



“CONSULTATION PAPER FOR SUCCESSOR TO STRATEGY FOR SCIENCE, TECHNOLOGY AND INNOVATION”: COMMENTS FROM THE HERITAGE COUNCIL OF IRELAND

23rd March 2014

The Heritage Council of Ireland welcomes the opportunity to comment on this consultation paper.

The Heritage Council is a statutory public body, established under the Heritage Act, 1995, with the ability to propose policy to government. As part of its remit, it funds heritage-focused research, with a particular emphasis on policy-orientated research. The Heritage Council funds the National Biodiversity Data Centre, the Discovery Programme (archaeological research), commissions policy-orientated research in the areas of cultural and natural heritage and funds heritage research projects through its community grants schemes. The Heritage Council is Ireland’s representative on the Executive Board of the JPI Cultural Heritage and Global Change.

General comments:

We note the absence of any reference to cultural heritage in the document. Our unique cultural heritage is a significant national resource, and a significant contributor to the Irish economy.

The term “cultural heritage” encompasses tangible heritage (eg. monuments, buildings, sites, paintings, museum objects), intangible heritage (eg. music, folklore, dance, traditional craft skills) and digital heritage (eg. digitised heritage content, cultural heritage data and born-digital artefacts). A 2011 report by ECORYS for the Heritage Council of Ireland, looking at the economic impact of Ireland’s historic environment alone (itself only a small part of what makes up our total cultural heritage) found that:

- The historic environment is a highly significant contributor to Ireland's national economy, directly supporting almost 25,000 FTE jobs.
- Including indirect and induced effects, it is estimated that the historic environment sector supports approaching 40,000 FTE employment positions in Ireland.
- In terms of contribution to national income, Ireland's historic environment is estimated to account for some €1.5 billion annually to the nation's Gross Value Added (GVA).
- Within the context of Ireland's economy, it is estimated that the historic environment contribution to the national economy is equivalent to 1% of total Irish GVA, and some 2% of overall employment¹.

Our cultural heritage is the backbone of our tourism industry. It is also a unique research resource that is widely recognised as being of international importance.

The lack of reference to cultural heritage within the consultation document is also at odds with the emphasis currently being placed on cultural heritage as a strategic research area at European level.

¹ ECORYS & Fitzpatrick Associates Economic Consultants, *Economic Value of Ireland’s Historic Environment*, 2011.

[http://www.heritagecouncil.ie/fileadmin/user_upload/Publications/Corporate/Economic_Evaluation_of_the_Historic_Environment_Ireland.pdf]

We strongly suggest that this absence should be remedied in future drafts.

European Context:

On the 20th of May 2014, the Council of the European Union formally adopted its *Conclusions on Cultural Heritage as a strategic resource for a sustainable Europe*. This document formally recognises, *inter alia*, that:

“3. cultural heritage is a major asset for Europe and an important component of the European Project”

and emphasises that:

“7. cultural heritage plays a specific role in achieving the Europe 2020 strategy goals for “smart, sustainable and inclusive growth” because it has social and economic impact and contributes to environmental sustainability”

“8. cultural heritage cuts across several public policies beyond the cultural, such as those related to regional development, social cohesion, agriculture, maritime affairs, environment, tourism, education, the digital agenda, research and innovation. These policies have a direct or indirect impact on cultural heritage and at the same time cultural heritage offers a strong potential for the achievement of their objectives. Therefore, this potential should be fully recognised and developed”

It calls on Member States and the Commission to:

“18. encourage the funding, development and dissemination of digital cultural content as well as the availability of innovative heritage-related services of cultural and educational value to citizens”

“19. promote long-term heritage policy models that are evidence-based and society- and citizen driven”

“25. further cooperate on a research agenda for cultural heritage and strengthen support for cultural heritage research initiatives within the EU framework programme for research and innovation Horizon 2020 such as the Joint Programming Initiative on Cultural Heritage and Global Change”

“26. pursue the analysis of the economic and social impact of cultural heritage in the EU and contribute to a development of a strategic approach to cultural heritage”.

The *Conclusions on Cultural Heritage* have been followed by a number of important strategy documents, including:

European Commission Communication *Towards an integrated approach to cultural heritage for Europe*, 22nd July 2014. The overall aim of which is:

“ to help Member States and stakeholders make the most of the significant support for heritage available under EU instruments, progress towards a more integrated approach at national and EU level, and ultimately **make Europe a laboratory for heritage-based innovation.**”

The document notes the “growing global demand for European expertise in heritage”, which is increasingly seen as an area where Europe can compete strongly against the major emerging economies. Ireland’s unique cultural heritage and our long tradition of research in this area make us ideally placed to take advantage of this growing European focus, and growing international demand.

The document also notes the contribution that the cultural heritage makes to both economic growth (Section 1.2) and social innovation (Section 1.3) as well as the importance of research and innovation (Section 2.1) within the cultural heritage sector.

In parallel with their Communication, the EC produced a mapping document (*Mapping of Cultural Heritage actions in European Union policies, programmes and activities*), which analyses existing and planned future initiatives for cultural heritage under headings that include:

1. CULTURE
2. EDUCATION
3. COHESION POLICY
4. DIGITAL AGENDA
5. RESEARCH AND INNOVATION
6. SCIENCE
7. TOURISM, ENTERPRISE AND INDUSTRY

All of these are areas where Ireland can compete strongly.

As a follow up to these documents, the Council of the European Union, published *Draft council conclusions on participatory governance of cultural heritage* on 13th November 2014, which call on Member States and the Commission to:

“27. promote evidence-based research on the impact of participatory approaches in cultural heritage policies and governance in order to contribute to the development of strategic approaches to cultural heritage;”

Accordingly, the Council of the European Union and Representatives of the Governments of the Member States, *Draft conclusions on a Work Plan for culture 2015-2018*, 26th November 2014, names Cultural Heritage as one of its four priority areas.

Most recently, the European Parliament Committee on Culture and Education *Draft Report towards an integrated approach to cultural heritage for Europe*, 03 March 2015 proposes a Motion for a European Parliament Resolution on Cultural Heritage, which:

“12. Notes that cultural heritage can contribute to innovative jobs, products, services and processes and can be a source of creative ideas, nurturing the new economy while having a low impact on the environment;

13. Recognises that cultural heritage plays a vital role in several of the Europe 2020 flagship initiatives, such as the Digital Agenda, the Innovation Union and the Agenda for New Skills and Jobs;

14. Notes that the field of cultural heritage has the capacity to create high-skilled jobs;

15. Encourages Member States to work together with regional and local authorities in order to maximise the value of cultural heritage in our society and its contribution to jobs and growth in the EU;

21. Highlights the potential of the digitisation of cultural heritage, both as a tool for preserving our past and as generating research opportunities, job creation and economic development;
22. Reaffirms the important contribution of cultural heritage to the cultural and creative industries;
23. Draws attention to the threats raised by climate change, affecting an important number of sites within the European Union;
24. Emphasises the role that cultural heritage plays in the Union's external relations through policy dialogue and cooperation with third countries."

In addition, a Horizon2020 High Level Expert Group on Cultural Heritage has been established and has recently produced the following summary report, based on a series of workshops held in 2014:

Horizon 2020 Expert Group on Cultural Heritage, *Summary report towards a new EU agenda for cultural heritage research and innovation*, 27th November 2014.

A further report from the Horizon2020 High Level Expert Group on Cultural Heritage *Getting Cultural Heritage to Work for Europe* is forthcoming (expected April 2015).

We are already seeing a significantly-increased emphasis on Cultural Heritage across the various draft 2016-2017 H2020 work programmes that are currently available. Ireland should now be positioning itself to take advantage of these upcoming opportunities. A specific reference to cultural heritage as a research priority within the Successor to SSTI would provide the unifying influence that is needed to gather existing research areas together under one banner and, as a result, to more effectively exploit the significant Irish potential for performance in a research field that is of increasing international importance.

Joint Programming Initiative on Cultural Heritage and Global Change (JPICH):

Ireland (via the Heritage Council of Ireland and the Department of Arts, Heritage and the Gaeltacht) sits on the Executive and Governing Boards of the JPI Cultural Heritage respectively. This puts us in a strong position relative to the cultural heritage research landscape at European and International level.

The JPI Cultural Heritage has produced a Strategic Research Agenda (SRA) for Cultural Heritage in Europe, which sets out four priority areas for cultural heritage research:

- Developing a Reflective Society
- Connecting People with Heritage
- Creating Knowledge
- Safeguarding our Cultural Heritage Resource

There is now a need for Ireland to clearly articulate its own cultural heritage research priorities in line with the European SRA. The inclusion of cultural heritage as a research area with the successor to SSTI would be an effective further step in this direction.

As noted in the *Report of the GPC Working Group on Alignment*, October 2014, in order to achieve this:

- Stronger interministerial coordination is needed, involving commitment and funding from several ministries (and their related funding agencies).
- New ways of engaging institutions should be addressed by policy makers, by developing a coordinated approach for institutional and project-based funding.
- Alignment is catalysed when there is a national top-down (i.e. strategic) programme/strategy in the domain. Member States do not necessarily need thematic programmes that exactly mirror a JPI's SRA but they do need a national strategic approach towards the respective challenge. It is essential that this engagement is visible and long-standing.

Ireland needs to do more to integrate its national research priorities with European strategies.

In relation to Bullet 1 above, we note the absence of a representative from the Department of Arts, Heritage and the Gaeltacht on the Interdepartmental Steering Committee (Appendix 1) and suggest that this might be addressed for future consultations.

In relation to Bullet 2, we suggest that research policy makers could begin by looking outside of the institutions that are traditional research funders, to include organisations such as the Heritage Council, which maintain a significant research remit in addition to their other activities.

In relation to Bullet 3, we note that a “national strategic approach towards the respective challenge” - in this case cultural heritage and global change - might start with the inclusion of cultural heritage as a research area within national research strategy documents, such as the successor to SSTI.

At a recent meeting of the Governing Board and Steering Committee of the JPI Cultural Heritage (Rome, November 2014), a significant proportion of the countries present reported that Cultural Heritage and/or more specific Cultural Heritage topics (eg. Digital exploitation of CH resources, Connecting People with Heritage) have been included in their recently revised Smart Specialisation Strategies. We would very much like to see Ireland follow suit.

Cultural Heritage Research in Ireland:

Nationally, the field of cultural heritage research is strong but fragmented. Excellent research projects already exist in areas as diverse as digital access, materials science and DNA technology, however there has, until very recently, been no mechanism by which to aggregate these diverse areas under the unified heading of “cultural heritage”.

The Heritage Council of Ireland initiated this process in 2012, by establishing a National Consultation Panel on Cultural Heritage, composed of national experts from tangible, intangible and digital cultural heritage research backgrounds. For many of these researchers it was a first opportunity to share their work and their priorities with experts from each of the three “strands” that make up our cultural heritage (tangible, intangible and digital) and to consider their work collectively under the transdisciplinary cultural heritage heading.

A specific reference to cultural heritage as a research priority within the Successor to SSTI would provide the unifying influence that is needed to build on this process, to gather these existing research areas together under one banner and, as a result, to more effectively target funding and resources towards a research field that is of increasing international importance.

Ireland has set ambitious targets for drawdown of funding from Horizon 2020. In order to achieve these targets it will be necessary to mobilise all potential funding applicants. A reference to cultural heritage as a research priority with the Successor to SSTI will allow for more effective targeting of these funding applicants with the area of cultural heritage.

There is a significant existing cultural heritage research sector; there is also a significant existing cultural heritage private sector (mainly composed of SMEs) who are either already involved in or are interested in becoming involved in research. A formal recognition of cultural heritage as a research area at national level would allow for much more effective mobilisation of these sectors.

Within the traditional “heritage” research fields alone, Ireland has particular research strengths in the areas of:

- Digital Cultural Heritage (including digital access and digital data management)
- The Historic Environment (including historic towns, heritage-led urban regeneration, cultural landscapes and sustainability)
- Heritage Values (including heritage and identity)

But the range of disciplines associated with cultural heritage research internationally goes well beyond the traditional, to include areas where Ireland has significant competitive potential, such as Environmental Science, Materials Science, Digital Technologies, Health Sciences, to name just a small selection.

A transdisciplinary research area:

As noted above, cultural heritage research encompasses both the Humanities and Social Sciences and the STEM areas. As such, it is an excellent example of the sort of cross-cutting research field that is currently being promoted under Horizon 2020.

Detailed comments:

Pillar 1: Investment in STI and key goals/targets

Noting that “in order to ensure that Ireland reaches the Europe 2020 research intensity target, it is essential that public investment in R&D not only be maintained but must now see an upward trajectory between 2015 and 2020” (page 15), we suggest that strategic investment in cultural heritage as a research area should form part of any forward planning for R&D.

We further suggest that it might be a worthwhile exercise to assess how other countries, especially those at the top of the International Comparison Chart (Chart 5 page 14), integrate cultural heritage into their innovation policies.

Pillar 2: Prioritised approach to Public Research Funding

While we feel that cultural heritage should be established as a stand-alone priority area, we note also that aspects of cultural heritage research fall under the existing priority areas (Table 2 page 17) of:

- A – Future Networks and Communications
- B – Data Analytics Management, Security and Privacy
- C – Digital Platforms, Content and Applications
- D – Connected Health and Independent Living
- F – Diagnostics
- K – Smart Grids and Smart Cities
- M – Processing Technologies and Novel Materials
- N – Innovation in Services and Business Processes

There is therefore a need for the descriptions of these areas, and for any funding calls issued under these areas, to include cultural heritage as one of their sub-headings.

We note the reference in this section to “our national objectives of a strong sustainable economy and a better society”. Cultural Heritage is a net contributor to the national and European economies (see, for example, ECORYS Report for the Heritage Council on the *Economic Value of Ireland’s Historic Environment*, cited above, as well as Section 1.2 of the EC Communication *Towards an integrated approach to cultural heritage for Europe*).

Cultural Heritage also has a significant societal benefit. In this context we note the importance of continuing to fund basic research as part of any Strategy for Science Technology and Innovation.

Pillar 3: Enterprise-level R&D and Innovation Performance

In this section, we note the challenges identified by consultants appointed to undertake an analysis as to how public policy can best support and more effectively optimise the impacts of enterprise RDI investment:

1. Strengthening the number of innovation performers in the multinational sector
2. Broadening RD&I activity in the indigenous sector and building absorptive capacity
3. Strengthening collaborative linkages between firms and the higher education sector
4. Better focusing of RD&I activities around public and societal challenges

In response, we would suggest that:

1. Cultural Heritage, in particular digital cultural heritage, is particularly well-placed to exploit research partnerships in the multinational sector. For a large diagnostics company, for example, or a multinational specialising in imaging and optical technology, involvement in a high profile cultural heritage digitisation project is both an opportunity for innovation and excellent PR.
2. Broadening RD&I in the indigenous sector means exploiting the capacity of all research areas. Broadening the field of focus from traditionally research-focused sectors to include transdisciplinary areas like cultural heritage, with a strong SME base, has huge potential benefit for Ireland’s overall RD&I capacity.
3. As per No.1 above, cultural heritage is an area with a significant appeal for collaboration between HE and industry, combining the potential for technological innovation with unique PR opportunities.
4. The existence of the JPI Cultural Heritage and Global Change indicates the recognition afforded to this research area as a “grand societal challenge” at European level. Ireland has

hitherto not focused research efforts in any coordinated way on cultural heritage and global change as a societal challenge. Building on the work already done by the Heritage Council with the JPICH and with its national consultation panel on cultural heritage would be a relatively easy way to better focus RD&I activities in this area.

Pillar 4: International Collaboration and Engagement

As previously mentioned, cultural heritage is being increasingly emphasised within the European Research Area and there is no doubt that stronger national infrastructures in these areas would enable Ireland to contend more competitively in programmes such as Horizon 2020.

The importance of Ireland's involvement in the JPI Cultural Heritage has also been underlined, as has the need to integrate national research strategy with European priorities.

Through its existing cultural heritage research base Irish researchers and Irish organisations have significant networks of international contacts, with whom they are already collaborating. A formal recognition of cultural heritage within the Successor to SSTI would provide the impetus to enhance and build upon an already strong base.

Pillar 5: Organisational/Institutional arrangements to enhance research excellence and deliver jobs

Within this pillar, we suggest that (a) a mapping exercise, looking at existing cultural heritage research infrastructure needs to be urgently undertaken, and that (b) strong consideration should be given to the establishment of a Research and Technology Centre for Cultural Heritage in Ireland.

International examples, such as the Centre of Excellence for Interdisciplinary Research on Cultural Heritage in Telc, Czech Republic, demonstrate where a small country has been able to capitalise on their unique cultural heritage resources to leverage significant European funds for the development of national and international research.

Similarly, in the UK, the SEAHA (Centre for Doctoral Training in Science and Engineering in Arts Heritage and Archaeology) has been established as "an 8-year initiative (2014-2022) to establish an infrastructure to meet challenges set by the heritage sector, industry and government".

Neither of these initiatives would have been possible without the prior establishment of cultural heritage as a research priority at national level.

Pillar 6: World class IP regime and dynamic systems to transfer Knowledge and Technology into jobs

Ireland has already done considerable work on digital data, open access and IP within the context of digital cultural heritage. This has the potential for much broader application.

The transfer of knowledge into jobs could certainly be further enhanced by directing funding to areas such as cultural heritage, which have thus far been neglected. Cultural Heritage research is very much transdisciplinary and therefore those working in the area already have a highly developed network of contacts between HEIs, public bodies, SMEs and government departments. This could be exploited to much more advantage with the application of directed funding and top-down prioritisation.

Pillar 7: Government wide goals on innovation in key sectors for job creation and societal benefit

In this pillar, we note the EPA's focus on Sustainability. As noted in the Council of the European Union conclusions cited above, heritage plays a specific role in achieving the Europe 2020 strategy goals for "smart, sustainable and inclusive growth" because it has social and economic impact and contributes to environmental sustainability". This area has been explored at European level by a number of key projects under the Environment theme in FP7, but much more could be done nationally. We suggest that research into the contribution of cultural heritage to sustainability would help "turn national challenges into global opportunities in areas such as sustainable land use, urban and rural development and vulnerabilities to global trends and changes" by helping to exploit Ireland's significant cultural tourism potential.

In the context job creation and societal benefit in general, we note the importance of the national tourism industry to Ireland's economic growth, the core role that cultural heritage plays in expanding the tourism industry, and the potential for RD&I to significantly enhance our existing tourism offer.

Pillar 8: Research for knowledge and the development of human capital

In the context of developing human capital, we note the importance of supporting a broad range of research fields and of not limiting support to a small number of prioritised areas.

Ireland's cultural heritage could be a significant draw-factor in attracting research talent into the economy. Many of our cultural heritage resources are unique and their research potential has not yet been fully exploited.

The heritage sector has a strong background in citizen-engagement and participatory research. This has significant potential benefit for other sectors interested in exploring this sort of engagement/outreach.

In conclusion:

- We call for the inclusion of cultural heritage as a research priority within the document.
- We suggest that due consideration be given to a Research and Technology Centre for cultural heritage, based in Ireland.
- We note Ireland's existing research strengths in digital cultural heritage data, the historic environment and heritage values and suggest that these be capitalised upon.
- We call, more generally, for a more holistic view of RD&I within the document.
- We suggest the inclusion of a representative from the Department of Arts Heritage and the Gaeltacht on the interdepartmental steering committee.