficient planning on the part of the educational system from the early school years, the persisting and prevalent negative national research environment conditions exacerbated by the economic crisis and the lack of brain drain reversion policies. Participants link these reasons with lack of research culture awareness<sup>171</sup>, chronic scarcity of funding<sup>172</sup> and ineffective national research policies and practices.<sup>173</sup> Consequently, and according to participants' observations, it can be argued that the inability to create an attractive research environment coupled with scarcity of professional opportunities remain fundamental negative factors for retaining and/or attracting native and non-native scientists to Cyprus. These are reasons to be considered seriously by policy makers in order to better monitor and evaluate the negative consequences of scientists' movement out of Cyprus.

#### 5.5.2.1 The Inefficient Planning of the Educational System

The Inefficient Planning of the Educational System (ES) at all education levels towards raising awareness of the importance and research value is a reason why participants considered that an exceptionally high proportion of Cypriot young people opt for HE in Cyprus<sup>174</sup> and the high number of Cypriot tertiary education graduates by European standards.<sup>175</sup> On this issue respondents felt that because "*there is not an established research culture in Cyprus, there is a strong need of more awareness of the value of research culture*"<sup>176</sup> and that this coupled with the fact that "*there is no national strategy*"<sup>177</sup> are serious brain drain reasons. They were convinced that "[...] *brain drain has to do with the ES not being able to divert correctly the people to the correct direction*"<sup>178</sup> and not "[...] *encouraging innovation causing people to leave*".<sup>179</sup> This they claimed was the reason why successive and successful employment paths are not created for young people.

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<sup>171</sup> Section 5,1 (n11)

<sup>172</sup> Section 5,1 (n12)

<sup>173</sup> Section 5.1 (n13)

<sup>174</sup> Maria Eliophotou Menon, 'The Economic Benefits of Higher Education in Cyprus: The Expectations of Prospective Students' (2008) *International Journal of Educational Development* 28(3):259–267. See also Pavlos Pavlou and Niki Christodoulou, 'Repatriated Students in Cyprus and their Prospects for Tertiary Education' (2003) *Mediterranean Journal of Educational Studies*, 7 (2): 1-20, p.2

<sup>175</sup> A growth by 80% between 2000 and 2010 - see Chapter 3 sections 3.2 and 3.4

<sup>176</sup> Interview 7 (CY 3 Nov 2014) and Interview 10 (CY 10 Nov 2014)

<sup>177</sup> Interview 11 (CY 27 Nov 2014)

<sup>178</sup> Ibid

<sup>179</sup> Interview 2 (CY 15 Oct 2014)



The inability of the ES to react to labour market needs and provide an efficient counselling and professional orientation system are perceived to be responsible for HE choices on the part of young people that are not in tune with the Cyprus labour market needs. Quoting from an interviewee,

*“Unfortunately, our educational system does not offer expert counselling and the way our society is built does not encourage innovation and young people follow the same pathway of the previous generation”.*<sup>180</sup>

Another relevant factor is also the theoretical knowledge promotion over technical knowledge in the school curricula which explains the very small presence of tertiary education graduates in Science fields with only 9% of science graduates aged 25-64.<sup>181</sup> There is little point in trying to implement policies aimed at strengthening scientific training and research culture in tertiary education if students at the lower levels are ill-prepared.<sup>182</sup>

*“There are a lot of people who start their studies on subjects that have no future for them because there already too many studying these areas. The researcher’s profession is underestimated even if it is a paid researcher linked to research projects”.*<sup>183</sup>

In Cyprus, however, studies for HE report an exceptionally high demand for HE<sup>184</sup> and that secondary education graduates consider HE necessary for increased employability chances.<sup>185</sup> Consequently, although there is awareness of the link between HE and earnings in the relevant population sample and among Cypriots which confirms human capital interpretation of educational choices as investment decisions, the expected benefits are not gained. This is because HE graduates do not increase their employability prospects in their own country due to the problems in the country’s system, labour market conditions and needs and saturation of popular employment sectors among Cypriots. This finding has important policy implications in that it provides the basis for a re-examination of HE

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<sup>180</sup> Ibid

<sup>181</sup> Based on 2012 data from European Commission Eurostat Pocketbooks (2012). See also Chapter 3 section 3.4

<sup>182</sup> Keith M. Lewin, ‘Science Education in Developing Countries: Issues and Perspectives for Planners’, (1992) International Institute for Educational Planning, p.26, p.41

<sup>183</sup> Interview 18 (CY 20 Jan 2015)

<sup>184</sup> A growth by 80% between 2000 and 2010 - see Tsipouri and Athanassopoulou (n. 158), p.38, p.42, p.44

<sup>185</sup> Maria Eliophotou Menon, ‘Factors Influencing the Demand for Higher Education: The Case of Cyprus’ 35(3) (1998) Higher Education 251-266,

demand patterns and enhancement of employment prospects of young Cypriots in Cyprus in order to address the brain drain phenomenon more effectively.

Apart from the link between HS emigrations, educational policies and the brain drain phenomenon respondents acknowledged that brain drain is also dramatically affected by the country of origin characteristics and its national policies.<sup>186</sup> An interviewee commented that:

*“[...] the tertiary education in Cyprus is quite young, still there are people with experience but they haven’t managed to establish research culture similar to other countries in Western societies”.*<sup>187</sup>

In contrast to Cyprus, in Western societies and in most developed countries in general, there is a long history of the development of science education, research culture and organizational change with research and development being core elements of economic growth.<sup>188</sup> In Cyprus the inability to establish research culture as the factor that influences a research productivity environment<sup>189</sup> is also linked by respondents with weakness in leadership development both crucial improvement factors<sup>190</sup> and in effecting the change needed to adopt and innovate. An interviewee explained that:

*“Still in Cyprus, they haven’t yet created the mentality to start thinking in innovative ways of creating local innovation, of what their real problems are, how to solve them and plan. To establish a good research experience infrastructure and culture in research takes time, even decades, and be willing to change and adapt.”*<sup>191</sup>

while a key informant commented that:

*“Due to the fact that back in 1988 Cyprus was much ahead regarding tertiary education in the region, the government would not take the necessary steps to improve the country’s appeal as an Educational Centre despite expert advice”.*<sup>192</sup>

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<sup>186</sup>Frederic Docquier and Hillel Rapoport, ‘Globalization, Brain Drain, and Development’ (2012) *Journal of Economic Literature* 50 (3): 681-730, p.684, p.718, p.725

<sup>187</sup> Interview 7 (CY 24 Oct 2014)

<sup>188</sup> Carl Dahlman, ‘Technology, Globalization, and International Competitiveness: Challenges for Developing Countries’ in *Industrial Development for the 21st Century* (UN, 2007) 29-83, p.31

<sup>189</sup> Carole Bland and Ruffin Mack, ‘Characteristics of a Productive Research Environment’ (1992) *Higher Education*, 67(6):385-397

<sup>190</sup> Linda Sharkey, ‘Changing Organizational Culture through Leadership Development: A Case in Leadership Transformation’ (1999) *Organization Development Journal* 17 (3):29-37 p.29.

<sup>191</sup> Interview 16 (CY 6 Dec 2014)

<sup>192</sup> Interview KI 7 (CY 27 Jan 2015)

The participants' views indicate the key role governments should play to the shaping of national cultural values and policies favouring I&R and in addressing negative consequences of emigration such as brain drain.

### 5.5.2.2 Economic Crisis

The beginning of 2013 found Cyprus at the brink of economic collapse and as a result, research funding was negatively affected. Although in March 2016 Cyprus exited its three-year Economic Adjustment Programme, it is now subject to Post-Programme Surveillance (PPS) which may last at least until 2029<sup>193</sup> since further reforms are needed to ensure compliance and economy growth potential.<sup>194</sup>

Respondents considered the economic crisis as causing “[...] *another brain drain of young researchers, young educators and scholars preferring to go or stay abroad to coming back to Cyprus because it is very difficult to find a job*”.<sup>195</sup> The fact that Cyprus is leaving no choice for its researchers, scientists and HS individuals but to leave remains and it is aptly described by one key informant as: “*There are many, many families sending out their young and bright minds outside. We are a heavy exporter of brains to particular countries but nonetheless a heavy exporter of researchers and consequently of HS personnel*”.<sup>196</sup>

From the quotes above-listed the brain drain phenomenon occurs as a scientific migration consequence caused by the effects of problems within the country's system. The brain drain process and the home country's economic development are two interdependent processes.<sup>197</sup> On the one hand, brain drain affects development, and its impact becomes negative when the migration flow out of the country is high. On the other hand, lack of or economic growth stagnation leads to an exodus of the HS from the country. The human talent loss through brain drain which could help create a critical mass of researchers is a problem confronting human resource development in Cyprus with limited human resources.

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<sup>193</sup> European Commission, ‘Post-Programme Surveillance for Cyprus’ (2016) Economic and Financial Affairs, [http://ec.europa.eu/economy\\_finance/assistance\\_eu\\_ms/cyprus/index\\_en.htm](http://ec.europa.eu/economy_finance/assistance_eu_ms/cyprus/index_en.htm)

<sup>194</sup> European Commission, ‘Recommendation for a COUNCIL RECOMMENDATION on the 2016 National Reform Programme of Cyprus and Delivering a Council Opinion on the 2016 Stability Programme of Cyprus’, Brussels, 18.5.2016 COM (2016) 333 final

<sup>195</sup> Interviews 1-20 (CY Aug 2014-Jan 2015)

<sup>196</sup> Interview KI 1 (CY 12 Sept 2014)

<sup>197</sup> Frédéric Docquier, ‘The Brain Drain from Developing Countries’ (2014) IZA World of Labour, 1-31 p.31

### 5.5.2.3 Brain Drain Reversion

Respondents were aware of the key role diaspora networks play in reverting brain drain into brain gain.<sup>198</sup> Migration of skills can be slowed through the return of expatriates to their country of origin while diaspora can nurture the knowledge base in their home countries.<sup>199</sup> Participants were asked if they were aware of any the Cypriot Government policy to attract brains back. In general, they were not aware of any measures, efforts or “any government incentives to bring human resources back”.<sup>200</sup>

Despite official announcements that the Government is doing its best to create conditions so that the country’s intellectual capital is not exported abroad and to curb the Cyprus brain drain resulting from young people’s emigration due to the economic crisis<sup>201</sup> respondents seem to distrust these intentions. They recognized the government’s weakness or unwillingness to form a coherent policy to bring the brightest minds back or keep them in the country emphasizing that it all comes down to a lack of a national general strategy and vision.

Interviewees felt like they “[...] *have to convince the government and the politicians to find the financial sources to promote this need for scientists and university researchers*” but that “*they cannot imagine that in the near future we can design as such a scheme as a government*”.<sup>202</sup> Considering the high numbers of Cypriots living abroad<sup>203</sup> participants opined that the role of diaspora networks can be better utilized.

They were also keen to make suggestions of how to accomplish this:

*“Many Cypriot scientists would like to come back and offer to their country and do research. The Cyprus government could facilitate their return by creating, for example, research centres in which they could work in their specific expertise and carry out research activity in Cyprus”.*<sup>204</sup>

*“Cyprus has the opportunity to be the stage of technology and research in the Middle East.[...] it is a safe environment and there are a lot of Cypriot scientists abroad who have*

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<sup>198</sup> Frederic Docquier and Hillel Rapoport (n. 186), p.707, p.725. See also Tito Boeri et al., (eds.), *Brain Drain or Brain Gain? The International Competition to Attract High Skill Migrants* (OUP, 2012)

<sup>199</sup> Jean-Eric Aubert ‘Promoting Innovation in Developing Countries: A Conceptual Framework’ (2005) World Bank Policy Research Working Paper No 3554, <http://info.worldbank.org/etools/docs/library/137729/0-3097AubertPaper%5B1%5D.pdf>

<sup>200</sup> Interview 11 (CY 3 Nov 2014)

<sup>201</sup> See President Nicos Anastasiades’ speech, Cyprus Mail 20<sup>th</sup> November 2014 marking the signing of the International Convention on the Rights of the Child anniversary, at: <http://cyprus-mail.com/2014/11/20/anastasiades-we-must-stop-the-brain-brain/>

<sup>202</sup> Interview 16 (CY 27 Nov 2014)

<sup>203</sup> See Chapter 1: section 1.2.4

<sup>204</sup> Interview 16 (CY 27 Nov 2014)

*excellent qualifications and ideas which could be applied here. Cyprus could have this role as well”*.<sup>205</sup>

## 5.6 Conclusion

This chapter presented the major themes that emerged from the participants' narratives as scientific mobility problems and challenges in Cyprus. Lack of research culture, chronic scarcity of funding and ineffective national research policies and practices were identified as the major features, characterizing the national research environment. Furthermore, the challenges facing meritocracy in the public sector and administration in the form of bureaucracy, nepotism and corruption raise major difficulties for the setting up of an attractive research environment, retaining scientists in Cyprus and bringing back those scientists who consider migrating to the country for employment or repatriation purposes.

Findings indicate that, as a result, there is a brain waste of native and non- native scientists who enter the country. While the traditional view on brain waste describes it as occurring after the emigration of skilled professionals and the highly educated, in Cyprus, it takes a different form which is country-induced. The present results could serve as a basis for investigating sociologically what it is that generates this phenomenon and whether it is encountered in the same form in other small countries. In addition, Cypriot researchers choose to leave the country giving rise to a potential, traditional brain drain phenomenon, indicating a loss of Cypriot researchers to other countries. Inefficient educational policies, the negative national research environment conditions exacerbated by the economic crisis and the lack of a methodical plan or measures on the part of successive Cypriot governments to lure back their most HS emigrants were the reasons cited for a potential brain drain in Cyprus.

A change of attitude and actual commitment of the Government to the creation and implementation of a plan of vision is unanimously suggested by the interviewees. More awareness of research culture and better human and funding resources allocation are additionally strongly recommended since this study empirically shows that research culture perceptions across all sectors in Cyprus are underdeveloped. Application of Schein's theory confirms that the State as an organizational culture leader is responsible for bringing about the evolution and strengthening of its organizational culture: mission and strategy, goals, means, measurement and finally correction.<sup>206</sup> This would potentially lead to the State's more effective formulation and implementation of sounder national research

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<sup>205</sup> Interview 2 (CY 15 Oct 2014)

<sup>206</sup> Edgar Schein et al., (n1) p.17

policies and practices reflecting integration and coherence and ultimately stronger research culture awareness.

## Chapter 6: Migration Pattern of Cypriot Scientists and its Determinants

### 6.1 Introduction

This chapter focuses on Cypriot scientists' and researchers' migration to the UK. It is based on empirical findings drawn from interviews with Cypriot scientists, researchers and doctoral candidates. The aim of this chapter is threefold. The first aim is to identify the underlying push factors,<sup>1</sup> driving Cypriot scientists who migrated to the UK to return home and then migrate again, a trend common among some of the scientists interviewed. The destination country is the UK. The second aim is to explore the pull factors<sup>2</sup> associated with those Cypriot scientists' and researchers' decision to remain in the UK. The third aim is to examine the extent of influence/impact of the UK research culture and environment on the above stakeholders. The extent of this influence on the sample's decisions on a future migration return to their home country is also considered.

By exploring the challenges to return migration affecting Cypriot scientists and researchers as they arise from the domestic and hosting research environment and culture, this chapter constitutes an integral part of the overall objective of this thesis. As already stressed in the theoretical part by employing Schein's organizational culture theory,<sup>3</sup> this thesis seeks to address the attractiveness, efficacy, and impact of the research landscape, culture and policy for the migration/mobility of these persons in Cyprus of which return migration is an integral part.

The chapter proceeds with a brief examination of the history of the Cypriot migration pattern to the UK, followed by a theoretical analysis of the return migration concept which represents the basis of analysis of the empirical data provided in the following sections.

### 6.2 Brief Historical Overview of Cypriot Migration to the UK

The UK has been traditionally Cypriot emigrants' main destination as the two countries have had long historical ties, which date back to the 19th century. As a former British colony, being under British colonial rule from 1878 to 1960 Cyprus' history, society, education, and culture has been heavily influenced by the UK.<sup>4</sup>

In the light of the above, all Cypriot migration waves that took place at the beginning of the 20<sup>th</sup> century, the early 1950s and 1960s and in 1974 following the island's

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<sup>1</sup> Push factors are conditions that can drive people to leave their home country

<sup>2</sup> Pull factors are factors that attract people to a certain location/country

<sup>3</sup> Edgar Schein, *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass, 2004), see also Chapter 1, section 1.2.4.

<sup>4</sup> Nicos Peristianis and Hubert Faustmann (eds.) *Britain in Cyprus. Colonialism and Post-Colonialism 1878-2006* (Harrassowitz Verlag 2009), p.8

partition, the UK was the preferred choice for Cypriots.<sup>5</sup> Throughout the 1920s and 1930s, due to the island's bad economic conditions, Cypriots found their way to the UK for employment purposes. Then the early 1950s and 1960s witnessed a second main exodus of Cypriots into UK again for economic reasons also facilitated by the 1962/68 Commonwealth immigration legislation, increasing the number of Cypriots to 70,000 by 1964.<sup>6</sup> The last substantial Cypriot migration to the UK occurred during the immediate aftermath of the 1974 Turkish invasion of Cyprus.<sup>7</sup> Many Cypriot refugees decided to move to the UK and join family members who had previously moved there with 11,000 relocating in the London Borough of Haringey alone.<sup>8</sup>

Apart from the economic motives and the tragic results of the conflict between Greek and Turkish Cypriots<sup>9</sup>, education has also been an important determinant for many Cypriot high school graduates deciding to go to the UK.<sup>10</sup> This may be attributed to a host of reasons. On the one hand Cyprus' colonial past resulted in the English language being widely used for social and professional exchange while language fluency was seen as a factor determining the UK as a destination country for Cypriots.<sup>11</sup> On the other hand, this contributed to the creation of a long-standing tradition of Cypriot high school graduates coming to the UK to study. Statistical evidence shows that Cyprus was the tenth-most common country of origin for non-UK domiciled students at British universities in 2010 and 2011, with 11,320 enrolled in the UK and 9,745 in 2014 and 2015.<sup>12</sup>

To conclude this section, it is important to mention that since the Cypriot diaspora establishment in the UK since the 1930s, today, there are currently around 300,000 Cypriots living in the UK<sup>13</sup>, making their community one of the largest Cypriot immigrant communities worldwide.<sup>14</sup>

<sup>5</sup> Floya Anthias, *Ethnicity, Class, Gender and Migration: Greek-Cypriots in Britain* (Aldershot 1992), pp.4-6 and Janine Teerling, 'The Development of New "Third-Cultural Spaces of Belonging": British-Born Cypriot "Return" Migrants in Cyprus', (2011) *Journal of Ethnic and Migration Studies*, 37(7):1079-1099. See also Chapter 1 section 1.2.4. and Chapter 5 section 5.5.1

<sup>6</sup> Russell King and Janet Bridal, 'The Changing Distribution of Cypriots in London' in *Studi Emigrazione* Anno XIX, No.65, (Centro Studi Emigrazione, 1982)

<sup>7</sup> Panayiotis Yiacomou and Stavros Panteli, *The Cypriot Diaspora Project*, (Greek Parents Association, Wood Green, 2006)

<sup>8</sup> National Federation of Cypriots in the UK (2018), <https://cypriotfederation.org.uk/cypriots-in-the-uk>

<sup>9</sup> Janine Teerling, Russell King, 'Of Hubs and Hinterlands: Cyprus as an Insular Space of Overlapping Diasporas' (2012) *Island Studies Journal* 7(1): 19-48, p.24

<sup>10</sup> For the year 2008-2009 the UK was the destination for 7,598 Cypriot high school graduates - see 'Cyprus Mapping EU Member States Higher Education' [http://www.mapping-he.eu/docs/Chapter%20CY\\_915725725.pdf](http://www.mapping-he.eu/docs/Chapter%20CY_915725725.pdf). See also Ministry of Foreign Affairs High Commission of the Republic of Cyprus in London, 'Cyprus - UK Relations' [http://www.mfa.gov.cy/mfa/highcom/london.nsf/hcrcl10\\_en/hcrcl10\\_en?OpenDocument](http://www.mfa.gov.cy/mfa/highcom/london.nsf/hcrcl10_en/hcrcl10_en?OpenDocument)

<sup>11</sup> Teerling and King, (n.9) p.24

<sup>12</sup> Higher Education Statistics Agency, 'Students in Higher Education Institutions 2010/11', (2012), <https://www.hesa.ac.uk/home>

<sup>13</sup> National Federation of Cypriots in the UK (n.8)

<sup>14</sup> See Chapter 1 section 1.2.4.



### 6.3 Return Migration: Definition, Concept and Policy

Literature reports that it is difficult to measure return migration due to definition challenges and data availability.<sup>15</sup> Difficulties in defining ‘return’ arise because the movements covered by the term are varied<sup>16</sup> and one single definition might not reveal complex or particular categories of return such as temporary, permanent, circulatory<sup>17</sup> re-emigration, and secondary migration<sup>18</sup>.

According to the definition provided by the UN Statistics Division for data collection on international migration, returning migrants are “persons returning to their country of citizenship after having been international migrants, whether short-term or long-term, in another country and who are intending to stay in their own country for at least a year.”<sup>19</sup> However this definition links home country to the migrants’ nationality, narrowing the time framework to a minimum of one year. The International Organization for Migration (IOM) defines return migration as “the movement of a person returning to his or her country of origin or habitual residence usually after spending at least one year in another country”.<sup>20</sup> Although this definition is appropriate it does not make a distinction between returning temporarily and returning permanently. Gmelch defines return as the “movement of emigrants back to their homelands to resettle”.<sup>21</sup> Despite being narrow, this definition is suitable for the present analysis purposes since return migration in the present context is understood to mean that permanent return may be defined as when the Cypriot scientist migrant returns to the home country with the intention to stay.

Research on HS return migration has been mainly conducted as part of the broader scientific migration /mobility context<sup>22</sup>, focusing mostly on the phenomenon’s

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<sup>15</sup> Stefanie Smoliner et al., ‘Comparative Report on Re-Migration Trends in Central and Eastern Europe’ in Thilo Lang (ed.), *Return Migration in Central Europe: Current Trends and an Analysis of Policies Supporting Returning Migrants*, (Leibniz Institute for Regional Geography, 2013), p.51

<sup>16</sup> Christian Dustmann and Yoram Weiss, ‘Return Migration: Theory and Empirical Evidence from the UK’ (2007) *British Journal of Industrial Relations* 45 (2): 236–256, p.237. See also Xiang Biao, ‘The Return of Return: Migration, Asia and Theory’ in G. Battistella (eds.) *Global and Asian Perspectives on International Migration* (Springer, 2014) 167-182.

<sup>17</sup> Dustmann and Weiss (n.16), p.238

<sup>18</sup> Jean-Christophe Dumont and Gilles Spielvogel, ‘Return Migration: A New Perspective’ (2008) *International Migration Outlook*, OECD, SOPEMI, p.165

<sup>19</sup> United Nations Statistics Division, ‘Recommendations on Statistics of International Migration’, (1998)

<sup>20</sup> International Organization for Migration, *No 25 Glossary on Migration* (2<sup>nd</sup> ed. IOM, 2011), p.62

<sup>21</sup> George Gmelch, ‘Return Migration’ (1980) *American Review of Anthropology*, 9, 135- 159, p.136

<sup>22</sup> Sonia Morano-Foadi, ‘Citizenship and Migration within the European Research Area: The Italian example’ in Martínez Arranz, Alfonso Pascaline Winand and Natalie Doyle (eds.) *New Europe, New World?: The European Union, Europe and the Challenges of the 21<sup>st</sup>* (P.I.E.-Peterlang, 2010), p.92, p.101. See also Thilo Lang, et al., ‘Introduction: Mobility Against the Stream? New Concepts, Methodological Approaches and Regional Perspectives on Return Migration in Europe’ in R. Nadler, Z. Kovács, B. Glorius and T. Lang (eds.) *Return Migration and Regional Development in Europe, New Geographies of Europe*. (Palgrave Macmillan, 2016) p.6

consequences and driving forces.<sup>23</sup> Initially the debate on the consequences drew attention to the brain drain impact on the development of sending countries<sup>24</sup> and the brain gain experienced by the hosting or receiving countries.<sup>25</sup> With respect to HS return migration scholars asserted its positive consequences as brain regain for the home country and brain circulation or brain exchange between sending and receiving countries.<sup>26</sup> This approach has gradually changed the brain drain context, marked by a realization that HS migration flows might be beneficial for both sending and receiving countries questioning the ‘zero-sum game’ among countries which lose talent and those which win.<sup>27</sup> Some scholars describe a win-win situation for both sending and receiving countries due to the mobility of talent increase worldwide coupled with the importance of knowledge-based development and globalization of scientific and research activities.<sup>28</sup> The ‘triple-win’ concept is a more recent addition to the literature claiming that migration can be positive for all three stakeholders involved: sending countries, destination countries and migrants themselves.<sup>29</sup> Research into the migration-development link has reinforced the idea that return migrants are a development resource.<sup>30</sup> While at first focusing on recruitment opportunities as a return condition, remittances as a migration positive outcome for sending countries and return as the final stage of migration of the HS<sup>31</sup> more recent research highlights the need to search beyond these aspects in relation to the HS return migration.<sup>32</sup>

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<sup>23</sup> Stefano H. Baruffaldi and Paolo Landoni, ‘Effects and Determinants of the Scientific International Mobility: The Cases of Foreign Researchers in Italy and Portugal’ (2010) Paper for the Triple Helix VIII Conference.

<sup>24</sup> Jagdish N. Bhagwati and Koichi Hamada, ‘The Brain Drain, International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis’ (1974) *Journal of Development Economics* 1 (1): 19- 42, p.19. See also Chapter 5, section 5.5

<sup>25</sup> Michel Beine, et al., ‘Brain Drain and Economic Growth: Theory and Evidence’ (2001) *Journal of Development Economics* 64, (1) 275-289, pp.277, 288

<sup>26</sup> John Salt, ‘International Movement of the Highly Skilled’ (1997) OECD International Migration Unit Occasional Paper (3), p.5, see also Anna Lee Saxenian, ‘From Brain Drain to Brain Circulation: Transnational Communities and Regional Upgrading in India and China’ (2005), *Studies in Comparative International Development*, 40(2):35-61.

<sup>27</sup> Jacques Gaillard and Anne Marie Gaillard, ‘The International Mobility of Brains: Exodus or Circulation?’ (1997) *Science, Technology and Society* 2 (2):195-228, p.218. See also Louise Ackers, ‘Moving People and Knowledge: Scientific Mobility in the European Union’ (2005), *International Migration*, 43(5):99-131.

<sup>28</sup> Rasa Daugeliene and Rita Marcinkevičienė, ‘Brain circulation: Theoretical Considerations’ (2009) *Inžinerine Ekonomika-Engineering Economics*, 63 (4): 49-57, p.51. See also Britta Klagge, et al., ‘High-skilled Return Migration and Knowledge-based Economic Development in Regional Perspective. Conceptual Considerations and the Example of Poland’, (2007) Centre of Migration Research (CMR) No 19/77

<sup>29</sup> Steffen Angenendt, ‘Triple-Win Migration - Challenges and Opportunities’ (2014) Framework Paper-Migration Strategy Group on Global Competitiveness- German Marshall Fund (GMF) and the Robert Bosch Stiftung 5

<sup>30</sup> Demetrios Papademetriou and Philip Martin (eds.) *The Unsettled Relationship: Labor Migration and Economic Development*, (Greenwood Press, 1991), pp. 16,17

<sup>31</sup> Ninna Nyberg-Sorensen et al., ‘The Migration Development Nexus: Evidence and Policy Options’ (2002) International Organization for Migration (IOM) Migration Research Series No 8 17, p.27

<sup>32</sup> Lang et al (n. 22)

Parallel literature focuses on the motivational factors determining scientific migration in an effort to understand the push and pull factors affecting migration and scientists' and researchers' return migration decisions. There is a strong suggestion that scientific migration unlike other professions<sup>33</sup> is not driven by purely economic reasons.<sup>34</sup> Previous studies confirm that the most important factors influencing scientific migration decisions are research related. These factors include the research environment quality, a transparent and meritocratic recruitment system, professional considerations, access to research equipment, resource availability, networking and collaboration, reputation and recognition.<sup>35</sup>

The above findings are also reinforced by literature strands which concentrate on scientific mobility within certain disciplines at different stages of scientists' careers<sup>36</sup> and of different nationalities such as Italian,<sup>37</sup> Portuguese<sup>38</sup>, Slovak<sup>39</sup> and Polish.<sup>40</sup> These research contributions collectively indicate that the importance of the appeal of the national research environment conditions is a major factor associated with scientific return migration.

Despite these research findings, the relationship between return migration and home country is an aspect of return migration relatively neglected.<sup>41</sup> Arguably a deeper understanding of this relationship is essential as this determines the root causes and motives that resulted in the decision to migrate in the first place, and potentially influence future return decisions. Given that scientists and researchers are knowledge producers necessary for R&D developments, generating subsequent economic growth there has been a growing interest in the issue of the HS return migration not only for countries worldwide, but also for the EU.<sup>42</sup> Scientific return migration is important for Europe for three reasons.

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<sup>33</sup> Salt (n. 26) p.8. See also Sami Mahroum, 'Highly Skilled Globetrotters: Mapping the International Migration of Human Capital' (2000) *R&D Management*, 30 (1): 23–32.

<sup>34</sup> Stefano Baruffaldi and Paolo Landoni, 'Mobility Intentions of Foreign Researchers: The Role of Non-economic Motivations' (2016) *Industry and Innovation*, 23 (1): 87–111, p.105.

<sup>35</sup> Tom Casey et al., 'The Mobility of Academic Researchers: Academic Careers and Recruitment in ICT and Biotechnology', (2001) A joint JRC/IPTS-ESTO Study EUR 19905 EN. See also Benedetto Lepori et al., 'Competition for Talent: Country and Organizational-level Effects in the Internationalization of European Higher Education Institutions (2015) *Research Policy* 44(3):789–802.

<sup>36</sup> See Laudeline Auriol et al., 'Careers of Doctorate Holders: Analysis of Labour Market and Mobility Indicators', (OECD Publishing, 2013)

<sup>37</sup> Sonia Morano-Foadi, 'Scientific Mobility, Career Progression, and Excellence in the European Research Area' (2005) *International Migration* 43(5):133 – 162, p.141

<sup>38</sup> Ana Delicado, 'Going Abroad to Do Science: Mobility Trends and Motivations of Portuguese Researchers', (2010) *Science Studies* 23(2): 36–59.

<sup>39</sup> Viliam Lendel et al., 'Identification of Motivational Factors Influencing the Return of Researchers Focusing on the Slovak Environment' (2014) Conference Paper in *Lecture Notes in Business Information Processing* p.185

<sup>40</sup> Klagge et al., (n.28)

<sup>41</sup> Lendel et al., (n. 39), p.49. See also Gill Bryony, 'Homeward Bound?: The Experience of Return Mobility for Italian Scientists' (2008) *Innovation: The European Journal of Social Science Research* 18 (3): 319–341.

<sup>42</sup> Casey et al., (n. 35), p.4, p.12. See also Lendel et al., (n. 39) and Klagge et al., (n. 28)

The first is that unbalanced and unsustainable patterns of scientific mobility within the EU exercise a detrimental effect on its need to maintain advantage in attracting and retaining scientists.<sup>43</sup> The second reason is that at a European and national level Europe is greatly affected by brain drain, causing the loss of scientists and researchers and thus having a negative impact on its competitiveness.<sup>44</sup> The third is that scientific return migration could be viewed as a component of the strategy to build, develop and implement the ERA concept.<sup>45</sup> Although the brain drain problem may potentially be attributed to reasons such as low productivity and profitability of HS jobs and research activities in Europe<sup>46</sup>, in reality effectively designed and targeted policies have a key role to play. This is evident by the growing role of policies targeting return migration worldwide.<sup>47</sup>

At an international level, examples provided by previous empirical research on HS migrants from Taiwan, China and India<sup>48</sup> show that a considerable number of HS migrants do return to their home country due to a successful government public policies successful mix. For example, the Indian government's use of migrant network policies coordinated by the a special department of its Ministry of external affairs<sup>49</sup> succeeded in creating a successful software and IT service clusters with overseas and returnee Indians. The Chinese government has implemented programmes to foster both permanent and temporary return such as the setting up of high tech zones designated for returnees and the introduction of Venture Capital firms investing in local firms and managed by returnees.<sup>50</sup> Finally the policy of recruiting Taiwan's best and the brightest from overseas in the 1980s and 1990s contributed to Taiwan's brain drain reversal and subsequent development.<sup>51</sup>

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<sup>43</sup> Klaus Zimmermann et al., *Immigration Policy and the Labour Market: The German Experience and Lessons for Europe* (Springer Verlag, 2007), p.2

<sup>44</sup> Frédéric Docquier and Hillel Rapoport, 'Globalization, Brain Drain, and Development' (2012) *Journal of Economic Literature*, 50(3): 681–730, p.725, see also Martin Hynes et al., 'Excellence, Equality and Entrepreneurialism Building Sustainable Research Careers in the European Research Area' Final Report for the European Commission- Directorate General for Research and Innovation (2012)

<sup>45</sup> Commission of the EC, 'Working Programme in the Field of Research, Science and Education', SEC (73) 2000/2, (23 May 1973). See also Chapter 2 for a more detailed analysis of the European legislative and policy framework of the ERA

<sup>46</sup> Ahmed Tritah, 'The Brain Drain Between Knowledge-Based Economies: The European Human Capital Outflow to the US', (2008) *Economie Internationale* 3(115):65–108, 88. See also Simona Milio et al., 'Brain Drain, Brain Exchange and Brain Circulation: The Case of Italy Viewed from a Global Perspective' (Aspen Institute 2012)

<sup>47</sup> Metka Hercog and Melissa Siegel, 'Promoting Return and Circular Migration of the Highly Skilled' (2011) UNU-MERIT Working Paper Series No. 2011-015, p.2

<sup>48</sup> See, for example, Anna Lee Saxenian, 'Transnational Communities and the Evolution of Global Production Networks: The Cases of Taiwan, China and India', (2002) *Industry and Innovation* 9 (3): 183-202

<sup>49</sup> Government of India, Ministry of External Affairs, 'Overseas Indian Affairs', <http://mea.gov.in/overseas-indian-affairs.htm>

<sup>50</sup> Huiyao Wang et al., 'Returnee Entrepreneurs: Impact on China's Globalization Process' (2011) *Journal of Contemporary China*, 20(70): 413 – 431, p.418

<sup>51</sup> Ji-Ping Lin, 'Tradition and Progress: Taiwan's Evolving Migration Reality', *The Online Journal of the Migration Policy Institute, Migration Information Source* (2012)

At a European level, EU policy measures target scientific migration in a broader context aiming at increasing collaboration between EU MSs in relation to scientists' and researchers' circulation and attraction across the EU and beyond.<sup>52</sup> This is also evidenced in the new Marie Skłodowska-Curie Actions (MSCA) Work Programme 2018-2020 which receives a boost with €2.9 billion in total over three years to reduce the R&I gap across Europe and discrepancies between European countries in attracting excellent researchers.<sup>53</sup> However, certain types of these Actions are reintegration schemes, taken to encourage the return and reintegration of scientists and researchers who have already received a European grant within their home country.<sup>54</sup> For example, the International Outgoing Fellowships (IOF) offers researchers the chance to acquire new knowledge in a high-level organisation outside Europe with the obligation that the researchers have to return to Europe to share this knowledge.

Another scheme is the European Reintegration Grants (ERG) but it is only available after a Marie Curie fellowship of at least 18 months' duration. Finally, the International Reintegration Grants (IRG) scheme is designed for researchers returning from third countries to a MS, to a host institution within a MS, including the country of origin.<sup>55</sup> Portability of social security benefits in the case of return to the home country<sup>56</sup> is also possible but it still entails complicated and occasionally lengthy administrative procedures.

At a European national level, scientific migration literature indicates that there are very few national policies put in place that focus on return migration in a direct or an indirect way.<sup>57</sup> Additionally these policies are relatively new for produced outputs as to their efficiency and financial returns.<sup>58</sup> An example illustrating such a national policy was the one launched by the British government and the Wolfson Foundation, a research charity in 2000, of a £20 million scheme aiming to stimulate British expatriate scientists' return to the UK.<sup>59</sup> At the same time empirical evidence shows the existence of quite a

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<sup>52</sup> Morano-Foadi (n. 22), 91, Simona Milio et al., (n. 46), p.19. See also Louise Ackers, 'Promoting Scientific Mobility and Balanced Growth in the European Research Area', (2005) *Innovation: The European Journal of Social Science Research*, 18(3):301-317.

<sup>53</sup> European Commission, Research and Innovation, 'Marie Skłodowska-Curie actions (MSCA)' 'MSCA Work Programme 2018-2020', [https://ec.europa.eu/research/mariecurieactions/news/20171026-msca-work-programme-2018\\_en](https://ec.europa.eu/research/mariecurieactions/news/20171026-msca-work-programme-2018_en)

<sup>54</sup> Morano-Foadi, (n. 37), p.141

<sup>55</sup> European Commission, Research and Innovation, Marie Skłodowska-Curie Actions - Overview, [http://ec.europa.eu/research/mariecurieactions/about\\_en](http://ec.europa.eu/research/mariecurieactions/about_en)

<sup>56</sup> Commission Communication, 'Migration and Development: Some Concrete Orientations', (2005) COM, 390 final

<sup>57</sup> Zoltán Kovács, et al., 'Returning People to the Homeland: Tools and Methods Supporting Re-migrants in a European context' in Thilo Lang (ed.), *Return Migration in Central Europe: Current Trends and an Analysis of Policies Supporting Returning Migrants*, (Leibniz Institute for Regional Geography, 2013), p. 63. See also Milio et al., (n. 46) and Casey et al., (n. 36)

<sup>58</sup> Kovács et al., (n. 15), p.67

<sup>59</sup> Mario Cervantes and Dominique Guellec, 'The Brain Drain: Old Myths, New Realities' (2002), *OECD Observer Issue 230*, 40. See also Milio et al., (n. 46)

number of programmes, projects and initiatives mostly at an institutional rather than national level.<sup>60</sup> A notable example is the Lendület (Momentum) Programmes I (now expired) and II (2016-2021) of the Hungarian Academy of Sciences (MTA), which aims at a renewal of research institutions in Hungary through the attraction of internationally acclaimed scientists, either by hiring them from abroad or retaining them in Hungary.<sup>61</sup> Another example is that of Austria's Erwin Schrödinger Fellowships including a return phase targeting young and especially HS scientists of any discipline.<sup>62</sup>

It is against this background that this chapter focuses on the extent of the influence of the national research environment on Cypriot scientists' and researchers' decision to leave Cyprus following their return migration, and the influence and impact of the hosting research environment and culture on the decision to stay in the UK. Following a brief introduction on the migration determinants the rest of the chapter undertakes an analysis and discussion of the empirical findings.

#### 6.4 Migration Determinants

Findings indicate that after gaining the necessary qualifications and work experience for subsequent progression in the home labour market<sup>63</sup> interviewees returned to Cyprus to find an environment which was considered unattractive to them. Interestingly, economic considerations were not a determining return migration factor despite the 2012-2013 economic crisis that hit Cyprus<sup>64</sup> indicating the science/research sector mobility might be more independent from economic factors compared to other professions<sup>65</sup> and not determined solely by such factors.<sup>66</sup>

The unattractiveness of the Cypriot research environment is the most predominant push factor involved in interviewees' re-emigration process to the UK<sup>67</sup> a country in which they have previously worked, completed their studies and feel familiar with. Interviewees' accounts further highlight political and cultural factors as interwoven into the national research landscape, influencing their migration decisions (Sections 6.4.1-6.4.2).

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<sup>60</sup> Casey et al., (n. 35), p.46, p.48. See also Pierpaolo Giannoccolo, "'Brain Drain Competition' Policies in Europe: A Survey", (2009), Università degli Studi di Milano-Bicocca, Department of Statistics series Working Paper No. 2006-02-01.

<sup>61</sup> MTA Lendület (Momentum) Programmes  
[http://mta.hu/data/dokumentumok/english/background/LENDULET\\_2016\\_felhivas\\_EN.pdf](http://mta.hu/data/dokumentumok/english/background/LENDULET_2016_felhivas_EN.pdf)

<sup>62</sup> Erwin Schrödinger Fellowships including a return phase,  
<https://www.fwf.ac.at/en/research-funding/fvf-programmes/schroedinger-programme/>

<sup>63</sup> Ackers (n. 27),

<sup>64</sup> European Commission, 'The Economic Adjustment Programme for Cyprus' (2013) Occasional Papers 149. For a more detailed analysis see Chapter 3 section 3.2 and Chapter 5 section 5.5.2.2

<sup>65</sup> Salt (n. 27) p.7. See also Mahroum (n. 33)

<sup>66</sup> Baruffaldi and Landoni (n. 34) p.105

<sup>67</sup> Interviews: 4, 6, 7, 8, 9, 10, 11 (UK Oct 2015 - Oct2016)

Conversely the UK research environment attractiveness repeatedly emerged as the most influential pull factor involved in the process of their decision making to remain in the UK<sup>68</sup> (Section 6.4.3). Interviewees' accounts further elaborate on the positive as well as negative impact of the UK research environment on their work and family life in the country (Sections 6.4.3.A - 6.4.3.B).

#### **6.4.1 Push Factors Associated with the Decision to Leave Cyprus Following Return Migration**

This is the first major theme emerging from the participants' narratives relative to Cypriot scientists' and researchers' migration pattern.

##### **6.4.1. A. The National Research Environment**

Although return migration is not free of complexities<sup>69</sup> previous research indicates that research attractiveness in the home country, including the research environment quality, amount and openness of career perspectives, meritocracy and transparency is instrumental for retaining and attracting scientists and researchers.<sup>70</sup> This could be argued implies attractiveness of the national scientific and research establishment and in general the institutional characteristics of the country of origin in terms of organisational structures, recruitment policies, openness and points of re-entry into the national research system.<sup>71</sup> Studies of research environments demonstrate that the above factors are integral to the different processes such as research activities, networking, working conditions, recruitment and career progression in the research environment and collectively determine research.<sup>72</sup> Interestingly, although these may not be specific to a particular country or to the country's size,<sup>73</sup> they potentially contribute to the improvement of creating conditions that

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<sup>68</sup> Interviews: 1, 2, 3 5, 12, 13, 14, 15 (UK Oct 2015 - Oct 2016)

<sup>69</sup> Amelie Constant and Douglas Massey, 'Return Migration by German Guest workers: Neoclassical Versus New Economic Theories (2002) *International Migration*, 40 (94): 5-38, 9. See also Jean-Pierre Cassarino, 'Theorising Return Migration: The Conceptual Approach to Return Migrants Revisited' (2004) *International Journal on Multicultural Societies*, 6(2): 253 -279.

<sup>70</sup> Casey et al., (n. 35), pp.26-27

<sup>71</sup> Casey et al., (n. 35),p. 48 and Morano-Foadi (n. 22) p.150

<sup>72</sup> Evanthia Kalpazidou Schmidt, et al., 'Innovation and Dynamics in Public Research Environments in Denmark – a Research Policy Perspective' (2002) Working papers 2002/10 Analyseinstitut for Forskning, the Danish Institute for Studies in Research and Research Policy, p.10

<sup>73</sup> Evanthia Kalpazidou Schmidt, 'Organisation and Management of Research Environments', (2002) Working papers 2002/10 Analyseinstitut for Forskning, the Danish Institute for Studies in Research and Research Policy,p.19. See also Tony Becher, and Paul Trowler, *Academic Tribes and Territories Intellectually Enquiry and the Cultures of Disciplines* (2<sup>nd</sup> ed. OUP, 2001),



support research environments in pursuance of excellence<sup>74</sup> and thus, raising their attractiveness level to researchers.<sup>75</sup>

As demonstrated in the previous section on the theoretical analysis of the return migration concept, studies, for example, on Italian<sup>76</sup>, Portuguese<sup>77</sup>, Slovak<sup>78</sup> and Polish<sup>79</sup> scientific mobility indicate that the above conditions are important motivators affecting scientists' migration decisions, despite any distinct differences in their experiences from countries of different economic development.<sup>80</sup> HS return migrants value an environment which helps them realize their potential<sup>81</sup> and in which the skills and experiences from a receiving country are recognized and potentially transferred into positions in their home country.<sup>82</sup> Thus, for scientists and researchers success is shaped by their work environment<sup>83</sup> where science is respected, their social status is esteemed,<sup>84</sup> and their experience is valued<sup>85</sup> through meritocratic processes.<sup>86</sup>

Given the competitiveness of scientific research and the characteristics of a researcher's career,<sup>87</sup> perceived to be linked to excellence<sup>88</sup> mentoring and networking are critical elements for a successful career in research.<sup>89</sup> Previous research, however, highlights the existence of two networking types: one type based on nepotistic relations, and another based on equal opportunity, cooperation and autonomy.<sup>90</sup> Although nepotistic networking belongs to the peculiarities of each national research environment and culture,<sup>91</sup> it can have a negative impact on researchers' visibility, employment and

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<sup>74</sup> Evanthia Kalpazidou Schmidt and Ebbe Krogh Graversen, 'Persistent Factors Facilitating Excellence in Research Environments', (2017) *High Educ* 1-23

<sup>75</sup> Casey et al. (n. 35) 7

<sup>76</sup> Morano-Foadi (n. 37).

<sup>77</sup> Delicado (n. 38)

<sup>78</sup> Lendel et al., (n. 39)

<sup>79</sup> Klagge et al., (n.28)

<sup>80</sup> William S. Harvey, 'British and Indian Scientists in Boston Considering Returning to their Home Countries' (2009) *Popul Space Place* 15(6):493-508, p.500

<sup>81</sup> Klagge et al., (n. 28), p.14, p.24

<sup>82</sup> Hercog and Siegel (n. 47) p.2, p.9

<sup>83</sup> Morano-Foadi (n. 37) p.144, pp.150-151. See also Joseph Hermanowicz, *Lives in Science: How Institutions Affect Academic Careers* (University of Chicago Press 2009)

<sup>84</sup> Dominique Martin-Rovet, 'Opportunities for Outstanding Young Scientists in Europe to Create an Independent Research Team', European Science Foundation (2003) p.1, at:

<http://fgimello.free.fr/documents/opportunities.pdf>

<sup>85</sup> CODEV-EPFL, IDSK, JNU, ILO 'Migration, Scientific Diasporas and Development: Impact of Skilled Return Migration on Development in India' Final Research Report, Swiss Network for International Studies (2013)

<sup>86</sup> Ibid p.19, p.24. Sonia Morano-Foadi 'Key Issues and Causes of the Italian Brain Drain' (2006) *Innovation: The European Journal of Social Science Research* 19 (2): 209-223, p.213

<sup>87</sup> See for example, Milio et al., (n. 46) p.7 Morano-Foadi, (n. 37), p.135 p.140

<sup>88</sup> Morano-Foadi, (n. 37), p.134

<sup>89</sup> Laura Haynes et al., 'Mentoring and Networking: How to Make it Work' (2008) *Nature Immunology* 9 (1): 3-5, p.5

<sup>90</sup> Zdenka Sadl, 'We Women Are No Good at It: Networking in Academia' (2009) *Czech Sociological Review* 45 (6):1239-1263, pp.1248-1249. See also Haynes et al. (n. 89), p.5

<sup>91</sup> Casey et al., (n. 35) pp.26, 27



promotion prospects whether it is encountered in the academia<sup>92</sup> or in any other private or public workplace environment.<sup>93</sup>

Interviewees opined that, when relocating to Cyprus, they found the national research environment to be unattractive and demotivating. Based on their accounts unattractiveness meant those factors that collectively contribute to creating difficulties for the setting up of a research environment able to attract and retain scientists and researchers.

The national work/research culture impact,<sup>94</sup> which includes nepotism as a ‘negative’ type of networking,<sup>95</sup> a change resistance,<sup>96</sup> a lack of transparency,<sup>97</sup> and no career progression<sup>98</sup> in the home country are strong themes illustrating a set of challenges/factors, considered by them to be an integral part of the whole negative picture.

The following respondents’ quotes provide a description of the Cypriot national research environment, reflecting these challenges:

*“I was unhappy with the research environment and with the mentality and culture of people at work there. There are always people in Cyprus, who think that the system belongs to them, so they think they can take advantage of everything”.*<sup>99</sup>

*“Cypriots do value education [...] the problem is with those who are in charge and responsible for the research promotion and growth and this makes the research environment unattractive”.*<sup>100</sup>

*“In Cyprus there is no meritocracy and transparency and there is zero accountability. There are many nepotism incidents too. These make the research environment unattractive and demotivating”.*<sup>101</sup>

*“There is a repetitive way of the Cypriot culture to oppose newcomers and change which makes the research environment unattractive”.*<sup>102</sup>

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<sup>92</sup> Morano-Foadi (n.86) p.215

<sup>93</sup> Maria Luca and Pavlos Filipopoulos, ‘Motivational and Adaptation Experiences of Returnees and Migrants to Cyprus: A Grounded Theory Study with Counselling Psychology Application and Practice Implications in Europe’ (2014) *European Journal of Counselling Psychology* 3 (1): 20-41, p.29, p.35

<sup>94</sup> Interviews 6, 7, 8, 9, 10, 11 (UK Oct 2015 - Oct 2016)

<sup>95</sup> Interviews 4, 6, 7, 8, 9, 11 (UK Oct 2015 - Oct 2016)

<sup>96</sup> Interviews 6, 8, 11, 9 (UK Oct 2015 - Oct 2016)

<sup>97</sup> Interviews 4, 8, 11 (UK Oct 2015 - Oct 2016)

<sup>98</sup> Interviews 6, 10 11 (UK Oct 2015 - Oct 2016)

<sup>99</sup> Interview 6 (UK 10 Sept 2015)

<sup>100</sup> Interview 7 (UK 11 Apr 2016)

<sup>101</sup> Interview 4 (UK 10 Apr 2015)

<sup>102</sup> Interview 11 (UK 3 Oct 2016)

In line with the above findings and their serious implications on the scientific return migration issue, the present empirical sample reported that all the previously-mentioned conditions (infrastructures, open research system, research support, transparent research career structures, and open and meritocratic recruitment systems) are not always available in Cyprus. Furthermore, participants' accounts reflect the significance they attribute to the research environment quality, and the respect and recognition of their potential for a positive impact on their country through their knowledge, new experiences and skills as well as professional relations and networks they had established before their return migration. Quotes from some of the interviews illustrate their feelings:

*“Abroad you can have a career path you can earn a lot more money and most importantly respect for what you represent and can offer through the experience you gained”.*<sup>103</sup>

*“I still think we can really offer to research and benefit from research in Cyprus [...] but they try hard to demotivate you when you are there, the environment is demotivating”.*<sup>104</sup>

In the context of the above, the development of an attractive and effective research environment is not only integral to the ERA<sup>105</sup> with its emphasis on building effective national research systems and attractive labour markets for researchers to increase European competitiveness,<sup>106</sup> it is also what scientists and researchers seek at an international level.<sup>107</sup> In their interviews Cypriot scientists and researchers call for their national research environment to become more international by building up its attractiveness targeting not only scientific mobility but scientific return migration as well, through all stakeholders' cooperation involved: the government, the academia and the research institutions. In an interviewee's own words:

*“The Cyprus academia and research environment could become more international, more open. They do some things but individually. They could do more in an organized way at*

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<sup>103</sup> Interview 9 (UK 29 Jul 2016)

<sup>104</sup> Interview 4 (UK 10 Apr 2015)

<sup>105</sup> Council of the EU, 'Competitiveness (Internal Market, Industry, Research and Space)', 3392<sup>nd</sup> Council meeting, 9385/15 Brussels, 28 and 29 May 2015, p.9, see also see Chapter 2 on the European Research Landscape.

<sup>106</sup> See, for example, Commission Communication, 'A Reinforced ERA Partnership for Excellence and Growth' Brussels, 17.7.2012 COM (2012) 392 final

<sup>107</sup> OECD, *The Global Competition for Talent: Mobility of the Highly Skilled* (OECD, 2008) p.9; See also Laudeline Auriol, 'Careers of Doctorate Holders: Employment and Mobility Patterns' (OECD 2010)

*national and university level; for example, there could be a general network of private and public universities in Cyprus which could build further networks at a European level”*.<sup>108</sup>

Based on the participants’ views discussed, the attractiveness and appeal of the national research environment conditions appears a major factor associated with scientific return migration and the risk of re-emigration occurrence. Although the present findings should be approached with a certain amount of caution due to the empirical sample’s smallness, they do highlight the need of a deeper understanding of the link between return migration and the scientific/research environment in the home country. Thus, the role of strategies and policies of scientific return migration in the country of origin are of particular relevance since their feasibility, adaptability and impact are affected by country-specific, political, cultural and economic factors.<sup>109</sup> This is an issue discussed next, the challenge of which is reflected in the following section.

Leaving to one side the chronic scarcity of funding<sup>110</sup> and the additional weighing down on the Cypriot research environment caused by the economic crisis<sup>111</sup> political and cultural factors were considered by interviewees as causing difficult issues for the Cypriot national research environment. Based on their accounts the political factors are associated with the government’s role and public administration pertaining to two policy-related aspects. The first concerns the way national research policies are introduced to, adopted by and implemented in Cyprus an issue dealt with in Chapter 5.<sup>112</sup> The second refers to the policies put in place in respect to scientific return migration and its impact on the empirical sample discussed in this section. The cultural factors include nepotism<sup>113</sup> as a ‘negative’ type of networking in the public and private sectors, extending into many aspects of the social life and workplace environment in Cyprus.

The above policy related aspects are discussed next and are exemplified in the following quote:

*“[...] one factor hindering research is that the vision is not shared. I also think that the human resources are there, but they are mismanaged. Additionally, we are a closed community with socio-cultural and political factors that keep the country from taking a decisive leap to create a meritocratic space for researchers and intellectuals. We have*

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<sup>108</sup> Interview 7 (UK 11 Apr2016)

<sup>109</sup> Kovács et al., (n. 15) pp.58- 59 and Milio et al., (n. 46), pp.32-33

<sup>110</sup> Lena Tsiouri et al., 'RIO Country Report 2015: Cyprus' (2016), Institute for Prospective Technological Studies, Joint Research Centre Report No. 27856, p.30, p.40. See also Chapter 5 section 5.2.2

<sup>111</sup> European Commission, Commission Staff Working Document Country Report Cyprus 2015, SWD (2015) 32 final, at: [https://ec.europa.eu/info/sites/info/files/file\\_import/cr2015\\_cyprus\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/file_import/cr2015_cyprus_en_0.pdf)

<sup>112</sup> See Chapter 5, section 5.2.3

<sup>113</sup> See also Chapter 5, section 5.3

*reached a point where the Government together with the Cypriot universities could and should make that difference by putting in place policies that would stimulate the return of these people”.*<sup>114</sup>

In the context of Cyprus, interviewees were aware of the structural challenges facing the national R&I system/environment such as absence of large research infrastructures, and chronic scarcity of funding, aggravated due to the austerity measures imposed in the context of the macroeconomic adjustment programme for Cyprus.<sup>115</sup> However, they were critical of the perpetuation of lack of strategic vision, and absence or deficiency of a comprehensive policy regarding RDI. They were also critical of the national research system policy ineffectiveness and or initiatives regarding scientists’ migration and taking into account return migration, subsequent fitting in, and re-emigration risk. They did not consider the launching of extensive reforms<sup>116</sup> in compliance with Cyprus’ three-year bailout agreement and the process of reviewing and restructuring of the National R&I system since 2013 catalysts for change. A participant commented that:

*“Because of the economic crisis there has been an effort to reform, but successful reform requires implementation and a new culture to operate efficiently. I don’t think there is something specific for relocating scientists or researchers. I believe it is an overall effort to bring Cyprus’ economy back on track and nothing more”.*<sup>117</sup>

At the same time, respondents were not aware of any national development policies which target returnee and potential returnee scientists and researchers, or which consider the possible role of brain gain. They believed that any plans which address the negative consequences of scientific emigration and consider the positive effects of return migration of the HS are always emerging superficially in the same political rhetoric. Another interviewee felt that:

*“There is an endless political debate and rhetoric on potential and would be policy solutions, going on and on, so I suppose one can try conventional ways such through their professional network or may be through friends working in Cyprus and the Euraxess portal”.*<sup>118</sup>

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<sup>114</sup> Interview 8 (UK 28 Jul 2016)

<sup>115</sup> European Commission, (n. 64), p.37, see also Christophoros Christophorou, et al., *Cyprus Report Sustainable Governance Indicators 2017* ( Bertelsmann Stiftung (2017) p.11

<sup>116</sup> European Commission, ‘The Economic Adjustment Programme for Cyprus Fourth Review - Spring 2014’ (2014) Occasional Papers 197, p.3

<sup>117</sup> Interview 9 (UK 29 Jul 2016)

<sup>118</sup> Interview 4 (UK 10 Apr 2015)

In the light of the above, although in March 2016 Cyprus exited its three-year financial assistance programme with the economic recovery continuing, the loss of reform momentum, and the stalling of measures reflect a more complex political environment.<sup>119</sup> The national RDI governance lacks guidance and vision, as well as a coherent strategy<sup>120</sup> that integrates outward and return migration into a development programme with the coordination and synergy between national research environment stakeholders, public and private, and business. A political decision is still to be made on how to implement the recommendations of the National Committee on Research, Innovation and Technological Development (NCRITD), created in 2013 with the aim of reviewing the NIS.<sup>121</sup>

An important development, however, is considered to be the launching, in 2016, of the new R&I FP, under the name “RESTART 2016-2020 Programmes” by the RPF, the national organisation for scientific and technological research promotion in Cyprus.<sup>122</sup> At this point, the RPF is in the process of creating a database with Cypriot expatriate researchers contact details. This database will be used for informing interested expatriate researchers about R&I activities in Cyprus, funding opportunities through European and national programs as well as opportunities for collaboration with organisations based in Cyprus.<sup>123</sup> The RPF states that its long-term aim is to examine ways of remote cooperation of Diaspora researchers with local researchers, and possibilities of a potential return or a close collaboration.<sup>124</sup> Two other programmes to be mentioned are the ‘Guidance and Counselling for Migrants and Returnees’ which ran from 2009 to 2011 involving five other EU countries and the ‘Service for Overseas and Repatriated Cypriots’<sup>125</sup> which has been running since 1976. However, their target group has been migrants and returnees in general.

On the role and impact of networking in the Cypriot national research environment, participants made a distinction between ‘negative and positive networking. Their accounts indicate the existence of nepotism<sup>126</sup>, working as a ‘negative’ type of networking where career advancement and/or securing a job depends on accessing people in key positions, and/or people of power in one’s family or social circle irrespective of credentials.

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<sup>119</sup> European Commission, ‘Country Report Cyprus 2017 Including an In-Depth Review and the prevention and correction of macroeconomic imbalances’, Staff Working Paper, Brussels, 22.2.2017 SWD (2017) 78 final

<sup>120</sup> Antonis Theocharous, et al., ‘RIO Country Report 2016: Cyprus’ (2017) No. EUR 28500 EN, p.6

<sup>121</sup> Ibid, and Tsiouri et al., (n. 111), see also Chapter 5 section 5.2.3 and Chapter 3 section 3.2

<sup>122</sup> See Chapter 3 section 3.2., Chapter 4 section 4.3.3 a and Chapter 5 section 5.2.3

<sup>123</sup> In order to be included in the abovementioned database, expatriate Cypriot researchers are encouraged to submit the ‘Expatriate Researchers’ Personal Information Form’, <http://www.research.org.cy>

<sup>124</sup> Euraxess Cyprus, ‘Scientific Diaspora’, <https://www.euraxess.org.cy/>

<sup>125</sup> RoC, Ministry of Foreign Affairs, Overseas Cypriots, ‘Service for Overseas and Repatriated Cypriots’, (2018)

<sup>126</sup> For more on nepotism, see Chapter 5 section 5.3.2

This finding is in line with that of another research which although it explored the motivational and adaptation experiences of returnees and migrants to Cyprus as the target group, it showed that some experienced an environment driven by nepotism, where jobs were offered to friends and relatives, sidelining meritocratic standards.<sup>127</sup> The indication that this type of ‘negative’ networking is not restricted to academic groups<sup>128</sup>, but it is potentially encountered in other public life aspects in Cyprus, is also in line with the empirical findings drawn from the first round of interviews with EU and non EU scientists and researchers in Cyprus.<sup>129</sup>

Of particular note are the interviewees’ quotes on employment practices in Cyprus:

*“Networking is a big factor in cultivating relationships that may lead to collaboration and opportunities to make your work known. Although there is no interviewing panel anywhere in the world that is fully objective, in Cyprus you might be promoted or hired solely on the basis of friendship or nepotism”.*<sup>130</sup>

*“I would say it depends on who you know basically to get a job or get your job done”.*<sup>131</sup>

*“To get a job you need to have good connections with politicians and people with power”.*<sup>132</sup>

While networking offers the opportunity to create meaningful contacts that make a researcher’s work visible to others in the field and aids interaction with them<sup>133</sup> this type of negative networking is detrimental for a career outcome. Drawing from their experiences interviewees described two types of networking, one encountered in the UK and one encountered in Cyprus:

*“I have experience of networking from both countries [the UK and Cyprus]. Definitely in Cyprus there is a nepotistic networking, but in the UK again positions are not always given*

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<sup>127</sup> Luca and Filipopoulos (n. 93), p.29 p.35

<sup>128</sup> Morano-Foadi (n. 86)

<sup>129</sup> See Chapter 5 section 5.3

<sup>130</sup> Interview 8 (UK 28 Jul 2016)

<sup>131</sup> Interview 11 (UK 3 Oct 2016)

<sup>132</sup> Interview 6 (UK 10 Sept 2015)

<sup>133</sup> Sadl (n. 90) 1260 and Haynes et al., (n. 89), p.4

*away on basis of merits entirely. [...] however, in Cyprus it depends more on who your parents are whereas in the UK it is who you know and who knows of your work”.*<sup>134</sup>

*“In the UK it is different, when there are two equal candidates in terms of qualifications in the final stage of being considered for employment they opt for someone they know, so friendship does count in the UK but only in the end of the process and only if you do deserve it”.*<sup>135</sup>

From the above statements, it is indicated that although nepotistic networking is potentially encountered in various research environments, in Cyprus it still greatly influences and impacts on visibility, employment and promotion prospects. Transparency and accountability can potentially minimize the impact of nepotism and the kind of negative network it promotes.<sup>136</sup> Overcoming such practices needs to be addressed as a high priority to enhance a RTDI system and governance in Cyprus with features more closely linked to merit.

Overall, based on the aspects of participants’ views discussed, the major driver for pushing interviewees away from Cyprus is perceived to lie primarily within the national scientific and research environment and the political and cultural factors interwoven into it. Addressing the national research environment issue and the factors that structure it<sup>137</sup> coupled with the role the government plays in putting in place policies related to re-migration and other relevant policies has serious policy implications. It is this synergy that could produce a change in the trends towards scientific return migration<sup>138</sup> and re-emigration and enable Cyprus to create a more attractive research environment.

#### **6.4.2 Pull Factors Associated with the Decision to Stay in the UK**

This is the second major theme emerging from the participants’ narratives relative to Cypriot scientists’ and researchers’ re-emigration to the UK and the encompassed ‘pull’ factors, driving them to remain in the UK, a country in which the interviewees have completed their studies and /or have worked and feel ‘at home’.

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<sup>134</sup> Interview 7 (UK 11 Apr 2016)

<sup>135</sup> Interview 8 (UK 28 Jul 2016)

<sup>136</sup> Carole Leathwood and Barbara Read, *Gender and the Changing Face of Higher Education, A Feminized Future?* (SRHE/ Open University Press, 2009) 136-137

<sup>137</sup> Casey et al., (n. 35) p.26

<sup>138</sup> Milio et al., (n. 46) p.36

### 6.4.2. A. The UK Hosting Research Environment

Although research is being done under different conditions and within different frameworks previous studies demonstrate that within innovative and dynamic research environments meritocracy, transparency and contact creation in the form of networking are common features.<sup>139</sup>

In addition, factors, such as the research system quality and openness, coupled with a transparent and meritocratic recruitment system in which objective evaluation procedures reward excellence have been shown to attract researchers, drive scientific mobility<sup>140</sup> and influence research performance.<sup>141</sup> For example, a study<sup>142</sup> on researchers' mobility patterns and career paths indicated that the UK has the highest share of satisfied researchers (around 80%) for openness, transparency and the degree of merit-based recruitment aspects.<sup>143</sup> However, it should be noted that currently as the UK prepares to leave the EU, a survey conducted online in 2017 by Elsevier and Ipsos Mori reveals that there is uncertainty among UK-based researchers, EU and non EU researchers about the Brexit impact on various aspects including mobility, funding and collaboration which contribute to an overall perception from the research perspective on the attractiveness of the UK as a place to do research.<sup>144</sup>

In the context of the present research interviewees felt that factors such as the UK excellent infrastructure, world class research and strong R&I system can be clearly and credibly demonstrated<sup>145</sup> without the need for further elaboration from their part. Based on their perceptions the factors that characterise and collectively make the hosting research environment more attractive than that of their country are meritocracy, transparency and openness,<sup>146</sup> positive networking,<sup>147</sup> and strong research culture.<sup>148</sup>

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<sup>139</sup> Kalpazidou Schmidt et al., (n.73) p.20, p.24

<sup>140</sup> Morano-Foadi (n. 37) p.149, Ana Fernandez-Zubieta, et al., 'Researchers' Mobility and its Impact on Scientific Productivity', (2013) University of Turin Working paper No. 13/2013, pp. 4-6

<sup>141</sup> Fernandez-Zubieta, et al., (n140) pp. 4-6 See also Kalpazidou Schmidt (n.74)

<sup>142</sup> The study was based on two large-scale surveys and two case studies between 2011 and 2013 of 10,000 individual researchers then working in the EU (27 Member States +6 Associated and Candidate Countries, 4,000 individual researchers then working outside the EU (27 Member States plus EFTA countries)

<sup>143</sup> 'MORE2 'Support for Continued Data Collection and Analysis Concerning Mobility Patterns and Career Paths of Researchers (2013) Deliverable 8 – Final report, European Commission (2013) at:

[https://cdn4.euraxess.org/sites/default/files/policy\\_library/final\\_report\\_0.pdf](https://cdn4.euraxess.org/sites/default/files/policy_library/final_report_0.pdf)

<sup>144</sup> Elsevier/Ipsos Mori Survey, Brexit — Global researchers' views on opportunities and challenges (2017) [https://www.elsevier.com/\\_data/assets/pdf\\_file/0017/543104/BREXIT-Global-researchers-views-on-opportunities-full-report.pdf?utm\\_source=EC&utm\\_medium=EC&utm\\_campaign=EC](https://www.elsevier.com/_data/assets/pdf_file/0017/543104/BREXIT-Global-researchers-views-on-opportunities-full-report.pdf?utm_source=EC&utm_medium=EC&utm_campaign=EC)

<sup>145</sup> Fernandez-Zubieta, et al., (n.140), p.12, see also Louise Ackers and Gill Bryony, 'Attracting and Retaining 'Early Career' Researchers in English Higher Education Institutions', (2008) *Innovation: The European Journal of Social Science Research*, 18 (3): 277-299, and Department For Business Innovation and Skills (BIS) 'Growing the Best and Brightest, The Drivers of Research Excellence' Economic Insight, (March 2014),

<sup>146</sup> Interviews 1, 3, 5, 12, 13, 14, 15 (UK Oct 2015 - Oct 2016)

<sup>147</sup> Interviews 2, 5, 12, 13, 14, 15 (UK Oct 2015 - Oct 2016)

<sup>148</sup> Interviews 3, 5, 12, 13, 14, 15 (UK Oct 2015 - Oct 2016)



Participants reflecting on their experiences in the UK national research environment in relation to meritocracy and transparency indicate that these are perceived as better when compared to their country. They felt that transparency and meritocracy coupled with the country's strong research culture are not only drivers of research excellence, but they also make the UK an attractive destination for them.

The following quotes illustrate participants' views:

*"It is meritocracy first of all. At least you have an opportunity [...] everybody has the opportunity based on merits [...] and the system works with full transparency and openness. This is strength and it is one of the reasons why people are coming to the UK, the language, the system and the strong research culture".*<sup>149</sup>

*"I strongly believe that the UK system most probably provides the most meritocratic environment of all, comparing to my experience from other countries such as Germany and Cyprus. Evaluation rules and methods are clear. This has an effect on research performance".*<sup>150</sup>

When questioned on the role and impact of networking in the UK research environment interviewees highlighted a number of benefits as a result of networking in the hosting research environment as opposed to the nepotistic networking in their country. Based on their accounts positive networking can lead to forming collaborations, opportunities for recruitment, and sharing best practices, which they believe contribute to research excellence.

In their own words:

*"In the UK there is networking, but it acts in a positive way because you create contacts, you collaborate, you exchange ideas, you promote your research and then others get to know your work".*<sup>151</sup>

*"You can have access to both scientists and researchers of high calibre, and some of the most innovative enough research in the world also through networking, so in terms of research performance and career progression that is an incentive".*<sup>152</sup>

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<sup>149</sup> Interview 3 (UK 3 Apr 2015)

<sup>150</sup> Interview 8 (UK 28 Jul 2016)

<sup>151</sup> Interview 15 (UK 7 Oct 2016)

<sup>152</sup> Interview 5 (UK 8 Sept 2015)

Participants further commented that although nepotistic networking may be potentially encountered in the UK research environment or produce personal gains, the procedures and internal regulations in place ensure accountability, fair treatment and equal distribution of services.

The above accounts indicate that the characteristics of the UK hosting research environment –the strength of the national research system, the strong research culture, its meritocratic and transparency aspects and positive networking- play a significant role in attracting Cypriot scientists and researchers. This finding is in line with many empirical studies which display strong associations between the research environment characteristics and market in the host country and the host country’s ability to attract foreign scientists and researchers.<sup>153</sup> The implication is that Cyprus as a country of origin and a less-attractive country to scientists and researchers based on the interviewees’ perceptions clearly needs to improve the attractiveness of its research environment in order to potentially retain its HS and stimulate scientific return migration. Undoubtedly this is an issue of national research policy and a challenge for Cypriot policy makers.

### 6.4.3 The Impact of the Hosting Research Environment and Culture

The impact of the hosting research environment and culture on Cypriot scientists’ and researchers’ professional and family life is the last major theme emerging from the participants’ narratives.

#### 6.4.3. A. Positive Impact

Previous literature contributions show that professional factors and social status increase scientists’ and researchers’ satisfaction in the host country.<sup>154</sup> At the same time, economic factors do not demonstrate a strong impact and this may be explained by the specific nature of the scientist’s/ researcher’s profession, which is not applicable in other professions<sup>155</sup> and for which reputation and recognition have a much stronger impact.<sup>156</sup> The factor of HS integration in the host country appears to have been understudied since much substantial theoretical and empirical work on migrants and their incorporation in the

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<sup>153</sup> Lepori et al., (n. 35). See also Mario Cervantes, ‘Attracting, Retaining and Mobilising Highly Skilled Labour’, in OECD (ed.), *Global Knowledge Flows and Economic Development*, (OECD, 2004), 51-71.

<sup>154</sup> Linda Van Bouwel and Reinhilde Veugelers, ‘Destinations of Mobile European Researchers: Europe vs. the United States’ in A. Geuna, *Global Mobility of Research Scientists, the Economics of Who Goes Where and Why*, (Elsevier, 2015), 215-237

<sup>155</sup> Morano-Foadi (n.37) p.137, Milio et al., (n.46) p.7

<sup>156</sup> Baruffaldi and Landoni (n. 34), p.7. Henry Sauermann and Michael Roach, ‘Not All Scientists Pay to Be Scientists: PhDs’ Preferences for Publishing in Industrial Employment (2014) *Research Policy*, 43(1) :32-47

host country has focused either on low-skilled migrants<sup>157</sup> or on economic factors explaining the integration of migrants in the host labour market.<sup>158</sup> However, it has been observed that specifically for scientists and researchers, science provides a common identity and space to interact in the hosting environment and thus contributing to their integration.<sup>159</sup> At the same time the migration policies of each hosting country exercise varying levels of influence on the HS migration and arguably on their subsequent integration. The UK's EU membership contributed to increased levels of migration including that of the HS from other EU MSs under the EU's free movement rules. For example, in 2016, non-UK nationals represented 11% of the UK labour market; EU nationals contributed 7% while non-EU nationals contributed 4%.<sup>160</sup> Furthermore, more than 3 million EU nationals were residing in the UK in 2016, a fact that indicates the existence of established communities that can arguably contribute to providing information access about employment opportunities and advice about living in the UK<sup>161</sup>

In the context of Cyprus, interviewees consider an improvement in their professional and social position<sup>162</sup> and a strong feeling of integration<sup>163</sup> in the hosting environment as having a positive impact on them and driving forces behind their decision to remain in the UK. Cypriot researchers and scientists commented that their integration into the UK research environment was smooth and it had a positive professional and social life impact. Based on the interviewees' accounts this might be explained firstly due to the fact that Cyprus and the UK share a dynamic and complex relationship with strong migration ties between them as it has already been demonstrated in previous sections.<sup>164</sup> Secondly under the EU's free movement rules, Cypriot scientists and researchers, as EU citizens, stated that they did not encounter any obstacles to their free movement and residence right in the UK.

The following quotes reflect their feelings in relation to the above:

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<sup>157</sup> See, for example, Erik Snel et al., 'Transnational Involvement and Social Integration' (2006) *Global Networks* 6 (3): 285-308.

<sup>158</sup> See for example, George Borjas and Marta Tienda, 'The Employment and Wages of Legalized Immigrants' (1993) *International Migration Review*, 27 (4):712-747

<sup>159</sup> Metka Hercog and Gabriela Tejada, 'Incorporation of Skilled Migrants in a Host Country: Insights from the Study of Skilled Indians in Switzerland' IMDS Working Paper, No 58 International Migration and Diaspora Studies Project, ZHCES, JNU, New Delhi (2013) p.12

<sup>160</sup> ONS 'International immigration and the labour market, UK: 2016' (2017) Office for National Statistics, at: <https://www.gov.uk/government/organisations/office-for-national-statistics>

<sup>161</sup> The Migration Observatory, 'Pulling Power: Why are EU Citizens Migrating to the UK?' Pre-Referendum Commentary, University of Oxford (2016)

<sup>162</sup> Interviews 1-15 (UK Oct 2015-Oct 2016)

<sup>163</sup> Interviews 2, 3, 4, 5, 7, 8, 10, 11, 12, 13, 14 and 15 (UK Oct 2015-Oct 2016)

<sup>164</sup> See Chapter 1 section 1.2.4 and Chapter 5 section 5.5

*“I didn’t have any issues regarding integration [...] and also it is the language issue. Almost everybody in Cyprus speaks English. Furthermore, the British culture is not very far from ours in the sense that we share certain links with the UK, so I wouldn’t like to stay in another country”*.<sup>165</sup>

*“I think Cypriots integrate well because of the ties of the two countries and the fact that their English is good. Language plays an important role because you might be an excellent scientist but if you can’t communicate that puts you in a lesser position and I think Cypriots are quite ‘Anglicised’. Also, most of the Cypriots I met have either done their education or part of their education in the UK, so they don’t feel strangers in this country”*.<sup>166</sup>

Overall improvement in their socioeconomic position was perceived by migrant Cypriot scientists and researchers to be the result not only of the successful skills transferability and human capital resources in the hosting country but also due to the hosting research environment characteristics.<sup>167</sup> Activities of developing, motivating, networking and collaboration in the research workplace environment were considered as having a critical effect on their careers, a finding in line with previous research on the research excellence drivers in UK’s leading institutions in 2014.<sup>168</sup>

#### **6.4.3. B. Negative Impact**

During the past decades the significant changes in the research profession and careers due to education, and RDI investments,<sup>169</sup> university system reforms and research systems expansion there has been an increase in funding for short-term projects.<sup>170</sup> This coupled with the flexibility provided by mobility has caused a shift towards short-term or fixed-term research employment contracts.<sup>171</sup> Prior studies have shown that these changes may potentially have a negative impact on the

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<sup>165</sup> Interview 7 (UK 11 Apr 2016)

<sup>166</sup> Interview 5 (UK 8 Sept 2015)

<sup>167</sup> George Borjas, ‘The Economics of Immigration’ (1994) *Journal of Economic Literature* 32, 1667-1717, p.1695

<sup>168</sup> BIS (n. 145)

<sup>169</sup> Commission Communication: Europe 2020 Flagship Initiative Innovation Union, SEC (2010) 1161, Brussels, 6.10.2010, COM (2010) 546 final.

<sup>170</sup> Hynes et al., (n. 44), p.19

<sup>171</sup> Brian Harney et al., ‘University Research Scientists as Knowledge Workers: Contract, Status and Employment Opportunities’ (2014) *International Journal of Human Resource Management*, 25(16): 2219-2233

research profession in terms of long-term career development, work security<sup>172</sup>, work attractiveness<sup>173</sup>, productivity<sup>174</sup>, and arguably work satisfaction.<sup>175</sup>

Family considerations issue is another dimension added to the negative impact the hosting research environment can potentially have on migrant researchers' lives. Added to the pressure to gain experience by being recurrently mobile and the temporary employment condition, as demonstrated above, researchers have to cope with great changes and serious decision making in terms of establishing and raising a family.<sup>176</sup> While previous research places the study of HS migration in the context of family life with a focus on various of its aspects, such as partnering and dual science career couples<sup>177</sup>, living apart relationships<sup>178</sup>, gendered impact on relationships<sup>179</sup>, marital status, migration and labour market earnings<sup>180</sup>, there is paucity of studies on the private and family life aspects of migrant scientists and researchers (including Cypriots) in the hosting country. Marital status and spousal considerations are important factors of migration patterns, searching for a job and choosing locations. Previous research has shown that for dual-career households where both spouses are HS or have HE degrees migration is a joint decision<sup>181</sup> increasingly likely to lead them in large cities<sup>182</sup> after considering costs and benefits associated with relocation and long-distance commuting.<sup>183</sup> The extent of the potential negative impact the hosting research environment can have in terms of starting and or raising a family and career making decisions of dual career HS couples is indicated by a previous

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<sup>172</sup> Alison Fuller and Lorna Unwin, 'Knowledge Workers' as the New Apprentices: The Influence of Organisational Autonomy, Goals and Values on the Nurturing of Expertise' (2010) *Vocations and Learning*, 3(3):203-222

<sup>173</sup> Liz Oliver and Louise Ackers, 'Fixed Term Positions in the Academic Career Trajectory' (2005) CSLPE Working Paper 2005-3

<sup>174</sup> Esteban Lafuente and Jasmina Berbegal-Mirabent, 'Contract Employment Policy and Research Productivity of Knowledge Workers: An Analysis of Spanish Universities' (2017) *The International Journal of Human Resource Management* 1-27

<sup>175</sup> Harney et al., (n. 171)

<sup>176</sup> Marta Vohlidalova, 'Academic Mobility in the Context of Linked Lives' (2014) *Human Affairs* 24 (1): 89-102, p.98

<sup>177</sup> See for example, Philipp Dubach et al., 'Dual-career couples at Swiss universities' (2013) *Evaluation of the Swiss Federal Equal Opportunity at Universities Programme 3rd Period 2008-2011*, Centre for Labour and Social Policy Studies BASS AG

<sup>178</sup> Chiara Carrozza et al., 'Brains and Bodies on the Move, A research Agenda on Precarious Researchers' Mobility' *Paper on Transnational Scientific Mobility* (2017), 57-90

<sup>179</sup> See, for example, Regula Julia Leemann, 'Gender Inequalities in Transnational Academic Mobility and the Ideal Type of Academic Entrepreneur' (2010) *Discourse: Studies in the Cultural Politics of Education*, 31(5):605-625

<sup>180</sup> Ahu Gemici, 'Family Migration and Labor Market Outcomes' *Job Market Paper* (2006)

<sup>181</sup> Dora Costa and Matthew Kahn, 'Power Couples: Changes in the Locational Choice of the College Educated, 1940-1990, (2000) *The Quarterly Journal of Economics*, 115 (4):1287-1315.

<sup>182</sup> Janice Compton, and Robert Pollak, (2004), 'Why are Power Couples Increasingly Concentrated in Large Metropolitan Areas?' *NBER WP No 10918*,

<sup>183</sup> Anne Green, 'A Question of Compromise? Case Study Evidence on the Location and Mobility Strategies of Dual Career Households' (1997) *Regional Studies* 31 (7): 641-657

study on Swiss universities between 2008 and 2011.<sup>184</sup> The study reported that women in academia are more frequently single and more frequently childless than their male colleagues. Female academics also more frequently postpone having children and worry more about their career.

In the context of the above, interviewees raised specific criticisms regarding contractual insecurity<sup>185</sup> and starting or raising a family<sup>186</sup> in the host country. These were perceived as having a negative impact on their lives and a potential determinant for a future migratory decision to return to the home country. A feeling of uncertainty due to the intensification of the debates over UK's EU membership and the approaching EU Referendum at the time of the interviews was also evident in their accounts.<sup>187</sup> The evidence from participants' narratives suggests that short-term and fixed-term contractual status give rise to increased levels of uncertainty and insecurity about their employment continuation and career development. Interviewees characterise temporary contracts as a 'systemic problem' and call for greater long-term contract research funding. They argue that funding should be more readily available so that they are not trapped in endless waiting while their funding application outcome is pending.

The following quotes illustrate the above interviewees' concerns:

*"Temporary contracts make researchers feel insecure; research money should be more readily available so that contracts become more permanent".*<sup>188</sup>

*"I see temporary contracts as a systemic problem; researchers as employees face a lot of insecurity and stress [...] when your contract is about to expire you may go through another grant application process to secure funding. This may be repeated or there is also the possibility of securing a different source of funding which will make you change plans".*<sup>189</sup>

In addition, respondents highlighted the negative impact temporary contractual status can have on their plans of settling down, starting a family or even buying their own house in the hosting country. Their quotes capture the above challenges and insecurities when they comment that:

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<sup>184</sup> Dubach (n. 177)

<sup>185</sup> Interviews 1, 2, 5, 6, 7, 8, 9, 13, 14, 15 (UK Oct 2015 - Oct 2016)

<sup>186</sup> Interviews 1, 2, 3, 4, 6, 7, 8, 9, 12, 13, 14, 15 (UK Oct 2015-Oct 2016)

<sup>187</sup> Interviews 3,5,6,7,8,11,13,14 (UK Oct 2015 - Oct 2016)

<sup>188</sup> Interview 5 (UK 8 Sept 2015)

<sup>189</sup> Interview 8 (UK 28 Jul 2016)

*“Temporary contracts create insecurity and make people postpone plans for settling down and starting a family”.*<sup>190</sup>

*“Temporary contacts create insecurity and stress and may put you off from starting a family and buy a house”.*<sup>191</sup>

*“You can have a steady life by finding work in another sector or take a two-year contract, carry on research and then in two years’ time go through the same procedure again. This creates insecurity and emotional stress”.*<sup>192</sup>

In the context of the above, the majority (60%) of the 15 respondents had a partner but marriage was not in their immediate plans. Only 6 participants (40%) were married with at least one child and were dual career couples. Regarding financial autonomy, six respondents (40%) stated they had received financial help from their parents to buy a house in the hosting country while three out of the 15 were thinking of going back to Cyprus for family support.

When discussing the hosting research environment impact in the context of their private everyday life, all the participants who were in a relationship admitted that lack of more permanent employment conditions coupled with low salaries compared to the cost of living in the UK is the most determining factor for not establishing a family. The following quote summarizes their feelings:

*“[...] the UK is a very expensive place to live and salaries don’t reflect the money you spend on accommodation, living and travelling expenses. You always need to plan ahead. The majority of PhD holders work on a temporary contract like me so that is why I’m just renting and not buying a house. I don’t plan to have a family in the near future because of all the above reasons which make me feel insecure”.*<sup>193</sup>

Married interviewees in dual career partnerships found the challenges of balancing partnership, family, career and the cost of living expenses enormous and the cost on outside child care an additional constraint. For some of them buying their own house was possible through their parents’ financial assistance:

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<sup>190</sup> Interview 6 (UK 10 Sept 2015)

<sup>191</sup> Interview 13 (UK 5 Oct 2016)

<sup>192</sup> Interview 15 (UK 7 Oct 2016)

<sup>193</sup> Interview 6 (UK 10 Sept 2015)

*“My family helped out because even though my husband is a PhD holder too, housing was way too expensive to afford on our own and it is a disgrace”.*<sup>194</sup>

Not surprisingly, at the time of the interviews, three participants who were dual career partners were seriously thinking of returning to Cyprus appreciating the help provided in the form of child care by family members and a place to stay. The following quotes illustrate the reasons behind the interviewees’ decision to return to Cyprus:

*“In the UK we are renting and it is very expensive and also we are expecting a baby. In Cyprus I have property, so we won’t need to rent. Also, there is child care to think about and in Cyprus we have family to help out”.*<sup>195</sup>

*“We always wanted to go back, Cyprus offers a better and friendlier environment for a family and the pace of life is more relaxing despite the disadvantages. Most importantly we will have someone to help with the children”.*<sup>196</sup>

Before concluding this chapter, it is worth mentioning that the issue of a potential exodus of the UK from the EU emerged as a source of uncertainty and insecurity for a number of interviewees.<sup>197</sup> Those who had not applied for permanent residence and/or citizenship at the time of the interviews stated that they would. In their own words:

*“I believe that this is something personal. I could have applied for both residence and citizenship, it is my decision. In case of a Brexit, however, I will do it”.*<sup>198</sup>

*“There are many good EU scientists and researchers who work here. I really hope it doesn’t come to that because I want to stay in the UK [...] I am considering of obtaining citizenship if that happens, so that I won’t have to worry about the consequences”.*<sup>199</sup>

*“After Brexit I had to apply for permanent residency for safety. Now I am also considering of obtaining citizenship but before I wasn’t really interested in it”.*<sup>200</sup>

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<sup>194</sup> Interview 14 (UK 6 Sept 2016)

<sup>195</sup> Interview 4 (UK 10 Apr 2015)

<sup>196</sup> Interview 9 (UK 29 Jul 2016)

<sup>197</sup> Interviews 3, 6, 7 and 14 (UK Oct 2015 - Oct 2016)

<sup>198</sup> Interview 3 (UK 3 Apr (2015)

<sup>199</sup> Interview 6 (UK 10 Sept 2015)

<sup>200</sup> Interview 14 (UK 6 Sept 2016)



A careful look at the participants' views suggests that the research profession developments coupled with the hosting research environment impact and labour market on migrant scientists and researchers greatly affect and possibly determine their future migration paths, family life and family planning. Arguably these are issues of particular relevance.

## 6.5. Conclusion

This chapter presented the major themes emerging from the participants' narratives regarding Cypriot scientists' and researchers' migration and its determinants.

For them the search for a better and more attractive research environment provides the strongest incentive to re-emigrate to the UK, a finding which supports the idea that scientific migration is mostly driven by non- economic reasons.<sup>201</sup> Despite the fact that attractiveness to scientific mobility and a more effective national research system are key aspects of a country's competitiveness and set priorities for the ERA implementation,<sup>202</sup> Cyprus still lacks a comprehensive RDI policy.<sup>203</sup> At the same time empirical evidence indicates that national policy initiatives targeting public administration and human resource management reforms have lost momentum<sup>204</sup> and thus have not effected significant change towards more meritocratic and transparent features which could potentially discourage phenomena such as nepotism.<sup>205</sup>

The above have serious implications for Cypriot policy makers and highlight the need to focus their attention to the Cypriot national research landscape overall attractiveness in order to stimulate return scientific migration and retain scientists and researchers in Cyprus. Furthermore, findings indicate that not much attention has been paid to the scientific return migration key issue despite growing awareness of its benefits to the home country<sup>206</sup> not only at the national level but also at the EU level.<sup>207</sup> The participants' unsuccessful stories provide a deeper understanding of the relationship between return migration and home country. Interviewees' perceptions of this relationship potentially provided the incentive for their UK re-emigration, indicating at the same time that the

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<sup>201</sup> Baruffaldi and Landoni (n. 34), p.105

<sup>202</sup> Commission Communication 'The ERA: Time for Implementation and Monitoring Progress' COM (2017) 35 (2017)

<sup>203</sup> Tsipouri, et al., (n. 110) p.7

<sup>204</sup> European Commission, SWD (2017) 78 final (n. 119), p.1

<sup>205</sup> Morano-Foadi (n.86), p.213. See also Goran Svensson, 'Legal Requirements for Transparency in Appointments and Promotions in Swedish Higher Education Institutes' (2007) *International Journal of Public Sector Management* 20 (2): 118-133

<sup>206</sup> Lee Saxenian (n. 48)

<sup>207</sup> Morano-Foadi (n. 22), Lang et al., (n. 22)

benefits of their initial return did not materialize in their country of origin and that any potential promotion of new knowledge was lost.<sup>208</sup>

Characteristics of the UK research environment and culture, such as the strength of the national research system and culture, meritocracy, transparency, collaboration and positive networking, have attracted Cypriot scientists and researchers to the host country and contributed to their career development. However, findings suggest the need to consider the nature and demands of the research profession as also linked to the private and family issues of the people involved. Family considerations and planning may have a strong impact on their migration decision back to their home country. The implication is that the family impact and living expenses in the host country need to be fully understood by employers and policy makers since they are decisive factors in how well scientists and researchers and particularly dual- career couples are able to realise professional goals and respond to work demands.

Although the present research provides evidence from a small sample of migrant Cypriot scientists and researchers, it focuses on the migration, return migration and re-emigration of EU citizens within the European context, a subject still under-researched.<sup>209</sup> Additionally it indicates that in the case of Cyprus, raising the national research environment attractiveness is considered instrumental. Arguably this is the policy outcome which the government needs to put in place with collective efforts and a shift towards a new organizational culture which can positively affect the national research environment performance and productivity. This is all the more important as scientific return migration is a process driven by a combination of cultural, social, political and economic factors.

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<sup>208</sup> Grit Laudel, Studying the brain drain: Can Bibliometric Methods Help? (2003) *Scientometrics*, 57 (2): 215-237, p.216

<sup>209</sup> Lang et al., (n. 22), pp.3-4

## Chapter 7: Conclusions

### 7.1 Introduction

This thesis examined the “migration” of EU and non-EU scientists, researchers and doctoral candidates within the ERA focusing on the legal and policy framework of Cyprus used as a case study. Two related questions guided the research in this thesis. The first question was *how attractive the EU research landscape and policy as linked to ‘research culture’ is for EU and non EU scientists and researchers*. The second question was *how effective the EU migration law acquis is for the migration/mobility for EU and non-EU scientists, and researchers at any career level in Cyprus*. Thus the thesis set out to determine whether Cyprus has aligned its domestic law and research policy with the EU law migration law acquis, policy and implementation within the country’s regulatory framework and the extent of impact of the Cypriot research culture and environment on the above stakeholders. The overall aim was to identify strengths and weaknesses in terms of attracting and retaining scientists and researchers, and the culture encountered in the national research environment, and to propose recommendations.

To provide answers to the research questions the focus was split on three particular features intertwined in this thesis: the supranational (EU law and research policy), the national (Cyprus law and research policy), and the interface of supranational and national (the impact of EU law and research policy on Cyprus law and research policy). The analysis and study of the abovementioned features was approached from the perspective of the role the EU, Member States (MSs), migration law and research policy play in scientific migration/mobility and their impact on migrant themselves. Schein’s organizational culture theory<sup>1</sup> was employed, extended and applied within broader dimensions: that of the EU and that of the State (Cyprus). The key dimensions of Schein’s organizational culture: external adaptation, internal integration and leadership<sup>2</sup> were used to explore the influences both external and internal to the EU and the Cypriot State and the leadership factor that have combined to create or not an attractive and effective research environment in Cyprus and the ERA more broadly (Chapter 1).

Analysis of the policy framework and legal instruments of the ERA was carried out to discern whether ERA has had the expected impact on research in Europe and whether it has been successful in creating an attractive research environment where scientific mobility functions (Chapter 2). Examination of the EU free movement provisions regarding EU and non-EU scientists and researchers was also carried out to identify

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<sup>1</sup> See Chapter 1 sections 1.3.1. – 1.3.5. and Edgar Schein *Organizational Culture and Leadership* (3<sup>rd</sup> ed. Jossey Bass 2004)

<sup>2</sup> Schein (n.1) pp. 10-23

conflicts and synergies between the three intertwined areas: EU Free Movement, Area of Freedom, Security and Justice and ERA (Chapter 2). This analysis revealed that the EU as an ‘organization’ promoting the ERA and policies in a joint effort with its MSs has accomplished key achievements towards a European integrated research landscape through the implementation of the ERA concept since 2000,<sup>3</sup> and improvement of scientific mobility (Chapter 2). These efforts have led to the evolution of the EU free movement provisions regarding EU and non-EU scientists, researchers and the HS through the EU Migration law Directives. Further development of the free movement provisions was also shaped by and extended through the CJEU and its case law as a supranational legal institution<sup>4</sup> (Chapter 2).

However, external non-European factors (the international economic climate, high EU unemployment rates, social and political climate) are challenges affecting both HS migration and the EU’s external adaptation as an organization due to the limited actions that can be undertaken at a supranational level to address them effectively. Internal and leadership challenges arise for the EU as an ‘organization’ due to the non-binding policies on which the ERA is based, creating a gap between policies on paper and delivery between the supranational and national level. Internal and leadership challenges also arise owing to the sharing of competences regarding research policies between the European, national and often, regional levels creating governance deficiencies and underdevelopment of a clear and coherent research policy between the EU and the MSs (Chapter 2).

Regarding EU migration law, the different legal frameworks for European and non-European scientists moving within the EU coupled with MSs’ national discretion and the absence of EU-wide standards for non-EU migrants create fragmentation, and flaws in the law implementation. Additionally due to a sectorial approach of EU Migration Directives towards the field of Migration, non EU researchers and HS migrants including doctoral candidates and their family members are still treated differently from their EU counterparts.<sup>5</sup> Consequently, very often the expected benefits of EU law and EU initiatives are not fully gained at the European and national levels (Chapter 2).

Applying Schein’s extended organizational culture theory within the EU dimension indicates that while the vision and concept of creating a European Research Area is shared, the EU as an ‘organization’ cannot fully deliver and implement the ERA

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<sup>3</sup> See Chapter 2 section 1.1. Commission Communication, ‘Towards a European Research Area’, COM (2000) 6 final, (Brussels, 18 January 2000)

<sup>4</sup> See chapter 2 section 2.6.1. C

<sup>5</sup> See chapter 2 section 2.6.2.B

due to the challenges it faces regarding the key dimensions of its organizational culture: external adaptation, internal integration and leadership. Thus despite the fact that the EU has created a policy and legal framework with useful EU supporting measures that could potentially shape favourable conditions for scientific migration and the setting up of a more integrated and attractive research environment similar to that of the USA are yet to be seen.

An appraisal of the Cypriot national research environment in the field of research and free movement provisions regarding EU and non-EU scientists has indicated that the historical, political-legal and socio-economic factors that shaped Cyprus legal and research system have affected the country's national research environment and the alignment of its domestic law and research policy with the EU law migration law acquis, policy and implementation within the country's regulatory framework (Chapter 3).

The above factors coupled with the fact that the country's research system is relatively young could potentially justify a narrow research culture reflected in the little interaction between public and private sectors on R&D issues, the low investment of the private sector in RTDI and the allocation of limited State funds to support the growing R&I needs and to curb potential negative consequences of brain drain (Chapter 3).

Cyprus' EU accession (2004) has been a crucial factor for the development of a research environment and certainly the main impetus behind increased emphasis on R&D due to building on the ERA priorities. Additionally Cyprus' exodus from the three-year EU-IMF economic adjustment programme in March 2016 marked the beginning of a period of reforms,<sup>6</sup> including restructuring of the R&I policy and system.<sup>7</sup> However, a majority of these reforms are still to be implemented<sup>8</sup> thus preventing improvement and flourishing of the national research environment. Applying Schein's extended organizational culture theory to the national research environment in Cyprus indicates that a more efficient governance structure of the R&I system, with a focused strategic direction and vision of the policy framework is still absent.<sup>9</sup> Consequently not only do shortcomings in strategic governance affect the adaptation of the country's R&D system to new external and internal challenges they also constitute negative factors in the setting up of a more attractive and effective research environment.

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<sup>6</sup> See chapter 3 section 3.4

<sup>7</sup> Ibid

<sup>8</sup> Ibid

<sup>9</sup> See Chapter 3 section 3.4 and Nicolas Robledo Böttcher, 'RIO Country Report 2017: Cyprus' (2018) EUR 29151 EN

## 7.2 Findings

The first stream of empirical findings drawn from interviews with EU and non EU scientists and researchers and key informants in Cyprus demonstrated that participants' observations were in line with issues identified as some of the problems and challenges for EU and non EU scientists, researchers and HS migrants in Cyprus as highlighted in Chapters 2 and 3. Factors creating the flaws in EU law implementation in the country take the form of external<sup>10</sup> and internal<sup>11</sup> challenges, which the country needs to address with effective leadership<sup>12</sup> thus indicating a need of a stronger link between the dimensions that determine the strength of the State's organizational culture (Chapter 4).

The first major external challenge has been the island's political problem having a negative spill over the national research environment and the country's legal system. This is reflected in the territorial application of EU law provisions as a consequence of the island's division since Cyprus is not fully integrated into the EU and the EU law *acquis* is not applied on the whole of Cyprus. It is also evidenced by the 'isolation' of the Greek and Turkish Cypriot scientific communities and which has been considered detrimental for research promotion and development that would benefit the whole island. Cyprus' EU accession has not led to the island's reunification or to a complete restoration of human rights and free movement rights between the two communities.

The country's adherence to the *acquis communautaire* as a result of its EU membership and the EU influence at national level regarding migration laws and policies has proved to be a second external challenge. The underlying factors for flaws in the implementation of the law pertaining to EU migration Directives and soft law initiatives at the national level are attributed to the formulation of a migration policy which discourages migrants' prolonged stay due to the country's long-standing political problem. This coupled with a fear of threat of any potential alternation of the country's demography has resulted in restrictive policies for national citizenship acquisition, an issue extremely politicised.<sup>13</sup> Given the European dimension of Cyprus nationality as an EU MS, wrong/incomplete transposition of EU Law into national law coupled with the provision in the national law that vests the Interior Minister with considerable discretion in assessing migrants' applications and issuance of visas<sup>14</sup> may lead to rejection of citizenship application and issuance of detention and deportation orders for EU and non EU migrants.

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<sup>10</sup> Schein (n. 1), pp. 10-23.

<sup>11</sup> Ibid

<sup>12</sup> Ibid

<sup>13</sup> Sanja Ivic, 'EU Citizenship as a Mental Construct: Reconstruction of Post-national Model of Citizenship', (2012) *European Review*, 20 (3):419-437, p.429, p.431

<sup>14</sup> See Chapter 3 section: 3.6.1

A non- proactive attitude is also demonstrated in the area of HS migration, with the country finding the task of reconciling its policies with the challenges and realities related to HS migration difficult. As for Cyprus' obligation as an EU MS to integrate TCN migrants in its labour market through their accessing LTR status in the country this has also proven challenging. Cyprus' application of a very broad reading of the exceptions contained in the LTR provisions for those TCNs who have been admitted on temporary grounds prevents them from benefiting from the EU Directive on LTR<sup>15</sup> (Chapter 4).

On the national research environment one of the most significant findings to emerge is that it is characterized by lack of research culture, chronic scarcity of funding and ineffective national research policies and practices. The second major finding was that, bureaucracy, nepotism and corruption were identified as challenges facing meritocracy in the public sector which raise major difficulties for the setting up of an attractive research environment. Interviewees considered that these features impact negatively on retaining scientists in Cyprus as well as luring back those scientists who consider migrating to the country for employment or repatriation purposes. The present findings are consistent with previous research into scientific migration which found that the most important factors influencing scientific migration decisions are related to research and include the quality of the research environment and a transparent and meritocratic recruitment system<sup>16</sup> (Chapter 5).

Furthermore, the present findings indicate that as result of the challenges facing meritocracy, in the functional organization of the Cypriot public sector there is a brain waste of native and non- native scientists who enter the country. Consequently, Cypriot researchers opt to leave Cyprus giving rise to a potential brain drain phenomenon, indicating a loss of Cypriot researchers to other countries. This finding corroborates previous studies into brain drain for small states including Cyprus<sup>17</sup> and is also in line with several European Commission reports<sup>18</sup> which refer to a real brain drain threat in the country (chapter 5).

The second stream of empirical findings drawn from interviews with Cypriot scientists in the UK revealed their migration pattern and its determinants described as an

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<sup>15</sup> See Chapter 3 sections 3.6.2. D and 3.6.3

<sup>16</sup> Tom Casey et al., 'The Mobility of Academic Researchers: Academic Careers and Recruitment in ICT and Biotechnology', (2001) A joint JRC/IPTS-ESTO Study EUR 19905 EN, p.49; Sonia Morano-Foadi, 'Citizenship and Migration within the European Research Area: The Italian example' in Martínez Arranz, Alfonso Pascaline Winand and Natalie Doyle (eds.) *New Europe, New World?: The European Union, Europe and the Challenges of the 21<sup>st</sup>* (P.I.E.-Peterlang, 2010), p.106. See also Benedetto Lepori et.al., 'Competition for Talent. Country and Organizational-level Effects in the Internationalization of European Higher Education Institutions' (2015) Research Policy Volume 44, (3):789-802

<sup>17</sup> Maurice Schiff and Yanling Wang, 'Brain Drain and Productivity Growth: Are Small States Different?' (2008) IZA DP No. 3378

<sup>18</sup> See Chapter 3 section 3.5 and Chapter 5 section 5.4.1

initial emigration to the UK and return migration to Cyprus, and a re-emigration to the UK. The third migration pattern related to those Cypriot scientists, who had previously migrated to the UK and never chose to return to Cyprus. The strongest incentive to re-emigrate to the UK was the search for a better and more attractive research environment which provided the strongest incentive to re-emigrate to the UK. This finding is line with the present findings based on the first stream of interviews in Cyprus (chapters 4 and 5) and previous research which supports the idea that scientific migration is mostly driven by non- economic reasons.<sup>19</sup> The negative perceptions of the national research environment and research system and governance in Cyprus with features not closely linked to merit provided the incentive for re-emigration to the UK and the major driver for pushing them away from their country (Chapter 6).

### 7.3: Policy Implications

The timing is appropriate for Cyprus to move forward and implement the structural reforms undertaken by the present Government to change the culture, modernise the State and re-organise the country's R&I system. In the light of the findings of this thesis and the observations made in the preceding chapters regarding the Cypriot research environment the following recommendations or proposals could be put forward for action by policy makers.

#### **Formulate an integrated national R&I strategy and establish a consolidated R&I governance structure**

As shown in previous chapters Cyprus is demonstrating inefficiency and delay into formulating and implementing a NIP. There is lack of a focused strategic direction and vision of the policy framework and absence of a more efficient governance structure of the R&I system, evaluation mechanism of policies and almost non- existent institutional linkages (chapter 1: section 1.3.1. F. chapter 3: section 3.4, chapter 5: section 5.2.3.)

Re-organization of the R&I system based on a shared vision and direction for the design of a national policy and strategy and increased level of leadership commitment and strategic guidance is strongly recommended. At the same time there should be development of appropriate tools such as systematic mechanisms of monitoring, evaluation and reviewing to ensure subsequent stages of support, funding and implementation of research ideas as well as identifying omissions, gaps and inexcusable delays.

#### **Raise the overall attractiveness of the national research environment**

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<sup>19</sup> Stefano H. Baruffaldi and Paolo Landoni, 'Mobility Intentions of Foreign Researchers: The Role of Non-economic Motivations' (2016) *Industry and Innovation*, 23(1): 87-111.



There is general dissatisfaction with many aspects of the research environment in Cyprus. As shown in chapter 5 sections 5.2 and 5.3 lack of research culture, chronic scarcity of funding and challenges facing meritocracy in the public sector and administration in the form of bureaucracy, nepotism and corruption are characteristics encountered in the Cypriot national research environment. The above negative features were the major drivers for pushing scientists and researchers away from Cyprus and the strongest incentive for researchers who relocated to Cyprus to re-emigrate to the UK.

The prevalent attitude and culture in the public sector and national research environment should be changed to cultivate more favourable conditions for attracting and retaining scientists and researchers. A new attitude and culture should be fostered with commitment on the part of the leadership: public servant employees should be trained and their culture altered to respond more effectively to the new external and internal challenges of the national environment. This is an important element that has to be taken into account when implementing reforms and can be considered a tangible lesson.

Cultivation of a new meritocratic culture built on the country's strengths and not on any political or self-interest reasons will potentially eliminate the occurrence of anti-meritocratic characteristics such as nepotism and corruption that prevent the flourishing and strengthening of the national research culture.

The country clearly needs to improve the overall attractiveness of its research environment in order to potentially retain its HS and stimulate scientific return migration.

### **Revisit Migration Policy and Practices**

As shown in Chapters 3 and 4 despite good rules on free movement and often verbatim transposition there are still flaws in implementation and correct application of EU migration law provisions by the Cypriot administrative and immigration authorities resulting in numerous detrimental consequences for EU citizens and their TCN family members and constitute negative factors in the setting up of a more attractive and effective research environment. A number of case studies cited in Chapter 3: section 3.7 and taken from case law highlight and illustrate the challenges facing Cyprus in the areas of citizenship acquisition, Highly-skilled migration, and accessing the LTR status.

The adoption of a migration policy and system that would establish the preconditions for people who potentially meet the citizenship acquisition criteria is strongly recommended. Cyprus does not encourage integration and very often the conditions for migrants to access long-term status are unfavourable while the opportunities to naturalize are few (see chapter 3: sections 3.6.3.A and 3.6.3.D and chapter 4: sections 4.3.1, 4.3.2, and 4.3.3.C).

Taking into consideration that no updated integration action plan has been adopted for the period 2016-2018 since the previous ‘National Action Plan 2010-2012’<sup>20</sup> the development of a new integration plan for non- nationals is also strongly recommended (chapter 4: section 4.3.3.B, and chapter 5: section 5.2.3)

The State should seriously consider the adoption of a proactive migration policy towards attracting HS migrants, taking into account stimulation of scientific return migration.

In terms of management of the country’s implementation of EU law and policies there is a need to place clear guidelines and criteria for assessing migration applications by the relevant authorities. In order to ensure a more efficient management of migration issues the training of specifically appointed public employees with expert knowledge in handling the different categories of legal migrants is necessary.

In terms of monitoring and assessment the State should proceed with the setting up of specific working groups at a national level to monitor the implementation of EU Migration Directives (chapter 4: section 4.3.3). This will facilitate the task of targeting problems and providing solutions and ensuring proper enforcement.

#### **Better knowledge exchange and dissemination**

The majority of interviewees were found to have little knowledge of the various EU Soft Law Initiatives (chapter 4: section 4.3.3.D).

More organized work of the National Contact Points in knowledge exchange and dissemination and learning from other countries’ examples of good practices so as to create better and more researcher friendly administration procedures is strongly recommended.

#### **7.4: Academic Implications**

Compared to previous research on scientific migration, the more important contribution of the present study is the comprehensive analysis and study of both the legislative and policy framework of the ERA and the EU free movement provisions regarding EU and non-EU scientists it provides in a single study of considerable breadth.

By applying Schein’s organizational culture theory<sup>21</sup> within the broader dimensions of the EU and that of the State (Cyprus) (chapter 1: section 1.3.1) this thesis indicated the relevance of structural constraints and the crucial role MSs, EU institutions and stakeholders play in the shaping of favourable conditions for scientific migration to occur. Thus, this study sought to contribute to the understanding of the roles of these actors, and

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<sup>20</sup> Ministry of Interior, Proposal to the Council of Ministers, ‘National Action Plan for the Integration of Migrants lawfully residing in Cyprus 2010-2012’, 8 October 2010; Council of Ministers, Proposal number 1066/2010, decision no. 71104, 13 November 2010, David Officer and Yiouli Taki, ‘The Needs of Refugees and the Integration Process in Cyprus’, Report commissioned by the Cyprus Office of UNHCR and conducted by INDEX: Research & Dialogue (2013)

<sup>21</sup> Schein (n. 1)

the extent of their impact on EU and non EU migrant scientists and their families. Through this theoretical model it was possible to firstly analyze the role of the State in introducing and accommodating EU law and research policy in the country demonstrating the external, internal and leadership organizational culture effects that influence the setting up of an attractive research environment in the country. Secondly it was possible to account for political, national, social and cultural variables that render the acquis, regulating the migration of TCNs weak and ineffective, forming challenges at the national level.

The rich and in-depth narrative presented is valuable as it enables the comprehension of the extent of the impact of national practices and culture have on the current management of the country's implementation of and attitude towards EU migration law and ERA policies.

This research further enabled the surfacing of a set of hot policy issues that under a different theoretical model would be left unaccounted for. These include a form of brain waste unlike its traditional view which describes it as occurring following the HS emigration,<sup>22</sup> in that it is country-induced, causing stagnation of talent and providing incentive to emigrate exacerbating the brain drain phenomenon (chapter 5: section 5.4) . In the context of Cyprus, the brain waste phenomenon has been under-researched and therefore, the present results could serve as a basis for future studies investigating sociologically what it is that generates this phenomenon and whether it is encountered in the same form in other small countries. Additionally, it confirmed the relationship between return migration and the home country which is an aspect of scientific return migration relatively neglected at the national and European levels<sup>23</sup> (chapter 6).

Finally, the current findings add to a growing body of literature on the scientific migration determinants which suggests that economic factors do not demonstrate a strong impact<sup>24</sup> and that it is the overall attractiveness of the research environment that attracts and retains scientists and researchers rather than isolated features of it<sup>25</sup> (chapter 6). As the same time the present findings indicate the serious impact of the nature, demands and development of the research profession on the private and family issues of the people

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<sup>22</sup> Sonia Morano-Foadi and James Foadi, 'Italian Scientific Migration: From Brain Exchange to Brain Drain', (2003) Research Report No. 8, University of Leeds, Centre for the Study of Law and Policy in Europe [www.leeds.ac.uk/law/cslpe/phare/No.8.pdf](http://www.leeds.ac.uk/law/cslpe/phare/No.8.pdf). See also Ruth Uwaifo Oyelere, 'Brain Drain, Waste or Gain? What we Know About the Kenyan Case' (2007) *Journal of Global Initiatives* 2(2): 113-129 and Rasa Daugėlienė, 'The Peculiarities of Knowledge Workers Migration in Europe and the World' (2007) *Engineering Economics - Work Humanism* 3 (53): 57-64.

<sup>23</sup> See Chapter 6 section 6.2

<sup>24</sup> See Chapter 6 section 6.2 and 6.3.3

<sup>25</sup> Casey et al., (n. 16) p.47; See also Morano-Foadi (n. 16) and Milio et al., 'Brain Drain, Brain Exchange and Brain Circulation: The Case of Italy Viewed from a Global Perspective', (Aspen Institute 2012)

involved<sup>26</sup> (chapter 6: section 6.4.3.B). The implication is that further research is needed into this aspect of scientific mobility since the issues of private life, family life and planning particularly for dual-career couples<sup>27</sup> potentially determine their future migration plans.<sup>28</sup>

Despite the smallness of the empirical sample the incidence of return migration and re-emigration is high (chapter 1: section 1.2.15). However, further research is needed into the migration decisions of Cypriot scientists and researchers at various stages of their career in order to verify this finding and evaluate its impact on the Cypriot research environment taking into serious consideration the risk of the brain drain phenomenon (chapter 5: section 5.5).

The analysis of the research environment neutral element presented in this thesis is transferable in terms of methods since transparency; meritocracy and contact creation in the form of positive networking are common features within innovative and dynamic research environments.<sup>29</sup>

In the light of the above and considering the limitations of this study, the present results suggest that the major factor pushing native and non- native scientists, researchers and the HS away from Cyprus lies primarily within the national scientific and research environment and the political and cultural factors interwoven into it.

## 7.5: Looking into the future

The main challenges facing Cyprus today remain the same as those identified in the bailout agreement when the risk of economic collapse emerged in 2011<sup>30</sup> and as highlighted in the present study. Despite containing the fiscal and financial crisis and achieving growth through certain planning improvements and measures there is need for greater strategic planning and policy-implementation capacity with monitoring and repeated reassessment. Increased resolve to continue engaging decisively in structural and procedural reforms,

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<sup>26</sup> Marta Vohlidalova, 'Academic Mobility in the Context of Linked Lives' (2014) *Human Affairs* 24 (1): 89-102, p.98

<sup>27</sup> Philipp Dubach et al., 'Dual-career couples at Swiss universities' (2013) *Evaluation of the Swiss Federal Equal Opportunity at Universities Programme 3rd Period 2008-2011*, Centre for Labour and Social Policy Studies BASS AG

<sup>28</sup> Dora Costa, and Matthew Kahn, 'Power Couples: Changes in the Locational Choice of the College Educated, 1940-1990, (2000) *The Quarterly Journal of Economics*, 115 (4):1287-1315.

<sup>29</sup> See Chapter 6 section 6.3.2

<sup>30</sup> See: European Commission, 'The Economic Adjustment Programme for Cyprus' (2013) *Occasional Papers* 149 and IMF 'IMF Completes Eighth Review of Cyprus' EFF and Approves €126 Million Disbursement' (2015) *Press Release No. 15/433*

compliance with new policies and an effective administrative meritocratic culture are the prerequisites for the setting up of a more attractive national research environment.

# Appendices

## Appendix I:

### 1. Interview templates for EU and non-EU scientists, researchers, doctoral candidates in Cyprus and the UK

INTERVIEW TEMPLATE:

SCIENTISTS/ RESEARCHERS/DOCTORAL CANDIDATES

Date:

Time and Length of interview:

#### **Personal details**

Name of Scientist/researcher/doctoral student:

Country of origin:

#### **EMPLOYMENT HISTORY**

Could you please describe your employment and educational background since completing compulsory schooling?

[Prompt: periods of full-time & part-time work]

Present position:

#### **MIGRATION HISTORY**

What is your nationality/background?

Please describe your mobility experience (moving from one country to another). Describe: moves, countries concerned, reasons for the move.

[Probe for e.g. school, studies/degree, previous moves, other work, moved with family/partner , probe for gender-related reasons/barriers if relevant, probe for details of

country, type of schemes - experiences – did that encourage them to make this application/to migrate again?

## **FAMILY**

### **If the interviewee has a partner:**

Partner's employment status:

[Probe: is your partner in similar work area, at similar or different career stage, are they the principle income providers?]

Partner's nationality:

Can you please tell me whether your partner has moved with you or spent time periods with you during the time/s of being mobile?

How did you reach that decision?

How do you feel about that decision?

[Probe: impact on relationships, future plans, etc.]

### **If the interviewee has children:**

Number & age of children:

Can you please tell me whether your children have moved with you or spent time periods with you during the time/s of being mobile?

How did you reach that decision?

[Probe: impact on relationships, family life, on child care support, etc.]

### **Ask interviewees joined by family members:**

Please describe the process/steps involved in bringing your family to the destination country? What were the conditions to be complied with for the family to be reunited?

Where there any integration conditions prior/ after arrival in the destination country?

(language requirements/ civic course/test?)

What permits do your family members have? How long for? Does the length correspond with length of your stay?

Is your partner entitled to any social/ unemployment/child benefits? Is there availability of facilities for learning the language of the destination for partner?

How long did it take authorities to decide on the family reunification application from the submission date?

**Ask all interviewees: Contact**

How much and what sort of contact do you have with you family ( in home country)  
[Probe: is it mainly by telephone/email/Skype/ regular visits home, incidences of family illness, parents etc. – if so how have you dealt with this?

**Scientist's/Researcher's/Doctoral/Student's EXPERIENCE - LIVING IN**

**DESTINATION COUNTRY**

Regarding access to and experience using welfare services in the destination country:

Do researchers in Cyprus enjoy a special social- security statute?

Do you have welfare services access? Have you ever been in situation where you needed to be on any benefits? / Is there availability of statutory pension based on employment in the destination country when moving to a home or third country? / Access and supply of goods and services available to the public, including housing, counselling?

Regarding access to children's education - Which institution/accessibility/ who meets the costs/ Language of education (language of destination country/other language/ education option in native language)?

[Probe: if they have children for their experiences/use of child care services, schools etc.]

Regarding health care and social benefits access: Who did you ask for advice?



### Language

What is your native language?

What language do you speak at home?

If living with others, what language do you speak at home?

Ask about competency in the language of the destination country (incl. partner, children – language at school?)

Is there an impact of your language competence on social integration?

### Social Integration

Social networks – Who do you mainly socialize with? – Social life outside work

Do you feel integrated in to the society in the destination country? If so to what level and what influenced it? If not, why/ what do you see as the main issues preventing your better integration? Have you (or your partner & children) had any integration problems?

Have you ever felt that you were discriminated against in the workplace/elsewhere? If so, can you please describe the situation(s)?

What is your understanding of the integration process?

### **Scientist's/Researcher's/Doctoral Student's EXPERIENCE OF WORKING IN DESTINATION COUNTRY**

Are you satisfied with your employment, conditions/ contract?

Financial Matters - Adequacy of salary/allowances (especially when having to support a family)

Please tell me about your contract package with your employer in the destination country.

[Prompt: Provision for meeting the cost of health care? Sick leave? Education/healthcare for children/spouses? Learning language? Training available/provided? Is there sponsorship for the 1<sup>st</sup> month? Is anything else to add?

Can you please describe your terms & conditions of employment? [Prompt: Hours worked/Holidays entitlements/Sick leave/Working pattern/ Work place language]

Can you please describe your workplace experiences and interactions? [Prompt:With bosses? Colleagues? Other national associates? Language of interaction?]

Host workplace environment compared with Home workplace environment

Have you experienced any problems that could discourage researchers working in Cyprus/England?

### **CULTURE AND CULTURAL ATMOSPHERE**

Men's and women's position in your workplace environment

Describe experiences and/or express views about gender roles/the relative position and advantages of men and women in science/research/academia in private/public sectors and society as a whole.

Ask to comment on the representation of men and women in the host workplace environment compared to home country?)

How would you evaluate the research culture in Cyprus/ the UK?

### **IMPACT ON CAREER**

Your impression of your present post impact (and period spent in another country) on your career trajectory.

[Probe: is such a period abroad a necessary part of the career progression in your country/discipline or a potential risk, to the extent that you may have lost your position in the domestic career structure?

Would that be different if you were a man/or woman?

## **FUTURE PLANS/OR AMBITIONS**

What are your plans following your contract termination? What did you do after the previous contract termination? Do you plan another move, return home or remain in the destination country? [Probe for reasons – partner related etc.)

Do you feel that mobility will help you to achieve your career objectives? Will your current position be taken into account in future career development/prospect of promotion?) Is mobility recognized positively in the career path, If not why?

Are there obstacles for Cypriot researchers wishing to become out-going?

What happens to children being born/ educated in the destination country? Problems of language of education? What happens to your pension?

## **PROPOSALS FOR IMPROVEMENT**

Is there anything else you would like to add?

Do you have any suggestions about how the current scheme could be improved?

Do you have any ideas about how participation of women in science/research market could be improved?

Suggest other (non-legislative actions) that could help to facilitate access of non-EU researchers to Cyprus such as fast-track procedures based on your personal experience

## 2. Interview templates for Policy officers, government officials, key informants and other stakeholders in Cyprus

INTERVIEW TEMPLATE 2:

OFFICIALS/ POLICY MAKERS/INDIVIDUALS OF EXPERT OPINION

Date:

Time and Length of interview:

### **Personal details**

Name of Official/Policy maker/ Individual of expert opinion:

Country of origin:

### ***Employment History***

Could you please describe your field of work and your present position?

### ***Regarding mobility of Scientists, researchers, doctoral candidates***

Ask about provisions: are the current rules on this category of people satisfactory/ attractive/ causing problems/ implemented correctly/

Can you suggest further actions that could improve the current rules on scientists/ researchers/doctoral students coming to Cyprus/England?

Are you aware of any problems TCN scientists/ researchers/doctoral students face when they come to Cyprus/England?

From your experience do TCN scientists/ researchers/doctoral students feel secure with their employment, conditions/ contract?

Given your expert opinion how would you evaluate the research culture in Cyprus/ the UK?

Can you suggest further actions that could improve the current rules on scientists/ researchers/doctoral students coming to Cyprus/England?

**Relevant to Cyprus:** In your opinion how well does Cyprus implement Directive 2005/71/EC (12 October 2005) also known as the Researcher Directive? How well does Cyprus implements Directive 2009/50/EC (EU Blue Card Directive) on the conditions of entry and residence of TCNs for the purposes of HS employment adopted in 2009

Are there any minor changes in the wording of these Directives that may cause significant/ unpleasant situations by enforcing the right policies and measures?

Is KYSATS the Council for the Recognition of Higher Education Qualifications in close cooperation with the Education Ministry? It has been commented that the Education Ministry may recognize subjects taught in courses in foreign Universities while at the same time KYSATS will disagree.

### ***Regarding brain drain***

In your opinion what can be done to eliminate the brain drain risk in weaker MS?

In your opinion should there be guidance on an EU level so as to avoid brain drain?

**Relevant to Cyprus:** Is there a brain drain in Cyprus? What are its causes? Is it possible for brain waste in your country? If yes why? What can be done to eliminate the brain drain risk in Cyprus?

### ***Regarding HE***

In your opinion should the Charter and Code (C&C) be a legal requirement for EU HEIs?

In your opinion should EU HEIs be penalized when not implementing the C&C correctly?

Do you think University curricula reflect emerging disciplines and markets?

Do you think there should be stakeholders' participation in decision-making processes about university curricula regarding research/ science?

Can you suggest ways in which academia and industry can benefit the most from each other?

**Relevant to Cyprus** It has been commented that the Cypriot Ministry of Education and Culture (CMEC) is not actively involved in research and innovation.

In your opinion, should the Ministry be more actively involved in research and innovation?

(If the response is positive) Please describe the reasons why and ask:

How can the CMEC be more actively involved in research and innovation?

In your opinion could a scientist/researcher/doctoral student with the ability to move between two disciplines considered an advantageous or disadvantageous candidate for employment? Why? Why not?

### ***Collaboration between MSs regarding research***

In your opinion how could collaboration between MSs' policies regarding research become more strengthened, committed and effective? What can Cyprus/England offer the most in this area?

Can the high level of investment in education in a MS such as Cyprus lacking research infrastructure be absorbed qualitatively by another MS' research community in exchange with needed material or relevant aid to the first MS? If yes how

Can the high level of investment in education in a MS lacking research infrastructure be used in any way to raise research investment in cooperation with other MSs with high level of investment in research?

### ***Regarding policy making***

In your opinion should there be an ERA Framework Directive? What should this Directive include [Probe for example non-discrimination/ equal opportunity/transparency/ subsidiarity/proportionality/ Scientific autonomy/ gender aspects in research/MSs' monitoring of commitment/systematic inclusion of dedicated ERA-related policy in National Reform Programmes/ Monitoring of HE adherence to and implementation of C&C/ Adherence to a common European approach and practices to research ethics and scientific integrity]

## **PROPOSALS FOR IMPROVEMENT**

- Is there anything else you would like to add?
- Do you have any suggestions about how the current landscape could be improved?
- Suggest other (non-legislative actions) that could help to improve non-EU researchers' mobility to Cyprus based on your personal experience

- Do you believe that an independent concept with the Union rather than nationally-derived meaning would provide EU movement rights with a momentum they currently lack?

## Appendix II:

### 1. The Recruitment poster

OXFORD  
BROOKES  
UNIVERSITY

## Researchers, Scientists, Doctoral Candidates:

You are kindly invited to take part in a PhD research  
project

I am examining the free movement of scientists within the ERA  
provided to you and how this may affect your mobility, your  
present and future career and everyday life to potentially inform  
policy makers and legislators.



**If you are a researcher at any stage, scientist or a doctoral  
candidate and would like to potentially contribute to a better understanding  
of your working conditions in academia and research**

**Then share your personal experience**

**If what you have read is of interest to you THEN why not participate in  
this PhD Research Project**

**Please do not hesitate to contact Ms xxxxxxxx on:  
Mobile phone: xxxxxxxx or Email: xxxxxxxx**

## **2. Participant's information sheet for EU and non-EU scientists, researchers, doctoral candidates**

School of Law, Faculty of Humanities and Social Sciences, Oxford Brookes University

Headington Hill Hall, Oxford OX3 0BP

### **Participant Information Sheet for: EU and non-EU scientists, researchers and doctoral candidates**

“Free movement of scientists within the European Research Area: An analysis of the Cypriot Research Market”

#### **An invitation to participate in this study-**

**You are being kindly invited to participate in this research study. However, before you decide whether or not to participate it is important for you to understand the study purpose and what it involves. Please take time to read the following information carefully and feel free to ask if you have any questions.**

#### **Purpose and outline:**

This Doctoral research study (on a part time basis: start date September 2012 and end date September 2016) aims at evaluating the legislative and policy framework of the European Research Area (ERA). In order to understand the ERA Cyprus is used as a case study.

There are **two** phases in this project structure:

**The first phase** analyses the laws and policies on the research area and free movement of scientists, researchers and doctoral students.

**The second phase** aims at conducting interviews with scientists, researchers and doctoral students as well as with policy-makers, government officials and other stakeholders in Cyprus, England and EU centres of influence.

#### **The aims of this research are**

- **To** analyse the theoretical and legal framework on research and free movement of scientists at EU and national level
- **To** compare law-policy on the one hand and actual practices on the other relevant to this category of people in order to understand the differences at EU and national levels.
- **To** provide an analysis of the EU and Cyprus legal systems concerning the research market in order to identify strengths and weaknesses of each system and propose recommendations to legislators and policy makers at national and European levels.

#### **Why have I been invited to take part?**



You have been invited to participate in this research project because of your experience as a scientist, researcher or doctoral candidate. Your experiences and views are valuable for this study since you will provide your perspective on what the impact of the national laws and policies is on your free movement rights and working conditions.

### **Do I have to participate?**

Participation is entirely voluntary. If you do decide to participate, you will be given this information sheet to keep and a consent form to sign. Even after deciding to participate you are still free to withdraw at any time without giving a reason.

### **What does participation involve?**

The first action is to complete a questionnaire and then be invited to volunteer for in-depth interviews. The interview will be semi-structured audio-recorded and will last about 1-2 hours. Participants whose interview will be over the telephone will be informed at what point the audio-recording of their conversation will start and end. The interviews will take place at the place of work in Nicosia, and Oxford. The interview template will be made available on request prior to the interview. An interview transcript will be sent to you on request for accuracy checking.

### **What are the possible disadvantages and risks of participating?**

The interview will take some of your time but there will be no direct costs involved.

However, because of the small sample size, it may be possible for participants to be identified. **What are the possible benefits of taking part?**

There are no direct benefits to individuals. However, it is hoped that your participation will further the understanding of the topic and provide a basis for recommendations to policy makers since the aim of this study is to contribute to the improvement of free movement provisions, working conditions and career paths of scientists, researchers and doctoral students who are or will be mobile within the EU.

### **Will what I say in this study be kept confidential?**

All information about participants collected will be kept strictly confidential (subject to legal limitations). The data provided will be anonymised through the use of pseudonyms after they are returned to you in the form of transcripts for verification. Data generated by the study will be retained in accordance with the University's policy on Academic Integrity. This includes data being kept in paper and electronic format for a period of ten years after the research project completion. A full-disk encryption in Windows will be used through employing the appropriate software to do it.

### **What should I do if I want to participate in this research project?**

You should "opt in" for the study signing the consent form which will be sent to you via email. Then you are kindly asked to contact the researcher and provide an email address.

Before the interview commences there will be a repeat explanation of the study aims and the opportunity to ask any questions.

**What will happen to the results of the research study?**

The research results will be published in the form of a PhD thesis and possibly in conference papers. A summary of the findings will be available on request.

**Who is organizing the research?**

The principal investigator who is conducting this research is a PhD candidate at the School of Law, Faculty of Humanities and Social Sciences, Oxford Brookes University. The candidate is supervised by xxxxxxxx a Reader in Law at the School of Law, Faculty of Humanities and Social Sciences, Oxford Brookes University (T: xxxxxxxxx E: xxxxxxxxxxxxxx)

**Who has reviewed the study?**

The research has been approved by the University Research Ethics Committee, Oxford Brookes University ([ethics@brookes.ac.uk](mailto:ethics@brookes.ac.uk))

**Contact for further information:** xxxxxxxx LLM, BA, PhD Candidate, Oxford Brookes University, Faculty of Humanities and Social Sciences, School of Law, Headington Hill Hall, Oxford, OX3 0BP; E-mail:xxxxxxxxxxx; Mobile: xxxxxxxxx; web page: <http://www.law.brookes.ac.uk>

**Thank you**

**Date:**

### **3. Participant's information sheet for Officials/ policy-makers/government official/Individuals with expert opinion**

School of Law, Faculty of Humanities and Social Sciences, Oxford Brookes University  
Headington Hill Hall, Oxford OX3 0BP

#### **Participant Information Sheet for: Officials/ policy-makers/government official/Individuals with expert opinion**

“Free movement of scientists within the European Research Area: An analysis of the Cypriot Research Market”

#### **An invitation to participate in this study-**

**You are being kindly invited to participate in this research study. However, before you decide whether or not to participate it is important for you to understand the study purpose and what it involves. Please take time to read the following information carefully and feel free to ask if you have any questions.**

#### **Purpose and outline:**

This Doctoral research study (on a part time basis: start date September 2012 and end date September 2016) aims at evaluating the legislative and policy framework of the European Research Area (ERA) and the EU “free movement” provisions applicable to EU and non-EU scientists moving within the EU. In order to evaluate the effect of the interplay between the EU “free movement” provisions and the ERA, Cyprus is used as a case study.

There are **two** phases in the project structure:

**The first phase** analyses the laws and policies on the research area and free movement of scientists, researchers and doctoral candidates.

**The second phase** aims at conducting interviews with scientists, researchers and doctoral candidates as well as with policy-makers, government officials and other stakeholders in Cyprus, England and EU centres of influence.

#### **The aims of this research are**

- **To** analyse the theoretical and legal framework on research and free movement of scientists at the EU and national levels.
- **To** compare law-policy on the one hand and actual practices on the other relevant to this category of people in order to understand the differences at EU and national levels.

- **To provide an analysis of the EU and Cyprus legal systems concerning the research market in order to identify strengths and weaknesses of each system and propose recommendations to legislators and policy makers at national and European levels.**

### **Why have I been invited to take part?**

You have been invited to participate in this research project because of your experience as an official/ policy-makers/government official and/or as an individual who is in a position to have insight knowledge on the topic. Your experiences and views are valuable for this study since you will provide your perspective on what the impact of the national laws and policies is on the free movement rights, working conditions, employment process and contract of EU and non-EU scientists, researchers and doctoral candidates. Interviews will also take place with scientists, researchers and doctoral candidates in Cyprus and England.

### **Do I have to participate?**

Participation is entirely voluntary. If you do decide to participate, you will be given this information sheet to keep and a consent form to sign. Even after deciding to participate you are still free to withdraw at any time without giving a reason.

### **What does participation involve?**

**Participation involves taking part in an interview. If it is more convenient you will be sent a follow-up questionnaire.**

The interview will be semi-structured audio-recorded and will last about 1-2 hours. Participants whose interview will be over the telephone will be informed at what point the audio-recording of their conversation will start and end. The interviews will take place at the place of work in Nicosia, and Oxford. The interview template will be made available on request prior to the interview. An interview transcript will be sent to you on request for accuracy checking.

### **What are the possible disadvantages and risks of participating?**

The interview will take some of your time but there will be no direct costs involved. However, because of the small sample size, it may be possible for participants to be identified.

### **What are the possible benefits of participating?**

There are no direct benefits to individuals. However, it is hoped that your participation will further the understanding of the topic and provide a basis for recommendations since the study aim is to contribute to the improvement of free movement provisions, working conditions and career paths of scientists, researchers and doctoral candidates within the EU and simplification of their employment process and contracts.

### **Will what I say in this study be kept confidential?**

All information about participants collected will be kept strictly confidential (subject to legal limitations). The data provided will be anonymised through the use of pseudonyms after they are returned to you in the form of transcripts for verification. Data generated by

the study will be retained in accordance with the University's policy on Academic Integrity. This includes data being kept in paper and electronic format for a period of ten years after the completion of the research project. A full-disk encryption in Windows will be used through employing the appropriate software to do it.

**What should I do if I want to participate in this research project?** You should "opt in" for the study signing the consent form which will be sent to you via email. Then you are kindly asked to contact the researcher and provide an email address. Before the interview commences there will be a repeat explanation of the study aims and the opportunity to ask any questions.

**What will happen to the results of the research study?** The research results will be published in the form of a PhD thesis and in possibly in conference papers. A summary of the findings will be available on request.

**Who is organizing the research?** The principal investigator who is conducting this research is a PhD candidate at the School of law, Faculty of Humanities and Social Sciences, Oxford Brookes University. The candidate is supervised by xxxxxxxx, a Reader in Law at the School of Law, Faculty of Humanities and Social Sciences, Oxford Brookes University xxxxxx E: xxxxxxxx

**Who has reviewed the study?** The research has been approved by the University Research Ethics Committee, Oxford Brookes University ([ethics@brookes.ac.uk](mailto:ethics@brookes.ac.uk))

**Contact for further information:** xxxxxx LLM, BA, PhD Candidate, Oxford Brookes University, Faculty of Humanities and Social Sciences, School of Law, Headington Hill Hall, Oxford, OX3 0BP; E-mail xxxxxxxxxx; Mobile: xxxxxxxx; web page: <http://www.law.brookes.ac.uk>

**Thank you**

**Date:**

#### 4. Consent form

### CONSENT FORM

**Full title of Project:** “Free movement of scientists within the European Research Area: An analysis of the Cypriot Research Market”.

**Name, position and contact address of Principal Investigator:** xxxxxxxx LLM, BA, PhD Candidate, Oxford Brookes University, Faculty of Humanities and Social Sciences, School of Law, Headington Hill Hall, Oxford, OX3 0BP; E-mail: xxxxxxxxxx; Mobile:xxxxxxx; web page: <http://www.law.brookes.ac.uk>

**Please tick initial box**

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reason.
3. I agree to take part in the above study.

**Please tick box**

- |  | <b>Yes</b>               | <b>No</b>                |
|--|--------------------------|--------------------------|
| 4. I agree to the interview being audio recorded           | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. I agree to the use of anonymised quotes in publications | <input type="checkbox"/> | <input type="checkbox"/> |

-----	-----	-----
Name of Participant	Date	Signature
-----	-----	-----
Name of Researcher	Date	Signature

**Appendix III:**

**1. QUESTIONNAIRE FOR SCIENTISTS IN CYPRUS**

**PART 1:**

**In what capacity are you completing this questionnaire?**

Non-EU experienced Researcher	<input type="checkbox"/>
EU experienced Researcher	<input type="checkbox"/>
Non-EU doctoral candidate/early-stage researcher	<input type="checkbox"/>
EU doctoral candidate/early-stage researcher	<input type="checkbox"/>
Other	<input type="checkbox"/>

Please specify.....

**Age group:**

25-35		36-46		47-57		57+	
-------	--	-------	--	-------	--	-----	--

**Gender:** Male  Female

**Status:** Married  Married with children  Single

**Holder of:**

First degree (Bachelor)	<input type="checkbox"/>
Second Degree(Master)	<input type="checkbox"/>
Doctoral candidate	<input type="checkbox"/>
PhD degree	<input type="checkbox"/>

**Country of origin**

--

**Current country of residence or where your organization is based**

--

**Country from which you hold citizenship**

--

**Are you a holder of more than one citizenship?**

Yes		No	
-----	--	----	--

**Please specify here:**

--

**Have you ever been mobile?**

Yes		No	
-----	--	----	--

**Have you ever considered being mobile?**

Yes		No	
-----	--	----	--

**Would you like to be mobile?**

Yes		No	
-----	--	----	--

**You are:**

<b>Employed</b>		<b>Unemployed</b>		<b>Part – time employed</b>	
-----------------	--	-------------------	--	-----------------------------	--



**PART 2:**

1. What are the main obstacles for you as an incoming researcher in Cyprus?

(You may choose more than one option given)

	In general	You as a researcher
a) Funding		
b) Family		
c) Culture		
d) Language		
e) Administrative and legal issues		
f) Visas		
g) Residence permits		
h) Insufficiently clear definitions regarding the legal quality and format of hosting agreements		
i) Insufficiently uniform way of updating and publishing the list of research organizations		
j) Insufficiently binding time limits for deciding on an application		
k) Immigration rules and procedures can be tiring and complicated		
Other		
Please specify:		

2. With which of the following would you agree for the capacity of the Cypriot research community?

a) It is restricted and requires considerable administrative and financial assistance	
b) It is relatively restricted and requires considerable administrative and financial assistance	
c) It is producing outputs but needs further administrative and financial boosts to further thrive	
d) It is producing outputs and only requires financial boosting	

3. What measures are taken to increase the number of women researchers in top-level positions and decision-making bodies?

a) Granting applicants fair access to competition-based research posts nationally	
b) Granting applicants fair access to competition-based research posts internationally	
c) Awareness schemes to raise women's interest in research and science	
d) Application of gender balance principle in national institutions, charters, etc	
e) Bodies dedicated to the issue of gender imbalance	
f) Fair recruitment procedures	
g) Even distribution to both sexes of resources, social networks, encouragement	
h) Attractive working conditions for women researchers	
i) Monitoring the equal representation of both sexes in the research profession in special bodies within ministries, committees, councils etc	
Other	

Please specify:
-----------------

4. What measures ensuring a representative gender balance for researchers are introduced by the government of the Republic of Cyprus?

a) Application of gender balance principle in national institutions, charters, etc	
b) Bodies dedicated to the issue of gender imbalance	
c) Fair recruitment procedures	
d) Even distribution to both sexes of resources, social networks, encouragement,	
e) Granting applicants fair access to government posts	
Other	
Please specify:	

5. It is a fact that the Charter and Code has been endorsed by both private and public Universities in Cyprus.

With which of the following would you agree for whether and how the Charter and Code is implemented?

a) Very satisfactorily	
b) Satisfactorily	
c) Poorly	
d) Don't know	
Other	
Please specify:	

6. Are you aware of the EU initiatives aiming at promoting the mobility of researchers such as the EURAXES services?

Yes		No	
-----	--	----	--

7. What measures to increase the quality of doctoral training are you aware of?

a) Preparation for market needs	
b) Awareness of Intellectual property rules	
c) Management of researches' Intellectual property	
d) Employment prospects	
e) Awareness of knowledge transfer opportunities	
Other	
Please specify: .....	
.....	

8. Are you aware of any measures to encourage researchers to move from the public to the business sector?

Yes		No	
-----	--	----	--

9. Are you aware of any measures to encourage researchers to move from the business sector to the public sector?

Yes		No	
-----	--	----	--

10. How would you evaluate the research culture in Cyprus?

a) There is rich research culture	
b) There is satisfactory research culture	
c) There is relatively little research culture	
d) There isn't any research culture	

11. Do you think there should be a set time limit for the Member State to decide on whether to give a researcher permission to come to the country?

Yes		No	
-----	--	----	--

12. Do you think there should be access and stay of researchers for stays below 3 months?

Yes		No	
-----	--	----	--

13. Does the national research system of Cyprus attract researchers?

Yes		No	
-----	--	----	--

Please explain:

--

14. Does the national research system of Cyprus retain researchers?

Yes		No	
-----	--	----	--

Please explain:

--

15. Do early-stage researchers have access to positions in public sector academia?

Yes		No	
-----	--	----	--

Please explain:

16. Do early-stage researchers have access to positions in private sector academia?

Yes		No	
-----	--	----	--

Please explain:

17 Do you believe research institutions have gender equality strategies and/or adequate capacities to implement them?

Yes		No	
-----	--	----	--

Please explain:

**Once completed please send to:**           XXXXXXXXXXXXXXXXXXXX

E- mail:                                   XXXXXXXXXXXXXXXXXXXX

*If you are interested in taking part in an interview, please contact the researcher*

**THANK YOU**

## 2. QUESTIONNAIRE FOR SCIENTISTS IN THE UK

### PART 1:

**In what capacity are you completing this questionnaire?**

Non-EU experienced Researcher

EU experienced Researcher

Non-EU doctoral candidate/early-stage researcher

EU doctoral candidate/early-stage researcher

Other


Please specify.....

**Age group:**

25-35		36-46		47-57		57+	
-------	--	-------	--	-------	--	-----	--

**Gender:**

Male

Female

**Status:**

Married

Married with children

Single

**Holder of:**

First degree (Bachelor)	
Second Degree (Master)	
Doctoral candidate	
PhD degree	

**Country of origin**

**Current country of residence or where your organization is based**

**Country from which you hold citizenship**

**Are you a holder of more than one citizenship?**

Yes		No	
-----	--	----	--

**Please specify here:**

--

**Have you ever been mobile?** (as in willing to leave country of origin?)

Yes		No	
-----	--	----	--

**Have you ever considered being mobile?**

Yes		No	
-----	--	----	--

**Would you like to be mobile?**

Yes		No	
-----	--	----	--

**You are:**

<b>Employed</b>		<b>Unemployed</b>		<b>Part – time employed</b>	
-----------------	--	-------------------	--	-----------------------------	--

**PART 2:**

**1. What are the main obstacles for you as an incoming researcher in the UK?**

(You may choose more than one option given)

	In general	You as a researcher
a) Funding		
b) Family		
c) Culture		
d) Language		
e) Administrative and legal issues		
f) Visas		
g) Residence permits		
h) Insufficiently clear definitions regarding the legal quality and format of hosting agreements		
i) Insufficiently uniform way of updating and publishing the list of research organizations		
j) Insufficiently binding time limits for deciding on an application		
k) Immigration rules and procedures can be tiring and complicated		
Other		



Please specify:
-----------------

2. With which of the following would you agree for the capacity of the UK research community?

a) It is restricted and requires considerable administrative and financial assistance	
b) It is relatively restricted and requires considerable administrative and financial assistance	
c) It is producing outputs but needs further administrative and financial boosts to further thrive	
d) It is producing outputs and only requires financial boosting	

3. What measures are taken to increase the number of women researchers in top- level positions and decision-making bodies?

a) Granting applicants fair access to competition-based research posts nationally	
b) Granting applicants fair access to competition-based research posts internationally	
c) Awareness schemes to raise women's interest in research and science	
d) Application of gender balance principle in national institutions, charters, etc	
e) Bodies dedicated to the issue of gender imbalance	
f) Fair recruitment procedures	
g) Even distribution to both sexes of resources, social networks, encouragement	
h) Attractive working conditions for women researchers	
i) Monitoring the equal representation of both sexes in the research profession in special bodies within ministries, committees, councils etc	
Other	
Please specify	

4. What measures ensuring a representative gender balance for researchers are introduced by the government of the UK?

a) Application of gender balance principle in national institutions, charters, etc	
--	--

b) Bodies dedicated to the issue of gender imbalance	
c) Fair recruitment procedures	
d) Even distribution to both sexes of resources, social networks, encouragement,	
e) Granting applicants fair access to government posts	
Other	
Please specify:	

5. Has the Charter and Code been endorsed by both private and public Universities in the UK?

With which of the following would you agree for whether and how the Charter and Code is implemented?

a) Very satisfactorily	
b) Satisfactorily	
c) Poorly	
d) Don't know	
Other	
Please specify:	

6. Are you aware of EU initiatives aiming at promoting the mobility of researchers such as the EURAXES services?

Yes		No	
-----	--	----	--

7. What measures to increase the quality of doctoral training are you aware of?

a) Preparation for market needs	
b) Awareness of Intellectual property rules	
c) Management of researches' Intellectual property	
d) Employment prospects	
e) Awareness of knowledge transfer opportunities	
Other	
Please specify: .....	
.....	

8. Are you aware of any measures to encourage researchers to move from the public to the business sector?

Yes		No	
-----	--	----	--

9. Are you aware of any measures to encourage researchers to move from the business sector to the public sector?

Yes		No	
-----	--	----	--

10. How would you evaluate the research culture in the UK?

a) There is rich research culture	
b) There is satisfactory research culture	
c) There is relatively little research culture	
d) There isn't any research culture	

11. Do you think there should be a set time limit for the Member State to decide on whether to give a researcher permission to come to the country?

Yes		No	
-----	--	----	--

12. Do you think there should be access and stay of researchers for stays below 3 months?

Yes		No	
-----	--	----	--

13. Does the national research system of the UK attract researchers?

Yes		No	
-----	--	----	--

Please explain:

--

14. Does the national research system of the UK retain researchers?

Yes		No	
-----	--	----	--

Please explain:

--

15. Do early-stage researchers have access to positions in public sector academia?

Yes		No	
-----	--	----	--

Please explain:

--

16. Do early-stage researchers have access to positions in private sector academia?

Yes		No	
-----	--	----	--

Please explain:

--

17. Do you believe research institutions have gender equality strategies and/or adequate capacities to implement them?

Yes		No	
-----	--	----	--

Please explain:

--

**Once completed please send to:**

XXXXXXXXXXXXX  
E- mail: XXXXXXXXXXXXX

*If you are interested in taking part in an interview, please contact the researcher*

***THANK YOU***

**2 QUESTIONNAIRE FOR POLICY MAKERS (For those unable to attend an interview)**

**1a In what capacity are you completing this questionnaire?**

a. Active participant in EU policy making	
b. Member of academia (university/ higher education)	
c. Consultant.....	
d. Public authority.....	
e. NGO.....	
f. Educational establishment .....	
g. Research organization.....	
h. Public research organization.....	
i. Research funding organization.....	
j. International organization.....	
k. Company.....	
l. Other.....	

**1b. Please indicate your field of work (more than one may be indicated)**

Agriculture ...	
Biotechnology....	
Energy....	
Environment.....	
Security....	
Immigration.....	
Transport.....	
Food.....	
Health .....	
Industrial technology.....	
Socioeconomic sciences and humanities.....	
International co-operation.....	
Nanotechnology.....	
policy making/management.....	
Regional development.....	
Research infrastructures.....	
Space.....	
Law .....	
Other	

**2. Age group:**

25-35		36-46		47	
-------	--	-------	--	----	--

**3. Gender:**

Male		Female	
------	--	--------	--

4. Under the current EU rules, non-EU researchers conclude a 'hosting agreement' with a recognized research institution before they are allowed to enter and reside in a Member State. In your view,

a) the hosting agreement mechanism is satisfactory the way it is	
b) the hosting agreement needs modification so as to provide more detailed guidance on its form and content	
c) replace the hosting agreement mechanism	

5. Do you think the attractiveness of the EU as a destination for researchers should be improved?

Yes		No	
-----	--	----	--

If Yes please specify.....

6. Do you think researchers should have more access to the labour market during their period of research (not just teaching) through a specific mechanism that could provide them this?

Yes		No	
-----	--	----	--

7. Do you think researchers who have permission to come to a Member State should be allowed to go to another Member without following specific procedures?

Yes		No	
-----	--	----	--

8. Do you think more legislative actions could help to facilitate access of non-EU Researchers to the EU?

Yes		No	
-----	--	----	--

If yes, please specify .....

9. With which do you agree:

a. All non-EU PhD candidates should be treated in the same way, i.e. as students.	
b. All non-EU PhD candidates should be treated in the same way, i.e. as researchers.	
c. Depending on the specific situation of the non-EU PhD candidates (e.g. depending on if they study full-time or while working for a private company), it should be left to national authorities to decide on their status.	
d. Depending on the specific situation of the non-EU PhD candidates (e.g. depending on if they study full-time or while working for a private company), it should be left to an ERA authority to decide on their status.	

10. In your opinion

a. ERA should acquire a legal framework through an ERA framework Directive	
b. ERA should rely only on enhanced political arrangements between Member States	
c. ERA should remain the way it is	

**11** In your opinion, rules should:

a. Include specific measures for researchers coming under the framework of EU financed programmes for mobility (eg. Marie Curie)	
b. Target all non-EU researchers without distinction	

**12.** In your opinion

a. All EU financed programmes should come under one umbrella and carry the acronym ERA	
b. All EU financed programmes should continue the way they are	

**13.** In your opinion

a. There should be ERA specialized offices handling all researchers' applications according to their field of expertise	
b. The way EU financed programmes function should remain the way they are	

**14.** In your opinion is the Charter and Code implemented in a satisfactory way in EU Higher Education Institutions?

Yes		No	
-----	--	----	--

**15.** Should national governments include the European dimension when deciding their research policies and allocation of budgets?

Yes		No	
-----	--	----	--

**16.** In your opinion

The involvement of stakeholders (research performing organizations including universities, funding agencies, researchers, private sector, civil society etc.) in ERA policy processes (fixing objectives, priorities, monitoring, etc.) is a requirement for the completion of ERA?

Yes		No	
-----	--	----	--

**17.** In your opinion

Are the present methods of monitoring and evaluating progress of ERA initiatives satisfactory?

Yes		No	
-----	--	----	--

If your response is negative, please describe what other methods of monitoring and evaluating could be employed .....

**18.** In your opinion

Can the well- functioning of ERA at national and EU level be achieved with the current level of policy development, coordination and implementation?

Yes		No	
-----	--	----	--

If your response is negative, please describe what other structures and processes are required .....



**19. In your opinion**

Do European scientists and research organizations have sufficient access to the scientific and technological programmes of third countries?

Yes		No	
-----	--	----	--

If your response is negative, please explain.....

**20. In your opinion do non- European scientists and research organizations have sufficient access to the scientific and technological programmes of EU MSs ?**

Yes		No	
-----	--	----	--

If your response is negative, please explain.....

**Once completed please send to: xxxxxxxxxxxxxxxxx**

E- mail:xxxxxxxxxxxxxxxxxxxxxx

**THANK YOU**

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