

COUNTRY REPORT

Social Sciences and Humanities in Ireland

2012 Report

The Social Sciences and Humanities are influential for all Member States and for the European Commission. Thousands of researchers carry out research in a vast array of themes of national and international interest. They do so taking into account their organizational structures, framework conditions, as well as cultural preferences and political priorities in their countries.

METRIS is an initiative of the Directorate-General for Research and Innovation (DG RTD) which aims to become an entry and reference point for the social sciences and humanities landscapes in Europe. Commissioned by the ERA Directorate of DG RTD and performed via the Metris-Network, it pursues the collection, regular updating, and analysis of information on social sciences and humanities at national and European level.

METRIS products

All products are brought together under the website www.metrisnet.eu. It provides METRIS country profiles for all EU-27 countries plus another 15 European and non-European countries, most of them Associated countries to the European Union's Research Framework Programme. The website provides access to the following services and publications, as they become available:

- Regularly updated country profiles of SSH systems in 42 countries;
- a news service;
- annual monitoring reports for all countries covered;
- synthesis reports bringing together key points;
- links to relevant reports and websites

This document has been prepared within the framework of an initiative of the European Commission's Research and Innovation Directorate-General, addressing the ERAWATCH Network asbl. The METRIS network is managed by Technopolis Consulting Group, the project manager is Dr. Viola Peter (viola.peter@technopolis-group.com).

The present report was prepared by Tom Martin, Tom Martin & Associates/TMA; email addresses: (info@tma.ie). The contents and views expressed in this report do not necessarily reflect the opinions of the Member States or the European Commission.

The report covers the period from September 2011 to December 2012.

Copyright of the document belongs to the European Commission. Neither the European Commission, nor any person acting on its behalf, may be held responsible for the use to which information contained in this document may be put, or for any errors which, despite careful preparation and checking, may appear.

1. Country Overview	1
1.1 Overview of SSH System	1
1.1.1 Overview of the structure	1
1.1.2 Recent changes in the system	2
1.2 Policy challenges and developments	3
1.2.1 Main societal challenges translated into SSH research	3
1.2.2 New SSH policy developments	3
2. Policy Setting System	5
2.1 Government policy making and coordination	5
2.1.1 Policy formulation and coordination	5
2.1.2 SSH policy advice	6
2.1.3 Main implementing bodies	7
2.2 Impacting factors	8
2.2.1 Policy fields influencing SSH policies	8
2.2.2 Influence of European and international developments	9
2.2.3 Relevance of European and international SSH research	10
2.2.4 Impact of evaluations	13
2.2.4.1 Project evaluation	14
2.2.4.2 Programme evaluation	14
2.2.4.3 Institutional evaluation	14
2.2.5 Impact of infrastructures	14
2.3 Important policy documents	15
2.4 Thematic priorities at national level	16
2.5 Important research programmes	18
2.6 SSH research infrastructures	21
2.6.1 National infrastructures	21
2.6.2 International infrastructures	22
3. Funding System	24
3.1 Overview of funding flows	24
3.2 National public SSH research funding	25
3.2.1 Overview of funding importance	25

3.2.2 Institutional funding	26
3.2.3 Individual funding	26
3.2.4 Programme Funding	27
3.3 Private research funding	28
3.4 Foundations/ not-for-profit funding	29
3.5 European and international funding	29
4. Performing System	30
4.1 Overview of the performers	30
4.2 Higher Education Institutions	31
4.2.1 HEIs as education performers	31
4.2.2 HEIs as research performers	34
4.3 Public Research Organisations	35
4.4 Private research performers	37
4.5 Research performance	38
4.5.1 Scientific publications	38
4.5.2 Interdisciplinarity	40
4.5.3 International Cooperation	42
References	43

1. Country Overview

1.1 Overview of SSH System

1.1.1 Overview of the structure

There have been a number of significant changes in the SSH system since the 2011 report.

At the apex of the political system is the Government which is the primary decision-making entity. A cabinet sub-committee on science, technology and innovation had been established in 2004 to oversee the State's investment in research in innovation. However due to the economic crisis, this sub-committee has been replaced by a new cabinet sub-committee, the cabinet sub-committee on Economic Recovery and Jobs.

The main Government departments (ministries) having responsibility for implementing SSH research policies are the Department of Education and Skills and the Department of Jobs, Enterprise and Innovation.

The Department of Education and Skills is the provider to the universities and institutes of technology of the core or "block" grant provided which is an important source of funds for SSH research. The block grant is provided through the Higher Education Authority (HEA), which has a statutory planning and policy development role in relation to higher education and research in Ireland.

The Department had also been the parent ministry of the Irish Research Council for the Humanities and Social Sciences (IRCHSS), which had been the only dedicated funder of SSH research in the Irish system. The IRCHSS provided funding for individual SSH researchers and, additionally, funded collaborative and project research in both national and international contexts. The IRCHSS also provided policy advice to the Department on SSH issues. In 2012, the Government decided to merge the IRCHSS with its sister research council, the Irish Research Council for Science, Engineering and Technology (IRCSET), to form the Irish Research Council (IRC). The new council funds research in both the SSH and the SET disciplines.

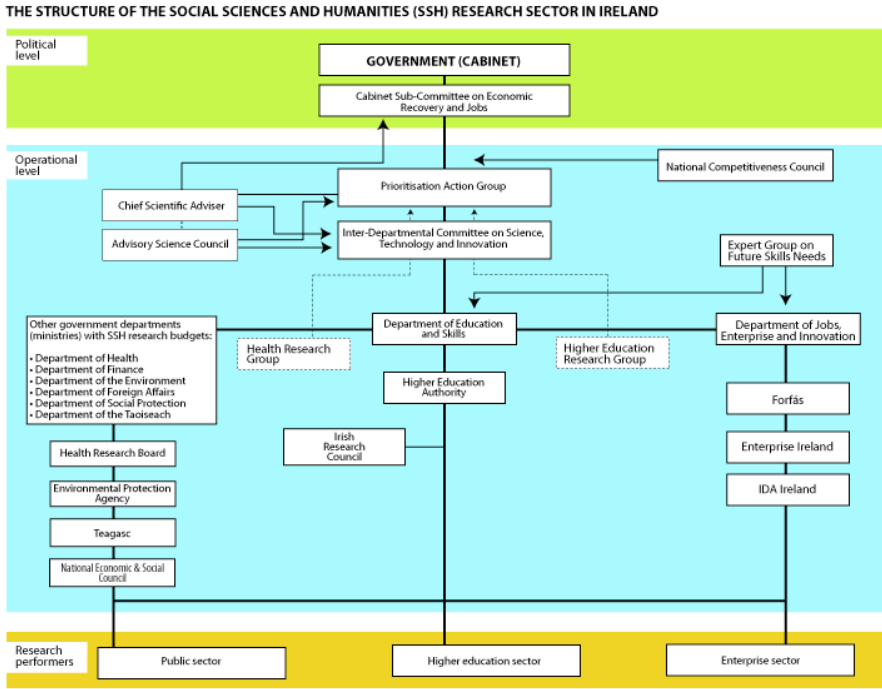
The Department of Education and Skills had been responsible for a large research funding programme, the Programme for Research in Third Level Institutions (PRTL), which supports building strategic institutional research capacity, enabling the establishment of research centres and facilities, and joint research programmes and national initiatives. Established in 1998, the PRTL has, in latter years, been an important source of funds for the development of a number of large-scale inter-institutional and interdisciplinary SSH research centres. In 2010, the government transferred responsibility for the PRTL to the Department of Jobs, Enterprise and Innovation though it is still managed by the HEA.

Both the Department of Education and Skills and the Department of Jobs, Enterprise and Innovation are represented on the Inter Departmental Committee on Science, Technology and Innovation which comprises the main government departments with significant research budgets and whose

main responsibilities are to take policy direction from the cabinet sub-committee on Economic Recovery and Jobs, develop policies that reflect those policy directions and oversee the implementation of those policies. The Inter Departmental Committee has a key role in overseeing the implementation of the Strategy for Science, Technology and Innovation 2006-2013. The Committee also has an important role in ensuring a "joined up government" approach to science and technology.

The Committee's role and influence has to a large degree been overshadowed by a new committee, the Prioritisation Action Group, which was established by the Government in 2012 to oversee the implementation of the [Research Prioritisation Strategy](#) published in March 2012 [1]. The strategy arose from the publication of the report of a high-level group, the Research Prioritisation Steering Group, which recommended that future Government investment in research should be concentrated in 14 priority areas.

The main performers of SSH research are the higher educational institutions and, in particular, the seven universities.



1.1.2 Recent changes in the system

- The merger of the Irish Research Council for the Humanities and Social Sciences and the Irish Research Council for Science, Engineering and Technology to form the Irish Research Council.
- The publication in March 2012 of the report of the National Research Prioritisation Steering Group which identified 14 priority areas in which the government will concentrate its research funding and the subsequent establishment of the Prioritisation Acton Group to oversee the implementation of the research prioritisation strategy.

- The abolition of the Office of the Chief Scientific Adviser as a separate office and the planned merger of Forfás, the policy advisory board for Enterprise, Trade, Science and Innovation, into the Department of Jobs, Enterprise and Innovation.

1.2 Policy challenges and developments

1.2.1 Main societal challenges translated into SSH research

The report of the national research prioritisation steering group which was published in March 2012 identified a total of 14 priority areas in which the government in the future would focus its research funding. The priority areas were identified through a structured process in which the steering group examined emerging industries/sectors and then sought to match these with areas in which Ireland had research expertise. The process of identifying the potential growth areas by the steering group could be used as a proxy for grand challenges. A number of these priority areas encompass SSH disciplines but the majority focus on SET-related themes.

The prioritisation strategy will not apply to the core or “block” funding provided to the higher education institutions or to in-company research.

1.2.2 New SSH policy developments

An important SSH policy development in 2012 was the formation of the Irish Research Council (IRC) which replaces the Irish Research Council for the Humanities and Social Sciences (IRCHSS) and the Irish Research Council for Science, Engineering and Technology (IRCSET).

The new Council will broadly continue the research funding policies of its predecessor organisations, i.e. to promote and support world-class research in Ireland and to promote and support world-class postgraduate and post-doctoral training. The IRC’s strategy document notes that it will seek to create flexible and varied suite of funded schemes that support research at various levels: individual scholars, engineers, technologists and scientists, project-based research, new ideas, ‘seed’ projects and innovative interdisciplinary initiatives.

The strategy document highlights that it will lead in the career development of early-stage researchers, including PhDs.

The research budget to be allocated by the IRC to social sciences and humanities research remains unchanged from that provided by the Irish Research Council for the Humanities and Social Sciences. The IRC has indicated that it will have separate committees for evaluating funding requests from SSH and SET applicants.

Though not a specific SSH policy development, the publication of the report of the Research Prioritisation Steering Group in March 2012 has led to a number of changes at a policy and governance level within the innovation and research infrastructure. The Steering Group identified 14 areas in which the Government would prioritise its research funding allocation. The majority of these priority areas relate to SET sectors but some have a SSH focus. The prioritisation strategy implies that future Government research funding will focus on these 14 areas though other areas will also be funded if they

METRIS

can prove that they will have an economic impact. The prioritisation strategy does not apply to Government funding for higher education institutions under the core or “block” grant or to research funded by the private sector.

2. Policy Setting System

2.1 Government policy making and coordination

2.1.1 Policy formulation and coordination

It should be noted from the outset that there are few specific social sciences and humanities research policies; most SSH-related policies are contained in broader STI policies.

The Government and, in particular, the cabinet, form the apex of the SSH policy-making structure. In 2004, a Cabinet Sub-committee on Science, Technology and Innovation was established to initiate, develop and review STI policies. However, as a consequence of the economic difficulties, this sub-committee has been disbanded and its work has been taken on by a new cabinet sub-committee, the **Cabinet Sub-committee on Economic Recovery and Jobs**. This sub-committee is chaired by the Taoiseach [Prime Minister] and includes the ministers for Jobs, Enterprise and Innovation (convenor), Finance, Public Expenditure and Reform, Education and Skills, Social Protection, Communications, Energy and Natural Resources, Transport, Tourism and Sport and Agriculture, Food and the Marine. The ministers of state with responsibility for small business, research and innovation and training and skills are also members of the sub-committee.

Reporting to this sub-committee are two committees that are concerned with the execution and administration of STI policies. The two committees are:

- The **Prioritisation Action Group (PAG)**: This is a new committee and was established by the Government in 2012 to oversee the implementation of the research prioritisation strategy. The Group, which is chaired by the Minister for Science and Innovation, comprises representatives from government departments (ministries) and research funders. It is responsible for identifying actions, timelines and lead actors, consulting with industry players and identifying necessary sources of funding;
- The **Inter-Departmental Committee on Science, Technology and Innovation (IDCSTI)**: This committee comprises senior officials from ministries with significant STI-related budgets. The role of the IDCSTI is to develop policies that reflect those policy directions and oversee the implementation of those policies. The IDCSTI has a key role in the implementation of the government's multi-annual research strategy document, the [Strategy for Science, Technology and Innovation 2006-2013](#) (SSTI) [2].

A number of sub-groups were established to assist the IDCSTI in the implementation of the SSTI; these include the Higher Education Research Group, Technology Ireland and the Health Research Group. As the SSTI has been effectively superseded by economic development and other STI policy initiatives, these sub-groups have become inactive.

The two main ministries having an influence on the development of SSH-specific policies are the Department of Education and Skills and the Department of Jobs, Enterprise and Innovation. The Department of Education and Skills is the parent ministry for the Higher Education Authority (HEA), the statutory planning and development body for higher education and research in Ireland. The HEA is responsible for the allocation of the core or “block” grant to the recognised higher education institutions.

The Department of Education and Skills is also the funder of the Irish Research Council (IRC) which provides research funding for post-graduates and post-doctorates in both the SSH and science, engineering and technology (SET) disciplines. The IRC was established in 2012 following the merger of the Irish Research Council for the Humanities and Social Sciences and the Irish Research Council for Science, Engineering and Technology which provided funding for SSH and SET research respectively.

The HEA core funding and IRC project-based funding are important sources of funding for SSH research undertaken in the higher education sector.

The Department of Education and Science had previously been responsible for the Programme for Research in Third Level Institutions (PRTLTI) which provided funding for the development of research infrastructures. In 2010, the Government transferred responsibility for the PRTLTI to the Department of Jobs, Enterprise and Innovation.

2.1.2 SSH policy advice

There are a number of organisations in the STI infrastructure that potentially can provide advice on SSH policy issues.

Previously, the Irish Research Council for the Humanities and Social Sciences (IRCHSS) had been the only dedicated SSH organisation providing dedicated policy advice. Since it merged in 2012 with the Irish Research Council for Science, Engineering and Technology to form the IRC there is currently no state agency solely providing SSH policy advice. The IRC’s policy advisory remit includes both SSH and SET; it interacts with its immediate parent organisation, the Higher Education Authority, as well as its parent ministry, the Department of Education and Skills, and other STI advisory organisations such as the Advisory Council for Science, Technology and Innovation and Forfás.

The HEA also has a role in relation to SSH policy advice provision as its brief covers statutory planning and development for higher education and research. The HEA and the Irish Research Council for the Humanities and Social Sciences were jointly responsible for the producing the foresight report in 2010, [*Playing to Our Strengths: the role of the arts, humanities and social sciences and the implications for public policy*](#) [3].

Forfás, the policy and advisory board for enterprise, trade, science, technology and innovation policy, has a remit in relation to SSH research policy advice. The organisation provides secretarial and support services to the Advisory Council for Science, Technology and Innovation (ACSTI) and provided support to ad-hoc committees such as the high-level group responsible for developing the research prioritisation strategy.

The Government has, however, decided to merge the policy and advisory unit within Forfás into the Department of Jobs, Enterprise and Innovation.

ACSTI is tasked with providing policy advice to the government on medium and long-term science, technology and innovation issues and contributing towards the development and implementation of a coherent and effective national strategy for STI. It is the primary interface between STI stakeholders and policymakers.

ACSTI has prepared a number of reports that impact on SSH research including the [sustainability of research centres](#) [4].

The Government can also avail of advice and information provided by the Chief Scientific Adviser. Following the retirement of the Chief Scientific Adviser, Professor Patrick Cunningham, the Government announced in October 2012 that it was abolishing the Office of the Chief Scientific Adviser as a separate body and that it was appointing Professor Mark Ferguson as the Chief Scientific Adviser in addition to his position as head of Science Foundation Ireland.

While not strictly a policy advisory body, the new Prioritisation Action Group (PAG) which was set up in 2012 to oversee the implementation of the Government's research prioritisation strategy (which seeks to focus the Government's competitive research funding being allocated to 14 priority areas) could potentially have a role in research policy input.

2.1.3 Main implementing bodies

The main implementing bodies in relation to SSH research policy are the Higher Education Authority, the Irish Research Council and the Department of Jobs, Enterprise and Innovation.

The HEA is responsible for the allocation, on behalf of its parent ministry, the Department of Education and Skills, of the core or block funding to the recognised higher education institutions. The [Science Budget 2010-2011](#) [5] publication indicates that the HEA provided €241m in core funding to higher education institutions in 2011. The survey of research and development expenditure in the higher education sector indicated that the block grant accounted for €87.9m of SSH research undertaken in 2008.

The HEA currently manages the Programme for Research in Third Level Institutions on behalf of the Department of Jobs, Enterprise and Innovation (PRTLTI). Established in 1998, the PRTLTI seeks to strengthen national research capabilities by investing in physical infrastructure.

There have been five cycles of the PRTLTI and latter cycles have seen the provision of funding for a number of large-scale, inter-institutional and inter-disciplinary SSH research projects (€51.8m in Cycle 4) such as the €29m **Humanities Serving Irish Society** (HSIS) project comprising eight higher education institutions. Other SSH research institutes that have been established with PRTLTI funding include:

- the Humanities Institute of Ireland;
- the Institute for International Integration Studies;
- the Urban Institute (now the UCD Earth Institute);

- the National Programme of Research on Innovation, Society and Space.

2.2 Impacting factors

2.2.1 Policy fields influencing SSH policies

There are no dedicated or specific SSH policies in Ireland and hence there are no policy fields that have an influence on SSH policies. It is, however, important to state that a key aim in overall science, technology and innovation policy as stated in the *Strategy for Science, Technology and Innovation 2006-2013* (SSTI) is the development of human capital. The SSTI's key metrics were the education of PhDs and the composition and size of research teams. The SSTI also had a key focus on research excellence.

These aspirations, the development of human capital and the focus on research excellence, were key tenets of the Irish Research Council for the Humanities and Social Sciences and have been continued by its successor, Irish Research Council. The Council's key principles are:

1. To promote and support world-class research in Ireland within and across all disciplines.
2. To assess research excellence on the basis of independent review, in an open, transparent and trusted way.
3. To promote and support world-class postgraduate and postdoctoral training designed to equip graduates for research or other professional careers.
4. To strengthen research impact by encouraging researchers to disseminate and transfer knowledge in the widest possible contexts.
5. To provide a strong integrated voice for Irish research and to be an effective advocate for its social, cultural and economic significance
6. To assist the internationalisation of Irish research.
7. To advance, shape and inform research policy in Ireland.
8. While established as a sub-board of the Higher Education Authority, the Council will operate as an autonomous body, informed by the government policy framework, but independent in its funding agenda, decisions and priorities.
9. To ensure excellence in Council practices and policies through periodic reviews, both internal and independent.

The higher education strategy, [National Strategy for Higher Education to 2030](#) [6], highlighted the contribution that SSH academics working in higher education institutions could make to the community and to wider civic life. The strategy document points out the importance of multi-disciplinary research involving both SSH and SET disciplines. It instances the Humanities Serving Irish Society (HSIS) as an example of how several institutions across the country have come together to enable the humanities play their role in national development including in particular the use of the power of digital technology. The document recommends that priority should be given to research areas with the greatest potential for national economic and social returns and which will be characterised by partnership across

disciplines, across the sciences and humanities, across institutions, and with industry and other relevant agencies nationally and internationally.

The Government's research prioritisation strategy announced in March 2012 may have an impact on future SSH policies. The implementation of the research prioritisation strategy will involve a focusing of the State's expenditure on research and development in 14 priority areas. The prioritisation strategy will have a significant influence on competitive funding programmes but will not apply to the core or block grant provided by the Higher Education Authority to the recognised higher education institutions. Though most of the 14 priority areas identified by the National Research Prioritisation Steering Group which reported in 2012 relate to the science, engineering and science disciplines, a number have relevance to the social sciences and humanities. One of the objectives of the process of determining the priority areas was to identify the supporting fields of science and technology that could contribute to these priority areas. The national research prioritisation exercise invited researchers across all disciplines, including researchers in the arts, humanities and social sciences, to examine the contribution that their research could make to these priority areas.

Forfás highlighted in its 2010 publication, [Making it happen: Growing Enterprise for Ireland](#) [7], the important contribution that the SSH could play in developing innovation skill-sets, particularly in complementing SET disciplines.

2.2.2 Influence of European and international developments

The joint HEA/IRCHSS (now IRC) foresight report covering the arts, social sciences and humanities published in 2010, *Playing to Our Strengths*, identified developments at EU level, including the European Research Area and a reconfigured Framework Programme as having a key influence in highlighting the importance of investment in research and development to promote creativity and innovation.

The report also noted that recent Irish SSH developments echoed the Lund Declaration, particularly the focus on researcher collaboration. It also pointed out that in recent years Irish AHSS researchers had been developing such collaborations both within, and between, institutions and in turn, between Irish and international partners. Such collaborations could assist mobility at all levels of the system, from student to an experienced researcher. These collaborations had been assisted by the Programme for Research in Third Level Institutions (primarily through the funding of research institutes) and the IRCHSS (through partnerships between individuals on a designated theme).

The HEA/IRCHSS foresight report also underlined the importance of the European Strategy Forum on Research Infrastructures (ESFRI) as a critical forum for both policy-making and funding. Following a review in 2006, ESFRI was re-configured to co-ordinate strategic thinking and identify strategic goals for the digital humanities within the EU. As a result, an amended road-map of projects was drawn up, including 6 in the AHSS. Of these, one each in the humanities and the social sciences, DARIAH and the ESS, were adopted by the IRCHSS for further development.

2.2.3 Relevance of European and international SSH research

European and international SSH research is increasingly having a relevance for Irish SSH research given the constraints on funding available from national sources.

Feed-back from a consultation process organised by the Advisory Council for Science, Technology and Innovation in developing its approach to the proposed new Horizon 2020 programme [8] indicated that proposals in the SSH domain had done particularly well in competitions for European funding and that they provided a dimension which had the potential to open up new fields within other areas of science and to complement other research strengths (e.g. in social networking, sensors).

Irish research organisations were partners in 26 SSH-related projects under FP6 (three as coordinators). The relevant projects were:

Project acronym	Project title
ACRE	Accommodating Creative Knowledge: Competitiveness of European Metropolitan Regions Within the Enlarged Union
AIM	Adequate Information Management in Europe
AIM-AP	Accurate Income Measurement for the Assessment of Public Policies
ANOVASOFIE	Analysing and overcoming the sociological fragmentation in Europe
CIVICACTIVE	Active Civic Participation
CLIOHRES.NET	Creating Links and Innovative Overviews for a New History Research Agenda for the Citizens of a Growing Europe
CONNEX	Efficient And Democratic Governance In A Multi-Level Europe
CORASON	A Cognitive Approach to Rural Sustainable Development the dynamics of expert and lay knowledges
DYNAMO	Dynamics of National Employment Models
DYNREG	Dynamic regions in a knowledge-driven global economy: lessons and policy implications for the EU
EMEDIATE	Media And Ethics Of A European Public Sphere From The Treaty Of Rome To The "War On Terror"
ENBR	European Network for Better Regulation
EQUALSOC	Economic Change, Quality of Life and Social Cohesion
ESEC	European Socio-Economic Classification
EU-CONSENT	Wider Europe, deeper integration? "Constructing Europe" Network
GARNET	Global Governance, Regionalisation and Regulation: The Role of the EU
ICONNECTEU	IConnectEU - Developing and testing a model for integrated dissemination of outcomes from complementary research projects
INCLUD-ED	Strategies for inclusion and social cohesion in Europe from education
IREN	International Radio Research Network
LLL2010	Towards a Lifelong Learning Society in Europe: The Contribution of the Education

	System
LOWER3	The Insecure Perspectives of the Low Skilled in the Knowledge Society
NEWGOV	New modes of governance
PROFKNOW	Professional Knowledge In Education And Health: Restructuring work and life between the state and the citizens in Europe
REFGOV	Reflexive Governance in the Public Interest
UP2YOUTH	Youth - actor of social change

(Source: DG Research)

Irish SSH organisations have also been successful in securing funding for research projects under FP7. Projects featuring Irish organisations either as co-ordinator or participant are shown below:

Project acronym	Project title
ACCEPT PLURALISM	Tolerance, Pluralism and Social Cohesion. Responding to the Challenges of the 21st Century in Europe
ALACS	Promotion of Participation and Citizenship in Europe through the “Advocacy and Legal Advice Centres (ALACs)” of Transparency International
CREATING	Cooperative research on East African Territorial Integration with Globalisation
DERREG	Developing Europe’s Rural Regions in the Era of Globalisation: An Interpretative Model for Better Anticipating and Responding to Challenges for Regional Development in an Evolving International Context
FLAWS	Impact of local welfare systems on female labour force participation and social cohesion
GINI	Growing Inequalities’ Impacts
HI-POD	Historical Patterns of Development and Underdevelopment: Origins and Persistence of the Great Divergence
ICATSEM	Institutional Changes and Trajectories of Socio-Economic development Models
NET4SOCIETY	Trans-national co-operation among National Contact Points for Socio-economic sciences and the Humanities
NORFACE PLUS	NORFACE Transnational Programme on Migration in Europe
PLATONPLUS	Strengthening the role that Socio-economic Sciences and Humanities (SSH) have on the ERA development
REMC	Religious education in a multicultural society: School and home in comparative context
REMC	Religious education in a multicultural society: School and home in comparative context
SERVICEGAP	The Impact of Service Sector Innovation and Internationalisation on Growth and Productivity
SOM	Support and Opposition to Migration. A cross national comparison of the politicisation of migration

(Source: DG Research)

Irish researchers have had success in attracting funding from the FP7-established European Research Council (ERC), which has committed 15% of its budget to the Social Sciences and Humanities.

Additionally, Ireland is a participant in a number of ERA-NETs that have a SSH focus. These include **HERA** (Humanities in the European Research Area) and **NORFACE** (New Opportunities for Research Funding Co-operation in Europe: A Strategy for Social Sciences). The Irish Research Council is the Irish co-ordinating body for both of these networks which afford Irish SSH researchers with the opportunity to participate in European and international research networks and policy forums.

IRC's membership of the European Science Foundation (ESF) offers opportunities for Irish researchers to associate with researchers outside Ireland.

In addition to constraints on national funding sources, there are a number of reasons why European research developments are having a larger impact on the SSH research community in Ireland:

- The Government has taken a policy decision to encourage Irish researchers to access a larger share of EU research funding under the Framework Programmes. The Government has set a target draw-down of €400 million to be achieved by Irish participants in FP7 which based on available data is likely to be achieved;
- To assist the achievement of this target, a revised State support infrastructure has been put in place to facilitate a more co-ordinated approach by Irish researchers in accessing FP7 funding. The IRC is the National Contact Point (NCP) for SSH-related priorities under the EU Framework Programme;
- FP7 has given a larger prominence to SSH research issues and has allocated a larger budget to SSH research.

One of the terms of reference for the Arts, Humanities and Social Science (AHSS) foresight exercise was that it should reflect on European developments in the arts, humanities and social sciences and seek to align Irish activities with European opportunities.

The *Playing to Our Strengths* report highlighted the importance of European research collaboration to Irish AHSS researchers:

- Since January 2009, there have been 73 applications with Irish participation under the Joint Research Programmes (JRP) for HERA. These have had varying degrees of Irish participation: 20 with an Irish project leader, 48 with Irish principal investigators, and 4 with Irish associated partners. The final outcome of the JRP is due for publication in December 2009;
- Irish participation rates in the Marie Curie and Leonardo programmes are also high, underlining the international reputation of Irish researchers in the SSH and promoting Ireland as a destination for researchers. In 2009, the IRCHSS was awarded €2.7m in external funding (FP7 Marie Curie COFUND) to implement an international mobility postdoctoral scheme. This award is the second largest award made to an Irish applicant in FP7.

The AHSS foresight report also pointed out that in a wider context, the Irish Aid Programme also supports international collaborations. The Irish-African

Partnership for Research Capacity Building (RCB) brings together all nine universities on the island of Ireland and four in Sub-Saharan Africa in a unique, high-level partnership to develop a coordinated approach to RCB in higher-education institutions.

2.2.4 Impact of evaluations

There has been no recent systematic evaluation of the STI system in general or of the SSH sector in particular. Nonetheless, the work of the Research Prioritisation Steering Group could be regarded as encompassing a very extensive investigation of STI public funding and, more recently, the work of the Prioritisation Action Group has involved significant consultation with researchers in the HEI and PRO sectors.

The Research Prioritisation Steering Group in its report made a number of recommendations aimed at bringing about a step change in the efficiency and effectiveness of the current STI system including that the Government should re-state its objectives for science, technology and innovation policy with clear goals and metrics for each policy element. It also recommended that policy goals and objectives that are set should be underpinned by a set of national indicators that reflect the goals and objectives and this should include indicators of economic impact.

In 2011, Forfás, the policy advisory board for enterprise, trade, science, technology and innovation, published an evaluation framework for enterprise supports. This evaluation framework which was developed having regard for international best practice sets out the methodologies and approaches to ensuring maximum coherence and comparability across evaluations carried out on entrepreneurship, R&D/innovation and business development support measures.

It is intended that the framework will assist policy-makers and enterprise support programme developers to assess the value of policy interventions, achieve continued improvements in the design and implementation of support measures, and strengthen the evaluation culture in enterprise support provision.

The new evaluation framework applies to all support measures provided by the agencies under the aegis of the Department of Jobs, Enterprise and Innovation such as SFI and Enterprise Ireland.

There has not been any major evaluation within the agencies under the aegis of the Department of Education and Skills. It is important to state that a new higher education strategy was published in 2011 and its preparation involved an in-depth assessment of the HEI sector.

Moreover, although there has been no systematic evaluation of the SSH system, in September 2010 the Higher Education Authority and the Irish Research Council for the Humanities and Social Sciences (now the Irish Research Council) published the report on the foresight exercise, *Playing To Our Strengths*, on the arts, humanities and social sciences. The report was commissioned at the invitation of the Minister for Education and Science in 2008 and was a response to a report prepared by the Royal Irish Academy, *Advancing Humanities and Social Sciences Research in Ireland*, in March

2007. Though *Playing To Our Strengths* was a foresight report it did, however, review existing AHSS structures and research programmes.

2.2.4.1 Project evaluation

There has been no recent published review of SSH research projects. The most recent evaluation of SSH-funded projects were those funded through the Programme for Research in Third Level Institutions, a review of which was published out in 2004.

There is, however, a systematic process in place for evaluating SSH funding proposals submitted to the Irish Research Council. Funding proposals for IRC programmes are reviewed by a panel of national and international experts and only a small percentage of proposals are successful. The AHSS foresight study noted that developing criteria for measuring the distinctive impact of the AHSS research was of critical importance. The study pointed out that within the debate of value for money and/or performance and peer-reviewed criteria for professional progression and promotion, appropriate metrics must be identified for measuring the impact of AHSS research.

2.2.4.2 Programme evaluation

The only programme that funds SSH research to have been evaluated is the Programme for Research in Third Level Institutions (PRTLTI). The last evaluation of the PRTLTI was carried out in 2004 and additionally the actual number of SSH-related projects funded by the programme during the period prior to 2004 was small in comparison to the funding of projects relating to science, engineering and technology.

2.2.4.3 Institutional evaluation

There has been no evaluation of an SSH institution since the Irish Research Council for the Humanities and Social Sciences was reviewed by a team of international experts in 2003.

2.2.5 Impact of infrastructures

The State-supported research centre landscape in Ireland comprises of a mix of small medium and large centres, and spanned across ten thematic areas (of which the social sciences and humanities accounted for two of the ten thematic areas). The development of these SSH-related research centres were largely funded under the Programme for Research in Third Level Institutions (PRTLTI) which encouraged higher education institutions to co-operate in the formation of large-scale research centres. The PRTLTI, which was divided into five funding cycles, was instrumental in funding the development of a number of significant SSH research centres, particularly those focused on widening access to, and preserving, Irish culture through a digitisation programme, which was a commitment in the *National Development Plan 2007-2013*. The most recent funding cycle of the PRTLTI, Cycle 5, provided funding of €6.8m to the Digital Arts and Humanities Structured PhD Programme promoted by Trinity College Dublin, National University of Ireland, Galway, National University of Ireland, Maynooth, Royal Irish Academy, Trinity College Dublin and University College Cork. The digital humanities were identified by the HEA/IRCHSS foresight report

into the arts, humanities and social sciences (AHSS) as being a key development to underpin the success of the AHSS in the future.

A report published in 2012 by the Advisory Council for Science, Technology and Innovation on the *Sustainability of Research Centres* pointed to the need to find a solution to supporting the maintenance, upgrading and development of large-scale research infrastructure in the longer term. This is increasingly an issue for SSH researchers given that the funding under the fifth cycle of the PRTL I was allocated in 2009 and a consequence of the constraints on Exchequer resources is that no new research infrastructural-related funding provision has emerged to take its place.

In 2012, the HEA initiated a project to develop a database of large-scale infrastructure and equipment in Ireland (which will link to the FP7-funded MERIL project, that aims to map research infrastructures of EU relevance). The project identified approximately 700 items of research equipment which had an original purchase value of over €100,000.

One of the intended outcomes of the HEA project is to develop a set of high level principles or guidelines for access by researchers to such equipment, the majority of which were exclusively or predominantly funded by the Exchequer. The facilitation of the widest possible access to large-scale exchequer-funded research equipment is in line with research prioritisation objectives and is seen as essential to achieve the greatest return on investment and value for money for the State and for the research community in general.

2.3 Important policy documents

The following documents recent¹ documents are relevant:

SSH specific documents

- Playing To Our Strengths: The role of arts, humanities and social sciences and the implications for public policy
<http://www.hea.ie/files/files/file/HEA%20FAHSS%20Report.pdf>

Further important documents

- Forfás (2012): *Report of the Research Prioritisation Steering Group*
<http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9545,en.php>
- Advisory Council for Science, Technology and Innovation (2012): *Sustainability of Research Centres*
<http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9388,en.php>
- Department of Finance (2010): *National Recovery Plan 2011-2014*
<http://www.budget.gov.ie>
- Government of Ireland (2011): *Programme for National Government 2011-2016*

¹ Older documents are included in the previous country reports as well as in the METRIS website.

http://www.taoiseach.ie/eng/Publications/Publications_Archive/Publications_2011/Programme_for_Government_2011.html

- Department of Education and Skills (2011): *National Strategy for Higher Education to 2030*, Report of the Steering Group
<http://www.education.ie/en/Publications/Policy-Reports/National-Strategy-for-Higher-Education-2030.pdf>
- Department of the Taoiseach [Prime Minister] (2010): *Innovation Ireland — The Report of the Innovation Taskforce*
http://www.taoiseach.ie/eng/Innovation_Taskforce/Report_of_the_Innovation_Taskforce.pdf
- Government of Ireland (2006): *Strategy for Science, Technology and Innovation 2006-2013*
<http://www.djei.ie/science/technology/sciencestrategy.htm>
see also the ERAWATCH web site:
http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/ie/policydocument/policydoc_mig_0008

2.4 Thematic priorities at national level

The only recent SSH-related document, the foresight study published in 2010 by the Higher Education Authority and the Irish Research Council for the Humanities and Social Sciences, *Playing To Our Strengths*, was relatively silent on the issue of thematic priorities. The study noted that Irish people had not:

“considered what the arts, humanities and the social sciences signify to us in Ireland or to our own grand challenges, we are not prepared psychologically or in terms of resources to begin to address them.” [2]

Consequently, there are few Irish policy documents that have clearly specified SSH thematic priorities.

The Government’s research prioritisation strategy launched in 2012 identified 14 thematic areas in which it would prioritise government research funding so as to maximise economic outcomes.

Policy-makers attach particular importance of the process underpinning the prioritisation project, known as the National Research Prioritisation Exercise. The Government appointed a high-level group chaired by a leading businessman with representatives from business, academia and Government to undertake the research prioritisation exercise. Forfás, the national policy and advisory board for enterprise, trade, science, technology and innovation, provided secretariat support to the group.

During the initial part of the process, a significant amount of time was allocated by the group to deliberating the appropriate balance for a prioritisation exercise at this point in the evolution of the Irish R&D system. The exercise sought to balance on one hand being specific enough to that a critical mass could be built in a focused number of areas while on the other hand avoiding being so specific that the group would end up doing the job of research funding agencies and scientists. The group also devoted a

considerable amount of time to defining a set of criteria to help bring objectivity and consistency to the prioritisation exercise.

The group decided on the following four high-level criteria for assessing priority areas:

1. The priority area is associated with a large global market or markets in which Irish-based enterprises already compete or can realistically compete;
2. Publicly performed R&D in Ireland is required to exploit the priority area and will complement private sector research and innovation in Ireland;
3. Ireland has built or is building (objectively measured) strengths in research disciplines relevant to the priority area;
4. The priority area represents an appropriate approach to a recognised national challenge and/or a global challenge to which Ireland should respond.

The group gathered evidence for each of the criteria concerned by undertaking detailed studies, by consulting with industry and the research community and drawing on relevant expertise for each of the areas being put forward for evaluation. At an early stage it reviewed with Government departments and agencies responsible for research and development in the science and technology area, what was currently happening in these areas. This helped to confirm to the group that the prioritisation exercise was more about sharpening focus rather than putting a new system in place. Finally, the group consulted and validated its proposals with experts in thematic working groups and with a wide a wide group of scientific and business stakeholders before finalising the prioritisation.

The majority of the 14 areas identified by the group concern science, engineering and technology but there is a recognition that some involve inputs from the SSH.

The *National Development Plan 2007-2013* includes a commitment under the Culture sub-programme to the digitalisation of Irish culture. The HEA/IRCHSS foresight report recommended that targeted initiatives should be put in place to allow private enterprise, including those in computer-based technologies, to interact with funding agencies and institutions to promote digitised projects in the AHSS.

A number of Government departments and State agencies fund research projects in SSH-related thematic areas such child welfare, families in the community and conflict resolution. These research projects are managed by the Irish Research Council through the Research Development Initiative (see Section 2.5 below); in 2011-2012, €0.5m was allocated to this initiative.

	Priority
	Behaviour, cognition
	Competitiveness, Innovation
X	Conflicts, peace, security and human rights within the EU and beyond
	Crime and Crime prevention (including drugs, organised crime etc.)
X	Cultural heritage (including preservation and conservation)
	Democracy, governance, accountability and responsibility
	Demography (Ageing, Fertility)
	Economy and finance
X	Education, skills, knowledge and life-long learning
	Employment, Work, Working conditions
	Ethics
X	Families, life-styles and well-being
	Gender, gender equality
	Globalisation
X	Health and Health systems
	Identity, religion, language, multiculturalism
X	International relations
	Migration
	Social cohesion, exclusion, inequalities, poverty
	Sustainable development
	Urban and rural development
X	Others: areas identified by the National Research Prioritisation Exercise

2.5 Important research programmes

This section lists the main social sciences and humanities research funding programmes.

Programme title	Government of Ireland Post-graduate scholarship scheme 2012
Start date	2009-12
Planned end date	1-3 years (award holders receive between one and three years of funding depending on registration date)
Planned total budget	€3,980,250 (estimate)
Budget 2012	€11,925,552
Implementing organisation	Irish Research Council
Target group	Postgraduate Scholars undertaking a Research Masters/Integrated Masters Doctorate Programme/Stand Alone Doctorate
Key goals	The Government of Ireland Postgraduate Scholarship Scheme is intended to support research master's and Ph.D. candidates pursuing or intending to pursue research in the Humanities and Social Sciences including Business and Law.
Website	www.research.ie
Tags	Post-graduate research third-level institution

Programme title	Employment-based Post-graduate programme
Start date	2012
Planned end date	1-3 year award holders depending on registration date
Planned total budget	€576, 000
Budget 2011/2012	€192,000
Implementing organisation	Irish Research Council
Target group	The Irish Research Council's Employment-Based Postgraduate Programme is an initiative that seeks to provide postgraduate researchers with an employment-focused educational experience. The Programme offers researchers the opportunity to undertake a Master's or PhD degree while employed by a private company or public organisation based in the Republic of Ireland.
Key goals	The development of a cadre of post-graduate researchers with employment experience within a private company or public organisation.
Website	www.research.ie
Tags	Post-graduate research employment industry enterprise public organisations

Programme title	Government of Ireland Postdoctoral Fellowships
Start date	October 2011
Planned end date	2011-14
Planned total budget	€6,796,074
Budget 2011/2012	€2,165,796
Implementing organisation	Irish Research Council
Target group	The Fellowship scheme targets post-docs
Key goals	The Council, through the Government of Ireland Postdoctoral Fellowships, seeks to facilitate the career development of researchers by funding those at an early stage of their postdoctoral career to associate with established research teams who have achieved international recognition for their work. The Council aims to support an expertise-driven research system in order to enhance Ireland's innovation capacity and skills base in a rapidly changing global environment where knowledge is key to economic, social and cultural development.
Website	www.research.ie
Tags	Post-doctoral research career development European Research Area

Programme title	Research Development Initiative
Start date	2008
Planned end date	2014
Planned total budget	€1,040,000
Budget 2011/2012	€522,302
Implementing organisation	Irish Research Council
Target group	The development of experienced researchers in order to underpin the building an expertise-driven research system.
Key goals	<p>The Research Development Initiative (RDI) was established with the objective of facilitating researchers and research teams to expand their activities into new research areas by way of stimulus project grants and knowledge transfer initiatives.</p> <p>The scheme funded in collaboration with the Department of Children and Youth Affairs, the Department of Environment, Community and Local Government, the Department of Foreign Affairs and the Family Support Agency. The Scheme therefore seeks to address stated research topics as identified by these research funders.</p>
Website	www.research.ie
Tags	Researcher knowledge transfer co-fund societal themes expertise

Programme title	Government of Ireland New Foundations Awards
Start date	October 2012
Planned end date	May 2013
Planned total budget	€271,263.03
Budget 2011/2012	€271,263.03
Implementing organisation	Irish Research Council
Target group	Established researchers who have held a competitive award in the past three years
Key goals	The Irish Research Council 'New Foundations' Scheme is intended to support researchers, who have held a competitive award within the past three years, who intend to pursue research, networking and/or dissemination activities within and across the diversity of disciplines.
Website	www.research.ie
Tags	Researcher research network disseminate new frontiers

Programme title	Government of Ireland Collaborative Research Projects Scheme
Start date	2012
Planned end date	2012-15
Planned total budget	€1,188,102
Budget 2011/2012	€836,906
Implementing organisation	Irish Research Council
Target group	Established researchers
Key goals	This scheme facilitates established researchers working within a small team to bring existing research activities or short term projects to successful completion by way of teaching buy-out, postdoctoral support and limited project funding. Thus this scheme will also support research-based teaching and knowledge transfer initiatives.
Website	www.research.ie
Tags	Researchers research established project funding post-doc knowledge transfer

Programme title	Programme for Research in Third Level Institutions
Start date	1998
Planned end date	2015
Planned total budget	€1.12bn
Budget 2011/2012	€58m (annual average over 2010-2015)
Implementing organisation	Higher Education Authority
Target group	Higher education institutions
Key goals	The aim of the programme is to propel Ireland forward as an internationally recognised location with the quality infrastructure and skills for the conduct of world class research and development.
Website	www.hea.ie
Tags	Higher education sector infrastructure human capacity development research

2.6 SSH research infrastructures

2.6.1 National infrastructures

The results of the last major study of research infrastructures — including those in the SSH — were published in 2006. The study was undertaken by Forfás and the Higher Education Authority with a view to taking stock of existing investment and to inform decision-making in relation to future funding cycles of Programme for Research in Third Level Institutions (PRTLII) and related investments under Strategy for Science, Technology and Innovation 2006-2013. The study involved representatives from the European Strategy Forum on Research Infrastructures (ESFRI) network in

order to maximise the alignment between any future national infrastructure strategy and the ESFRI Roadmap.

The study results indicated that while there had been significant investment in national research infrastructures, Ireland was still playing “catch up” with its international competitors. The report made recommendations on space provision, data management and archiving facilities. It said that there were deficiencies in space provision and data management, and stressed the need for archiving facilities to be developed in way that promotes collaboration in research and excellence in scholarship.

The study had a major bearing on funding allocation under the fourth and fifth cycles of the PRTL including a number of large-scale SSH projects:

- Arts Humanities Social Sciences Research Building: €10.6m
- Humanities Serving Irish Society: €28.9m
- National Audio Visual Repository: €5.2m
- National Programme of Research on Innovation, Society and Space: €22.1m

In 2010, responsibility for the PRTL transferred from the Department of Education and Skills to the Department of Jobs, Enterprise and Innovation though the HEA is still the management agency.

The IRCHSS has prioritised two infrastructures from the ESFRI Roadmap (the European Social Survey and a digital research facility for the arts and humanities). These were prioritised on the basis of alignment with IRCHSS objectives and potential reach to the research community in Ireland.

2.6.2 International infrastructures

Irish organisations are members of all five SSH-related ESFRI initiatives:

- **Common Language Resources and Technological Infrastructure** (Clarín) project (Irish partner: National University of Ireland, Galway). Clarín seeks to establish an integrated and interoperable research infrastructure of language resources and its technology. It aims at lifting the current fragmentation, offering a stable, persistent, accessible and extendable infrastructure and therefore enabling eHumanities. <http://www.CLARIN.eu>
- **Council of European Social Science Data Archives** (CESSDA) project (Irish partner: Irish Social Science Data Archive). CESSDA is an umbrella organisation for social science data archives across Europe and its members are seeking to improve access to data for researchers and students. CESSDA research and development projects and Expert Seminars enhance exchange of data and technologies among data organisations. <http://www.CESSDA.org>
- **Digital Research Infrastructure for the Arts and Humanities** (DARIAH) project (Irish partner: Irish Research Council for the Humanities and Social Sciences). DARIAH’s mission is to enhance and support digitally enabled research across the humanities and arts. DARIAH aims to develop and maintain an infrastructure in support of

ICT-based research practices across the arts and humanities.
<http://www.dariah.eu>

- **European Social Survey (ESS)** project (Irish partners: Economic and Social Research Institute, Ipsos-MORI (Ireland) and the University of Limerick). The ESS is an academically-driven social survey designed to chart and explain the interaction between Europe's changing institutions and the attitudes, beliefs and behaviour patterns of its diverse populations. <http://www.europeansocialsurvey.org/>
- **Survey of Health, Ageing and Retirement in Europe (SHARE)** project (Irish partner: University College Dublin). The SHARE project is a multidisciplinary and cross-national panel database of micro data on health, socio-economic status and social and family networks of more than 45,000 individuals aged 50 or over. <http://www.share-project.org>

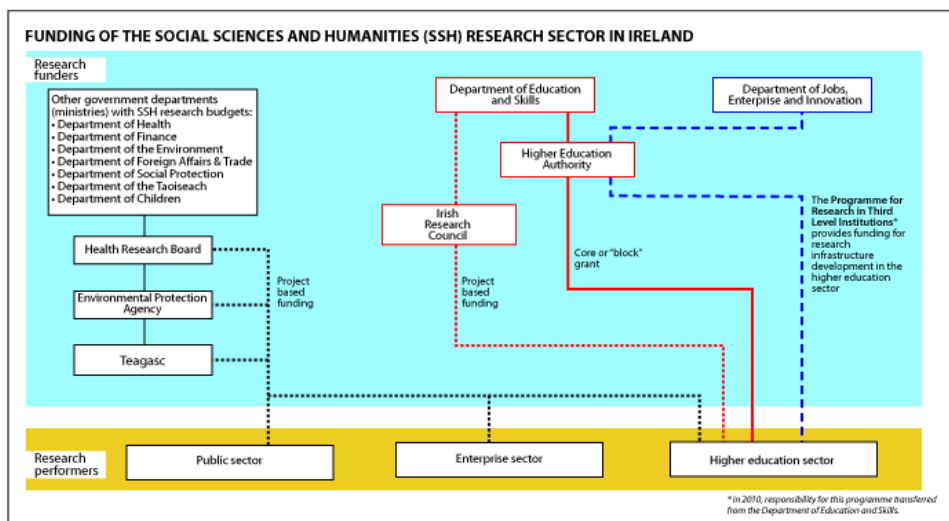
Irish policy-makers regard Ireland's participation in EU infrastructure projects as being important in terms of gaining access to large-scale facilities that smaller countries could not otherwise afford.

3. Funding System

3.1 Overview of funding flows

Figure 3.1 below outlines the funding flows for social sciences and humanities research in Ireland. It focuses on national HSS funding sources and does not take into account international funding sources such as the EU Commission or the European Research Council.

Figure 3.1: Overview of the funding of social sciences and humanities research in Ireland



The Department of Education and Skills plays a key role in relation to SSH funding. It provides two types of funding:

- project-based funding through the newly-formed Irish Research Council. The IRC provides funding for individual post-graduates and post-docs to carry out research projects in the SSH; the Council also provides a small amount of funding for groups of SSH researchers to undertake research projects;
- the core or “block” grant which is distributed via the Higher Education Authority (HEA) to authorised third level institutions. The core/block funding is intended to cover the operating costs of higher education institutions, of which a large component is salaries of academic staff. The individual higher education institutions have autonomy as to how they utilise the core/block funding. A proportion of this funding is accounted for by SSH research.

The Department of Education and Skills previously had responsibility the Programme for Research in Third Level Institutions (PRTL) which provided funding for the development of the research capacity within the higher education sector. There have been five PRTL funding cycles — the last of which started in 2009 — and the last two cycles have played a vital role in

the development of a number of significant SSH research centres. The Department provided the funding for the programme which was managed by the HEA.

In 2010, the Government transferred overall responsibility for the PRTL to the Department of Jobs, Enterprise and Innovation, though the HEA is still the managing agent for the programme.

Other government departments and agencies have a comparatively smaller role in relation to the funding of SSH research. Recent data indicate that the Health Research Board is not only a significant funder of HSS research but also undertakes HSS research itself. Teagasc, the agriculture and food development authority and the largest public research organisation, is also a SSH research performer.

3.2 National public SSH research funding

3.2.1 Overview of funding importance

One of the difficulties in relation to the funding of SSH research is that while data on individual funding programmes are up-to-date there is either a lack of data on other types of funding of SSH research or the available expenditure figures are out-of-date. Detailed data on SSH research expenditure within the third level sector presented below was published by Forfás in 2010 but relates to 2008.

Table 3.1 below presents data from the 2008 [Higher Education R&D Survey](#) [9] which indicates that the provision of funding for SSH research undertaken within the higher education sector grew by over 68% over the period 2004-2008. Funding for SSH research amounted to €120m in 2004 and rose to €145m in 2006 and grew further to €201m in 2008.

The table shows that R&D expenditure on social sciences increased to €145m in 2008, a 42% increase over the 2006 figure and a 77% increase over the 2004 figure of €82m. Funding for the humanities increased by 30% between 2006 and 2008 (from €43m to €56m) and by 13% between 2004 and 2006.

Table 3.1 Higher education expenditure on R&D in SSH in current prices (€m), 2004-2008

Sector	2004	2006	2008
Social sciences	82	102	145
Humanities	38	43	56
Total SSH	120	145	201

(Source: Higher Education R&D Survey 2008)

The following table, Table 3.2, specifies the main sources of funding — both direct and indirect — for SSH research carried out within the higher education sector in 2008.

Total funding for SSH research carried out in the higher education sector amounted to €201m in 2008 of which indirect sources accounted for €87.9m with direct sources of funding contributing €113.1m. Of the three categories of direct funding sources, the Irish public research system provided €69.1m

(61%), the EU was the source of €15.5m (14%) and industry and other accounted for the balance of €28.5m (25%).

Table 3.2 Sources of SSH research funding (€m), 2008

Sector	Direct source of funds			Indirect Government	Total
	Irish public research	EU	Industry and other		
Social sciences	54.0	14.6	19.0	57.0	144.6
Humanities	15.1	0.9	9.5	30.9	56.4
Total SSH	69.1	15.5	28.5	87.9	201.0

(Source: Higher Education R&D Survey 2008)

The table shows that direct sources of funds for social sciences research amounted to €87.6m in 2008 or 60.5% of total funding.

Indirect government funding (the core or “block grant”) accounted for the balance of €57m or 39.5% of funding for social science. The EU accounted for 10% of all funding sources and just under 17% of all direct sources of funds.

A slightly different picture emerges in relation to the funding of research in the humanities. Here, direct sources of funds amounted to €25.5m or 46% of total funding. Indirect funding for humanities research came to €30.9m or 54% of total funding. EU sources of funding for research in the humanities came to 2%.

3.2.2 Institutional funding

The core or “block” grant distributed by the Higher Education Authority (HEA) to the universities and other recognised higher education institutions is main form of institutional funding. The block grant is allocated primarily on the basis of a formula e.g. number of taught undergraduate students. The main function of the block grant is to fund the salaries of staff (more than 75 per cent) and teaching-related infrastructure. It should be noted that as each higher education institution in receipt of block grant funding is an autonomous organisation, how the funding is allocated internally is a matter for the individual organisation.

The research component of the block grant is calculated by measuring the amount of time spent on research at the institution by academic staff, and proportioning that part of overall funding to departmental R&D activities.

In 2008, the R&D element of the HEA block grant was €219m, a decline from the €248m recorded in 2006. The *Forfás Science Budget 2010-2011* publication indicates that in 2011 the HEA provided €241m in core funding to higher education institutions.

3.2.3 Individual funding

Prior to its amalgamation with the Irish Research Council for Science, Engineering and Technology to form the Irish Research Council (IRC), the Irish Research Council for the Humanities and Social Sciences was the main dedicated SSH funding provider for individual researchers. The *Science Budget 2010-2011* publication indicates that the IRCHSS provided €11.7m in

2010 and an estimated €10.4m in 2011, the majority of which was provided to individual researchers.

The funding programmes offered by the Irish Research Council that are directed at individual post-graduate and post-doctoral researchers and academic staff include the following:

- Government of Ireland Post-graduate scholarship scheme 2011/2012
- Embark Post-graduate scholarship scheme
- Employment-based Post-graduate programme
- Government of Ireland Postdoctoral Fellowships
- CARA Postdoctoral Fellowship Scheme
- Research Development Initiative
- Government of Ireland New Foundations Awards
- Government of Ireland Collaborative Research Projects Scheme

It should be noted that these programmes are open to researchers both in the SSH and the SET disciplines.

The IRC manages through the Research Development Initiative funding for SSH research undertaken by academic researchers provided by the Department of Children and Youth Affairs, the Department of Environment, Community and Local Government, the Department of Foreign Affairs and Trade and the Family Support Agency.

3.2.4 Programme Funding

The main source of programme funding for the SSH research sector was the Programme for Research in Third Level Institutions. The PRTLTI has been instrumental in funding a number of large-scale SSH research centres.

The *Playing To Our Strength* 2010 foresight report for the arts, humanities and social sciences noted:

“To date the PRTLTI has allocated a total of €865m (consisting mainly of exchequer and significant private funds) to strengthen national research capabilities by investing in excellence and physical infrastructure. The ultimate aim of the programme is to consolidate Ireland’s position as a leading hub for carrying out world-class research and development.”

There have been five cycles of PRTLTI funding and the provision of funding for AHSS projects has been successively increased with each cycle. The programme allocated €53.9m to four ASSH projects in Cycle 4.

AHSS projects funded under Cycle 5 include Arts Humanities Social Sciences Research Building (€16.6m), the Digital Arts and Humanities Structured PhD Programme (€6.8m), Economics and Political Science (€3m) and National Audio Visual Repository (€5.2m).

The PRTLTI has been instrumental in fostering inter-institutional and cross-disciplinary collaboration and this is also evident in its funding of large-scale SSH research institutes. The Programme has provided funding for the €29m Humanities Serving Irish Society (HSIS) project comprising the Royal Irish

Academy, Queen's University, Belfast, University of Ulster, University College Cork, National University of Ireland Galway, National University of Ireland, Maynooth, Trinity College Dublin, University College Dublin, Dublin City University and University of Limerick which aims to develop an inter-institutional research infrastructure for the humanities.

The centrepiece of the HSIS collaboration is the Digital Humanities Observatory (DHO), a sophisticated web-based humanities resource, which will store, preserve and provide access to the increasingly complex range of e-resources now being created in the humanities.

Another HSIS project is An Foras Feasa, an inter-institutional and cross-disciplinary Institute for Research in Irish Historical and Cultural Traditions. This consortium which brings together staff from Humanities and Computer Science departments in National University of Ireland Maynooth, Dublin City University, Dundalk Institute of Technology and St. Patrick's College Drumcondra, supports individual and collaborative research projects in the following four research streams: ICT: Innovation and the Humanities; Multiculturalism and Multilingualism: Textual Analysis and Linguistic Change; Ireland and Europe; and Cultural Heritage and Social Capital in a Global Context.

In 2010, the government transferred responsibility for the PRTLTI from the Department of Education and Skills to the Department of Jobs, Enterprise and Innovation.

The challenge for the SSH sector is that decisions on the most recent PRTLTI funding allocation (the fifth cycle of the programme) were taken in 2009, and there are no indications of a further round of PRTLTI funding or a replacement programme for the funding of large-scale research facilities.

The Higher Education Authority is responsible for the E-Journals programme which originally started in 2004 with funding from Science Foundation Ireland to allow access by Irish researchers to research publications in biotechnology and ICT. This facility is now being extended to include the social sciences and humanities. Researchers, staff and students in the seven Irish Universities will now have online access to full-text articles from more than 25,000 quality, peer-reviewed research publications across a range of disciplines.

3.3 Private research funding

There is little published national data on the extent of SSH research that is funded by the private sector. The Irish Longitudinal Study on Ageing (TILDA, www.tilda.ie), is being jointly funded by Irish Life, a major assurance company, Atlantic Philanthropies, a philanthropy organisation and the Department of Health, a government ministry.

Data produced by Forfás in the 2008 *Higher Education R&D Survey* indicates that industry and other sources contributed €28.5m towards SSH research carried out by higher education institutions in 2008, of which €19m for was for social sciences and €9.5m for the humanities.

3.4 Foundations/ not-for-profit funding

Foundations/not-for-profit funding has played a prominent role in the development of research activity within the higher education sector. Atlantic Philanthropies, the foundation established by the Irish-American billionaire, Chuck Feeney, was an earlier contributor to the PRTL which has played a pivotal role in the development of research infrastructures in the Irish higher education sector.

Total funding provided by the private non-profit sector for research carried out in the higher education sector amounted to €40m in 2008 but no information is available on what proportion of this was for SSH research.

3.5 European and international funding

In 2012, the Advisory Council for Science, Technology and Innovation published a Statement on Horizon 2020, *Playing Our Part in Europe*, in which it noted that at the consultative workshop proposals in the domain of social sciences and the humanities did particularly well in the competition for European funding and that they provided a dimension which had the potential to open up new fields within other areas of science and to complement other research strengths (e.g. in social networking, sensors).

The ACSTI Statement also noted the necessity to include the social sciences in technological research and development e.g. biotechnology, nanotechnology.

The Statement also highlighted that Ireland saw itself as having benefited from being engaged in the ESFRI roadmap projects and was particularly involved on infrastructures in areas such as including social sciences and humanities, marine and medical/biotechnology.

Additionally, ACSTI pointed out that social science and humanities were horizontal themes in Horizon 2020 and were areas in which Ireland has significant strengths. The workshop participants saw opportunities to grow this cross-cutting theme and encouraged the national funding bodies to take appropriate measures. The National Support Structure and other bodies could help researchers to form partnerships but opportunities should also be sought in infrastructure and key enabling technologies (where citizen involvement is important), for example.

4. Performing System

4.1 Overview of the performers

As shown in Table 4.1 below, the total estimated intra-mural expenditure on SSH research amounted to €227m in 2010, an increase on the 2005 figure of €158m but a slight decrease on the figure of €235m recorded in 2009.

The higher education sector is the main performer of social sciences and humanities (SSH) research in Ireland; it is estimated that in 2010 the higher education institutions undertook SSH research with a value of €216m out of a total national SSH research expenditure of €227m.

The 2010 figure for SSH research carried out by the higher education sector represented a decline on the previous year's figure of 2009 which stood at €224m. Prior to this, the value of SSH research undertaken by the HEIs had been steadily increasing year-on-year.

The seven universities account for the bulk of this research: University College Cork, University College Dublin, National University of Ireland Galway, National University of Ireland Maynooth, the University of Dublin [Trinity College Dublin], the University of Limerick and Dublin City University.

Up until recently, Dublin Institute of Technology and the network of Institutes of Technology have not been major performers of SSH research but this picture is beginning to change slowly.

The public research organisations accounted for €11m of SSH research expenditure in 2010, which in percentage terms is down considerably from the figure of €19m spent in 2005.

Neither the Enterprise nor the Private non-profit sectors were recorded by Eurostat as undertaking any meaningful SSH research.

Table 4.1 HSS research performers by sector, 2005-2010 (€m)

HSS research performing sectors	2005	2006	2007	2008	2009	2010
Government	19	22	15	15	12	11
Higher education	139	143	160	201	224	216
Enterprise	-	-	-	-	-	-
Private non-profit	-	-	-	-	-	-
Total SSH research	158	165	175	216	235	227

(Source: Eurostat)

Table 4.2 shows that SSH research expenditure as a proportion of GERD varied between 7% and 8% during the period 2005-2010.

Table 4.2 Expenditure on SSH research and GERD, 2005-2010 (€m)

	2005	2006	2007	2008	2009	2010
Total SSH research	158	165	175	216	235	227
GERD	2,030	2,217	2,434	2,616	2,838	2,673
SSH as % of GERD	8%	7%	7%	8%	8%	8%

(Source: Eurostat)

Eurostat data indicates that total intra-mural expenditure on SSH research performed in Ireland measured in Euro per head of population is almost twice the EU27 average (see Table 4.3). The Irish SSH figure was €50.9 per inhabitant in 2010, while the equivalent EU27 figure was €23.9.

Table 4.3 Total intramural expenditure on SSH research, in Euro per inhabitant, 2007-2010

	2007	2008	2009	2010
EU27	15	17.2	22.9	23.9
Ireland	40.6	49.1	52.9	50.9

(Source: Eurostat)

Total Irish SSH research expenditure funded through civic government R&D allocations amounted to €19.8 in 2010 per head of population, slightly below the EU27 average of €21.2. The share of SSH research in Irish civic GBAORD on a per capita basis has been declining over the period 2007-20110 while, on the other hand, the EU27 average has been increasing.

Table 4.4 Total civic R&D appropriations (GBAORD) by socio economic objective (NABS 2007), R&D related to Social Sciences and Humanities, financed from GUF and other sources in Euro per inhabitant, 2007-2010

	2007	2008	2009	2010	2011
EU27	18.4	19.3	20.5	20.2	21.2
Ireland	26.1	25.9	27.1	20.5	19.8

(Source: Eurostat)

4.2 Higher Education Institutions

4.2.1 HEIs as education performers

The total number of SSH graduates produced by the Irish education system amounted to 21,665 in 2010 of which 3,531 were humanities graduates and 18,134 were social science graduates. SSH graduates accounted for just under 37% of the total number of graduates in 2010.

Table 4.5 shows the number of SSH graduates by main SSH sub-disciplines and the total number of graduates for the period, 2005-2010. Care should be taken with this table as there have been changes in the composition of SSH sub-disciplines during the period under review. Data on Humanities graduates are only available for 2009-2010 while data on Humanities and the Arts graduates are only available for 2005-2008, making comparisons over the period 2005-2010 impossible. For the same reason, there are difficulties comparing the number of total SSH graduates in 2005-2008 with the total number of SSH graduates in 2009-2010; the same also applies to the percentage of SSH graduates as a percentage of total graduates.

The Table shows that there have been fluctuations in the number of social science graduates emerging from the education system during the period 2005-2010 which stood at 18,134 in 2010.

Table 4.5 Number of SSH graduates by main SSH sub-disciplines, 2005-2010

Discipline	2005	2006	2007	2008	2009	2010
Humanities and the arts	13,867	11,328	14,871	13,170	-	-
Humanities	-	-	-	-	3,314	3,531
Social sciences, business & law	17,817	20,566	16,751	19,474	17,933	18,134
Total SSH graduates	31,684	31,894	31,622	32,644	21,247	21,655
Total tertiary graduates	59,650	59,184	59,011	60,074	57,894	58,527
SSH as % of total	53%	54%	54%	54%	36.7%	36.8%

(Source: Eurostat)

Eurostat data also indicate that there have been fluctuations in the numbers of SSH Ph.Ds during the period 2009-2011. SSH Ph.Ds accounted for 25.6% of all Irish Ph.Ds in 2009, just slightly below the EU27 average of 26.9%. There was a decline in the Irish Ph.D ratio in 2010 whereas the EU27 average ratio remained stable; the decline in the Irish SSH Ph.D ratio was only temporary as the 2011 figure rose to 24.1%.

Table 4.6 Share of Ph.D.s in Humanities, Social sciences, business and law as a percentage of all Ph.D.s

	2007	2008	2009	2010	2011
EU27	23.3	24.0	26.9	27.0	-
Ireland	-	-	25.6	19.7	24.1

(Source: Eurostat)

The report of the HEA/IRCHSS foresight study, *Playing to Our Strengths*, provided considerable data on enrolments in all disciplines and in the arts, social sciences and humanities (AHSS) disciplines in the publicly-funded higher education system (the universities and Institutes of Technology) for the academic years, 2004-2005 and 2007-2008.

Table 4.7: Enrolments in all Disciplines in the publicly-funded HE System, 2004/05 and 2007/08

	2004-2005			2007-2008			Percentage change		
	Overall			Overall			Male & female		
	M	F	Total	M	F	Total	Full-time	Part-time	Overall
University sector									
Undergraduate	30,415	44,612	75,027	31,683	46,797	78,480	8%	-18%	5%
Postgraduate	9,859	12,457	22,316	10,788	14,283	25,071	8%	22%	12%
Total	40,274	57,069	97,343	42,471	61,080	103,551	8%	-1%	6%
Institutes of Technology sector									
Undergraduate	33,356	31,156	64,512	32,671	30,101	62,772	-2%	-5%	-3%
Postgraduate	1,141	1,076	2,217	2,305	2,404	4,709	81%	152%	112%
Total	34,497	32,232	66,729	34,976	32,505	67,481	0%	6%	1%
Total for sector	74,771	89,301	164,072	77,447	95,585	171,032	4.8%	2%	4%

(Source: HEA/IRCHSS foresight study, *Playing to Our Strengths*, 2010)

The data shows that the number of undergraduates in all disciplines enrolling in the university sector increased by 5%, though the number of post-graduates enrolling grew by 12%.

Table 4.8: Enrolments in AHSS Disciplines in the publicly-funded HE System, 2004/05 and 2007/08

	2004-2005			2007-2008			Percentage change		
	Overall			Overall			Male & female		
	M	F	Total	M	F	Total	Full-time	Part-time	Overall
University sector									
Undergraduate	16,049	27,619	42,891	17,569	27,650	45,219	7%	-8%	5%
% of all disciplines	53%	62%	57%	55%	59%	58%			
Postgraduate	4,862	6,836	11,698	5,572	8,247	13,819	11%	35%	18%
% of all disciplines	49%	55%	52%	52%	58%	55%			
Total	40,274	57,069	97,343	42,471	61,080	103,551	8%	-1%	6%
Institutes of Technology sector									
Undergraduate	13,193	19,963	33,156	12,560	18,438	30,998	-6%	-9%	-7%
% of all disciplines	40%	64%	51%	38%	61%	49%			
Postgraduate	532	641	1,173	1,110	1,536	2,646	66%	242%	126%
% of all disciplines	47%	60%	53%	48%	64%	56%			

(Source: HEA/IRCHSS foresight study, *Playing to Our Strengths*, 2010)

Undergraduate enrolment in the Institute of Technology sector fell slightly by 3% while the number of post-graduate enrolments jumped dramatically by 112%, albeit from a low base.

Overall enrolments for the publicly-funded higher education sector increased by 4% over the period.

The statistics for enrolments in AHSS disciplines indicate that undergraduate enrolments in the university sector increased by 5% over the period 2004-2005 to 2007-2008. However, post-graduate enrolments in the AHSS increased at a much faster rate, 18%.

In the university sector in 2007-2008, 58% of undergraduates and 55% of postgraduates were enrolled in AHSS courses, an increase of 1 and 3 percentage points, respectively, on the figures for 2004-2005.

While AHSS postgraduate enrolments in the Institute of Technology sector also increased substantially (126%), the number of AHSS undergraduate enrolments fell by 7%.

In the institutes of technology sector, 49% of undergraduates and 56% of postgraduates were enrolled in AHSS courses, a decrease of 2 and an increase of 3 percentage points, respectively.

A December 2011 report [10] compiled for the Office of Science and Technology in the Department of Jobs, Enterprise and Innovation by Forfás in respect of outputs of the Strategy for Science, Technology and Innovation 2006-2013 indicates that there has been considerable growth in the number of SSH graduates over the period 2005-2010. The report, *Strategy for Science, Technology and Innovation Indicators - December 2011*, noted that the number of Masters and PhD graduations from the university system had increased from 6,193 in 2005 to 9,867 in 2010 (+42%). SET Masters and PhD graduates increased from 2,271 to 2,956 (+30%) and HSS graduates increased from 4,696 to 6,911 (+47%) from 2005 to 2010. University Masters graduates in SET and HSS increased by 28% and 45% between 2005 and 2010 to 2,180 and 6,534 respectively.

4.2.2 HEIs as research performers

Eurostat data indicate that the higher education sector accounts for 95% of the research undertaken in the social sciences and humanities sector in Ireland. While no detailed statistics are available, it is estimated that the seven universities account for the majority of SSH research undertaken in the higher education sector.

The seven universities are:

- University College Cork (www.ucc.ie)
- University College Dublin (www.ucd.ie)
- National University of Ireland Galway (www.nuigalway.ie)
- National University of Ireland Maynooth (www.nuim.ie)
- The University of Dublin (Trinity College Dublin) (www.tcd.ie)
- The University of Limerick (www.ul.ie)

- Dublin City University (www.dcu.ie)

Other higher education institutions that are involved in SSH research include the Royal Irish Academy, the Dublin Institute for Advanced Studies, Dublin Institute of Technology and the network of fourteen Institutes of Technology.

The seven universities are represented by the Irish University Association (www.iua) and the network of fourteen Institutes of Technology are represented by the Institutes of Technology Ireland (www.ioti.ie).

Expenditure on SSH research as a percentage of all research undertaken in the higher education sector rose from 29% in 2005 to 32% in 2010, though the percentage fluctuated during the period (see Table 4.9 below).

Table 4.9: Total expenditure by the higher education sector on SSH research and on all research disciplines, 2005-2010 (€m)

	2005	2006	2007	2008	2009	2010
Total SSH research	158	165	175	216	235	227
HERD	550	601	660	750	829	709
SSH as % of HERD	29%	27%	27%	29%	28%	32%

(Source: Eurostat)

Eurostat data on the SSH share of higher education research and development expenditure (HERD), in Euro per inhabitant, indicate that Ireland has a higher expenditure level compared to the EU27 average. In 2007, the share of SSH research as a proportion of HERD was €37.1 per head of population which compares to the EU27 equivalent of €23.7. By 2010, the Irish SSH share of HERD had increased substantially to €48.2 while the EU27 figure had declined fractionally to €23.6.

Table 4.10: SSH share of HERD, in Euro per inhabitant

	2007	2008	2009	2010
EU27	23.7	21.1	28.3	23.6
Ireland	37.1	45.7	50.2	48.2

(Source: Eurostat)

4.3 Public Research Organisations

There are a number of public research organisations (PROs) that are involved in SSH research; data from Eurostat indicates that PROs undertook SSH research to a value of €11m in 2010, down substantially from the €15m budget in 2008.

Data published by Forfás in its 2012 publication, *The Science Budget 2010-2011*, reveal that of the 301 male researchers employed by public research organisations, that 37 or 12% were involved in SSH research while a similar number of female researchers were employed, 37, proportionally they accounted for 21% of all female researchers.

Table 4.11: Total male/female and as percentage of total by field of science within public research organisations, (2011)

Fields of science	Male researchers	Male researchers as a % of all male researchers	Female researchers	Female researchers as a % of all female researchers
Agriculture, forestry and fisheries	181	60.0%	86	48.6%
Earth & related environmental sciences	17	5.5%	7	4.1%
Economics and Business	35	11.6%	35	19.7%
Environmental Engineering	3	0.9%	1	0.5%
Health sciences	3	1.0%	31	17.5%
Other social sciences	2	0.7%	2	1.1%
Physical sciences	44	14.6%	15	8.5%
Veterinary science	17	5.6%	0	0.0%
Total	301	100%	177	100%

(Source: The Science Budget 2010-2011)

The main public sector organisations involved in SSH research include:

- The Economic and Social Research Institute

The Economic and Social Research Institute (ESRI) is a not-for-profit organisation under the aegis of the Department of Finance. ESRI's current research activities include the areas of macroeconomics, international economics, equality, health, education, labour market, social cohesion, taxation, welfare and pensions. ESRI undertakes commissioned studies, surveys and data analysis on behalf of a wide range of Irish and international organisations. The ESRI's research and development budget was estimated by Forfás in *The Science Budget 2010-2011* publication to be €6m in 2011.

- The Central Bank and the Financial Services Authority of Ireland

The Central Bank of Ireland, which came into being in 1943, was re-structured and re-named in 2010 as the Central Bank and Financial Services Authority of Ireland. The organisation undertakes research in relation to economic intelligence and forecasting, inflation and competitiveness, monetary issues, economic modelling, public finances, structural issues, housing market, productivity and growth. Its research budget was estimated by Forfás at €1.4m in 2011.

- The National Economic and Social Council

The National Economic and Social Council was established by Government in November 1973. Its members include representatives from employer associations, trade unions, agricultural groups, community and voluntary organisations, environmental organisations, plus a number of independent

members nominated by Government. According to the Forfás Science Budget 2010-2011 publication, the Council's research budget amounted to €1.2m in 2011.

- FAS

FAS, the national training and employment agency, is under the aegis of the Department of Enterprise, Trade and Innovation. The organisation's planning and research department carries out work in relation to labour market research and analysis, skills forecasting, surveys and evaluation and policy advice and analysis. Its research and development budget was forecast to just under €1m in 2011.

The government announced in July 2011 that FAS would be split in two, with some functions transferring to a new agency (Solas) and the remainder transferring to the Department of Social Protection.

- Teagasc

Employing 200 research scientists and 300 research technicians, Teagasc, the agriculture and food development authority, is Ireland's largest public research organisation. Its estimated research and development budget in 2011 was €50.1m. Teagasc's Rural Economy Research Centre (RERC) carries out economics and social science research. RERC's mission is to produce high quality social science research and policy advice to improve the competitiveness and sustainability of Irish Agriculture and to enhance the quality of life in rural Ireland, thus contributing to the achievement of Teagasc's key goals: competitiveness and innovation in agriculture, sustainable systems of agriculture and rural viability.

- The Central Statistics Office

The Central Statistics Office (CSO) is responsible for the collection, processing and dissemination of official statistics and is an independent office under the aegis of the Department of the Taoiseach [Prime Minister]. The CSO has a staff of approximately 800 employees and its technical services budget amounted to €82.6m in 2011.

- Health Research Board

The Health Research Board (HRB) which is under the aegis of the Department of Health is the lead agency in Ireland supporting and funding health research. It provides funding, maintains health information systems and conducts research linked to national health priorities. The HRB's aim is to improve people's health, build health research capacity and make a significant contribution to Ireland's knowledge economy. It carries out a number of research activities and its R&D budget was estimated at €2.5m in 2011.

4.4 Private research performers

There is little published data on private sector performers of SSH research. Neither Eurostat nor the Central Statistics Office, the national statistical agency, collect data on HSS research undertaken by private sector companies in Ireland. Other national data sources on R&D undertaken by private sector companies on HSS are limited.

The main performers of HSS research in the private sector are likely to include multinational companies such as Intel, Microsoft and IBM which have a significant presence in Ireland.

Major companies in the banking, stockbroking and financial services sector regularly publish research work in relation to economic and financial issues. The major stockbroking companies such as Davy, Goodbody Stockbrokers and NCB all undertake research on Irish and international trends in economic, financial and monetary policy.

The large accountancy companies such as KPMG and PriceWaterhouseCoopers also undertake research on taxation, financial and management issues.

There are a number of economic and management consultancy enterprises that carry out research across a range of SSH disciplines. These include DKM Economic Consultants and Indecon International Economic Consultants (economics) and TNSmrb, RedC and Amarach (consumer research).

The Institute of Public Administration carries out research in relation to public administration.

Though the EU R&D Scoreboard (the 2012 EU Industrial R&D Investment Scoreboard) [11] focuses on R&D expenditures of industrial companies it includes a number of Irish-based or Irish-owned companies in the top 1500 R&D performers that are either business service companies such as Accenture (R&D expenditure of €389m in 2012) or financial institutions such as the Bank of Ireland (€35m). However, it is not stated to what extent the R&D expenditures by these companies relate to SSH disciplines.

4.5 Research performance

4.5.1 Scientific publications

The most recent study of publicly-funded research performance was published in 2009 by Forfás and the Higher Education Authority. The study showed that Ireland had improved in terms of the volume and impact of its research. The study revealed that Ireland ranked 8th on the impact of research publications within a group of 20 comparator countries, including; Denmark (1), Netherlands (3), US (4), UK (6), Finland (8), Australia (10), Singapore (13) and China (17).

The study was conducted by Evidence Limited, part of the Thomson Reuters Group, and concluded that Ireland was punching above its weight in terms of the impact of its research.

The study reported that in relation to the humanities Ireland appeared to perform well in terms of volume of humanities papers, but the total number of papers published (34 in 1998; 48 in 2007) had been very low and thus trends should be interpreted with care.

The Forfás/HEA study noted that growth in the number of social science papers produced by Irish authors had been phenomenal over the last ten years. From a very low base in 1998 (only 112 papers, or 0.34% of total world output) Ireland in 2007 produced 246 papers, or 0.58% of world output.

Within Ireland, social science was now one of the stronger project research areas considered in this report. Share of the total world output had increased by 37% — the greatest improvement amongst any of this comparator group. These dramatic percentages must be interpreted in the light of publishing patterns within social sciences, where a lot of research was published in reports rather than as papers, and where patterns of research dissemination were rapidly evolving.

A study by the Irish University Association, the representative body for the seven universities, using Thomson Reuters Essential Science Indicators data for May 2005 found that Irish universities were in the top 1% in the world in ten fields including the social sciences.

Data produced by the Technopolis Group using the Scopus database for the period 2005-2011 in relation to SSH publications indicates that the average annual growth rate for the number of SSH publications in Ireland during the period was 16.3%. As shown in Table 4.12 below, the number of Irish SSH publications increased from 588 in 2005 to 1,456 in 2011.

Table 4.12 Number of SSH publications in Ireland, 2005-2011

Year of publication	Ireland
2011	1,456
2010	1,305
2009	1,060
2008	915
2007	787
2006	710
2005	588
Average annual growth rate 2005-2011	16.3

(Source: Technopolis Group, 2013)

Note: The definition of SSH excludes multidisciplinary journals; additionally, only articles and reviews were counted.

Technopolis also carried out a review of the countries with which Ireland co-published SSH publications. The countries that Ireland co-operated with in terms of SSH publications during the period 2005-2011 are presented in Table 4.13 below (minimum threshold for inclusion in the inter-country comparison was 10 co-published SSH publications).

Table 4.13 Countries with which Ireland co-published SSH publications, 2005-2011

Country	Number of SSH co-publications
United Kingdom	1,072
United States	633
Germany	211
Netherlands	185
Canada	143
France	135
Italy	113
Spain	107
Belgium	76
Sweden	72
Switzerland	59
Norway	55
Denmark	46
Finland	45

Greece	44
Israel	34
Austria	32
Portugal	25
Turkey	21
Hungary	19
Japan	16
Poland	16
Czech Republic	15
Slovenia	15
Cyprus	10
Iceland	10

(Source: Technopolis Group, 2013)

Note: The definition of SSH excludes multidisciplinary journals; additionally, only articles and reviews were counted.

The two countries with which Ireland co-published SSH publications were, unsurprisingly, the UK (1,072 co-publications) and the US (633 co-publications), both of which Ireland has long historical and language ties. Germany and the Netherlands occupied third and fourth places with 211 and 185 co-publication.

Whereas the UK was the largest Irish international partner in terms of SSH co-publications, Ireland only ranked 10th in the UK international co-publication partner listing.

4.5.2 Interdisciplinarity

The concept of multi- and inter-disciplinary research is well understood and accepted within the higher education sector. There is recognition among academia that many of the societal challenges facing Ireland can only be properly addressed by multi- and inter-disciplinary research involving the humanities and social sciences. This recognition is evidenced by the development of SSH research centres within higher education institutions and the importance these centres attach to multi- and inter-disciplinary research.

However, research has indicated that while there is an aspiration among academia for multi-disciplinary research there are gaps that need to be addressed. A Forfás report on Skills in Creativity, Design and Innovation pointed to a lack of interaction between science, engineering and technology and the humanities and social sciences, in particular business and makes a number of recommendations of how this gap could be closed including industry placement for PhD students and more cross disciplinary work being undertaken in the higher education institutions.

A scan of SSH research centres within the higher education sectors indicate that they mainly focus on inter-disciplinary research though there are a small number of high profile centres that also engage in multi-disciplinary research.

National policy documents place an emphasis on the need for both inter- and multi-disciplinary research. The national higher education strategy, National Higher Education Strategy to 2030, highlights that the multi-dimensional nature of many of the social, economic and civic challenges means that they require multi-disciplinary approaches, and higher education institutions are

uniquely well placed to lead, develop and apply these, in partnership with others.

The strategy document specifically mentions that in identifying research priorities attention should be paid to multi-disciplinary research funding initiatives to connect the arts, humanities and the social sciences on one hand and science, technology, engineering and the mathematics on the other. It also notes that in relation to research funding a balance needs to be applied between different types of research from fundamental to strategic and applied, and from single investigator to large multi-disciplinary teams working in partnership with other relevant players.

The theme that many of the social, economic and civic challenge require a multi-disciplinary research approach is also addressed in the Government's research prioritisation strategy, the Report of the Research Prioritisation Steering Group. The strategy document notes that in one of the 14 research priority areas identified, Digital Platforms, Content and Applications, there were niche market opportunities for Ireland in the development of tools for content authoring and creation and inter-disciplinary fields between technology, social science and humanities e.g. in social media applications and in making the human-machine interface more intuitive. Similarly to the higher education strategy, the Steering Group recommends the introduction of flexible funding instruments to facilitate inter-disciplinary research across technology, humanities and social science disciplines.

The Research Prioritisation Steering Group point out that in relation to another research priority area, Innovation in Services and Business Processes, there was an important gap in the research system, namely the lack of multi-disciplinary teams of researchers in the social and business sciences and technological and ICT sciences.

Both the Higher Education and Research Prioritisation strategy documents make the case for the provision of multidisciplinary approaches to third level education provision. The Strategy for Science, Technology and Innovation 2006-2013 recommends the provision of quality-led training of early stage researchers in multi-disciplinary environments.

The 2010 foresight report on arts, humanities and the social sciences (AHSS), *Playing to Our Strengths*, noted that significant changes were needed if the AHSS were to continue to underpin a successful society and economy. It emphasises that cross- and inter-disciplinary work is key to the future of AHSS. The report says that the challenge is in getting recognition of this first of all, and then developing the systems and processes for cross-disciplinary and inter-disciplinary work. It points out that while there is a lot of rhetoric about multi-disciplinary and inter-disciplinary research, the metrics used are all single discipline-based. The report notes that the drivers must change if the behaviour of researchers and scholars is to change.

One of the challenges in facilitating multi- and inter-disciplinary HSS research activity is the current absence of new funding initiatives promoting such collaboration. The Programme for Research in Third Level Institutions (PRTLII) has played a major role in fostering multi- and inter-disciplinary HSS research centres in higher educational institutions as evidenced in the report prepared by PA Consulting Group for the Higher Education Authority on the

outcomes of the programme. There have been five cycles of PRTLTI funding with awards under the fifth cycle — covering the period 2009-2013 — having been allocated in 2009.

The Irish Research Council for the Humanities and Social Sciences (now merged with the Irish Research Council for Science, Engineering and Technology to form the Irish Research Council) provided funding for small groups of HSS researchers to engage in collaborative inter-disciplinary research. That funding has now ended but its successor, the Irish Research Council, is considering the development of new funding initiatives to further the involvement of HSS researchers in both multi- and inter-disciplinary research activities. However, the provision of new funding initiatives will be dependent on the availability of Exchequer resources which are constrained as a result of the economic crisis.

4.5.3 International Cooperation

Ireland has signed science, technology and innovation agreements with a small number of third countries and additionally has agreements covering broader economic development co-operation with a larger number of third countries. The extent to which the international STI agreements cover SSH research co-operation is unknown.

One of the difficulties for small countries such as Ireland is that the management and co-ordination of international co-operation agreements are resource intensive, and in the context of current manpower restrictions within Government ministries these resource constraints are more acute. Consideration is being given at a Government level to the development of new approaches to international STI co-operation agreements where the management input can be devolved to other organisations more directly involved in international exchanges.

It should be noted that there is extensive international co-operational by individual Irish SSH researchers or research centres within the higher education sector, mostly in the context of European-funded programmes.

References

- [1] Department of Jobs, Enterprise and Innovation (2012): *Report of the Research Prioritisation Steering Group*, Dublin, Ireland <http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9545,en.php>
- [2] Department of Jobs, Enterprise and Innovation (2006): *Strategy for Science, Technology and Innovation 2006-2013*, Dublin, Ireland <http://www.djei.ie/science/technology/sciencestrategy.htm>
- [3] Higher Education Authority and the Irish Research Council for the Humanities and Social Sciences (2010): “*Playing to Our Strengths: The role of the arts, humanities and social sciences and implications for public policy*”, Dublin, Ireland <http://heatest-drupal6.heanet.ie/files/files/file/HEA%20FAHSS%20Report.pdf>
- [4] Advisory Council for Science, Technology and Innovation/Forfás (2012): *Sustainability of Research Centres*, Forfás, Dublin <http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9388,en.php>
- [5] Forfás (2012): *The Science Budget 2010-2011, State Expenditure on Science & Technology and Research & Development*, Forfás, Dublin <http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9359,en.php>
- [6] Department of Education and Skills (2011): *National Strategy for Higher Education to 2030*, Report of the Strategy Group, Dublin http://www.heai.ie/files/files/DES_Higher_Ed_Main_Report.pdf
- [7] Forfás (2010): *Making it happen: Growing Enterprise for Ireland*, Dublin <http://www.forfas.ie/publication/search.jsp?ft=/publications/2010/Title,6807,en.php>
- [8] Advisory Council for Science, Technology and Innovation (2012): *Playing Our Part in Europe*, Forfás, Dublin <http://www.forfas.ie/publication/search.jsp?ft=/publications/2012/Title,9206,en.php>
- [9] Forfás (2010): *Higher Education R&D Survey*, Dublin, Ireland <http://www.forfas.ie/publication/search.jsp?ft=/publications/2010/Title,7208,en.php>
- [10] Department of Jobs, Enterprise and Innovation/Forfás (2011): *Strategy for Science, Technology and Innovation Indicators - December 2011*.
- [11] European Union/Joint Research Centre of the European Commission (2012): *The 2012 EU Industrial R&D Investment Scoreboard*, Luxembourg: Publications Office of the European Union http://ec.europa.eu/dgs/jrc/index.cfm?id=1410&dt_code=NWS&obj_id=15810&ori=RSS