

CULTURAL HERITAGE DATA FRAMEWORK: THE NEED FOR A NATIONAL POLICY AND INFRASTRUCTURE

RESPONSE TO SSTI CONSULTATION PAPER

Context of Response

One of Ireland's richest knowledge assets that has yet to be recognised as such for economic, educational and societal gains is its cultural heritage data. This data encompasses the electronic and paper archives preserved in national cultural and heritage agencies (e.g. the National Museum of Ireland, the National Monuments Services, the Office of Public Works, the National Roads Authority, the Heritage Council, the Discovery Programme), HEIs (especially Schools of Archaeology) and local authorities (heritage, conservation and planning departments). This extensive national resource is unevenly curated, often inaccessible and lacks a coherent infrastructure and investment. In addition, due to the departure of key personnel to retirement from many of these agencies and institutions, the loss of institutional memory has become an acute problem. Much of Ireland's archaeological record remains in physical form and has not been digitised. Of the hundreds of thousands of records of cultural heritage held, only between ten and twenty five per cent are accessible digitally. Where data has been digitised or born-digital the interoperability of the datasets is affected by the lack of standard approaches to metadata and the sparse existence of thesauri or controlled vocabularies within the sector. While the organisations who curate this material believe that the public should have access to the metadata, and the right to re-use it, resources for creating and sharing it in useful ways are not available to them. In order to make the archaeological record available in useful formats, such as Linked Open Data, a series of activities and services is required, including: guidance and assistance on metadata design and creation, tools to enable the discovery, integration and reuse of cultural heritage data are required. This task and others could be accomplished by the establishment of a Research, Technology and Innovation Centre for Cultural Heritage.¹

A fresh perspective of these institutions and the massive datasets that they hold is required not alone for the survival of part of Ireland's national identity, but perhaps more significantly because EU and international policies increasingly demand a carefully planned national strategy on cultural heritage and its economic and societal potentials. This view is most clearly expressed in the EU Commission's Communication 'Towards an integrated approach to cultural heritage for Europe' (Brussels 22 July 2014 COM(2014) 477 final):

Para 1.1 Europe's cultural heritage, both tangible and intangible, is our common wealth – our inheritance from previous generations of Europeans and our legacy for those to come. It is an irreplaceable repository of knowledge and a valuable resource for economic growth, employment and social cohesion. It enriches the individual lives of hundreds of millions of people, is a source of inspiration for thinkers and artists, and a driver for our cultural and

¹ A collaborative committee established under the EU ARIADNE programme (www.ariadne-infrastructure.eu) and co-directed by the Heritage Council (www.heritagecouncil.ie) and the Discovery Programme (www.discoveryprogramme.ie) has met since October 2013 with a view to preparing a policy document on a Cultural Heritage Data Framework. Representatives of the National Museum of Ireland, the DAHG National Monuments Services, the OPW National Inventory of Architectural Heritage, the National Roads Authority, Dublin City Council, Meath County Council and the Digital Repository of Ireland have contributed to the meetings and a document is in the final stages of preparation.

creative industries. Our cultural heritage and the way we preserve and valorise it is a major factor in defining Europe's place in the world and its attractiveness as a place to live, work, and visit.

The Commission's communication has been followed by a mapping report 'Mapping of Cultural Heritage actions in European Union policies, programmes and activities' which highlights the importance of

- The Digital Agenda in relation to cultural material and its digital preservation (paras 4.1-4.2.2), the Digital Single Market (para. 10)
- The role of culture in Research and Development, and especially in supporting heritage-related projects as part of the Horizon 2020 programme. Particular emphasis will be placed on the development of converging technologies for preservation and restoration, as well as on multidisciplinary research and innovation for innovative methodologies, products and services for the preservation of cultural heritage assets (paras 5.2.1-5.2.2)
- Cultural and Creative Industries (CCIs) in Europe and the value of competences in creativity in producing new ideas and in confronting challenging problems (paras 6.1-6.1.1)
- Promoting education on cultural heritage and raising public awareness for sustainable growth and to increase cooperation in civil society (para. 6.1.3)
- Promoting cultural tourism as a driver for social and economic development and supporting the sustainable management of cultural tourism, including tangible and intangible heritage (paras 7.1.2-7.2.1)

Following on these communications from the EU Commission, the EU Council for Education, Youth, Culture and Sport at its most recent meeting held on 25 November 2014 adopted conclusions establishing a Work Plan for Culture (2015-2018) and conclusions on participatory governance of cultural heritage. The Work Plan has four priorities (accessible culture; cultural heritage; creative economy and innovation; and cultural diversity, including culture in EU external relations), which are complemented for the first time by two cross-sectoral priorities (digital shift and statistics). They are all structured around the Europe 2020 strategy for growth and jobs.

The importance of cultural tourism is highlighted in the Government's Draft Tourism Policy Statement published in July 2014 (and due to appear in its final form in March 2015). Tourism is defined as one of Ireland's most important economic sectors and as having a significant role in Ireland's economic renewal. Ireland's appeal as a destination is based on the character of its people, its natural scenery, culture, and visitor attractions and events. Draft policy proposals outlined in the Statement include

- The formulation of policies, strategies and plans by public bodies with a role in relation to natural and built heritage to place tourism as a priority issue and to ensure that the quality of our natural and built heritage is upheld (1.2.1)
- Government support for innovation and continual improvement in the competitiveness of Ireland's tourism offering, in order to most effectively meet the needs of future visitors (2.2.1)

- Recognition of the role of tourism in the wider economic and social fabric of the State through placing tourism as a primary consideration in the formulation of fiscal policy (5.1.1)

The management and open availability of large datasets stored in national and local public agencies and institutions is the subject of the policy 'eGovernment 2012-2015' administered under the aegis of the Department of Public Expenditure and Reform. Actions 27-30 of the policy cover Digital Mapping and Geographic Information Systems (GIS) and in sum propose that the many datasets that consist of GIS data could be released as Open Data. This proposal should also extend to datasets of cultural heritage (e.g. museum topographical files and registers, excavation reports, archaeological and architectural inventories, GIS surveys and remote sensing data) as they are necessary to conservation, planning, tourism, and educational infrastructures and offer key resources for ICT innovation (e.g. 3D modelling, digitisation and visualisation). They also offer endless topics for dedicated research in archaeology, history, conservation, remote sensing, digital humanities and other disciplines.

Detailed response to SSTI Consultation Paper

The absence of any reference to culture (incorporating creative culture, cultural heritage and the cultural digital agenda) as part of the Government's Science, Technology and Innovation Strategy does not take account of the increasing significance of creative culture and cultural heritage in EU RD&I policy. The significant role for RD&I relating to tourism, and specifically cultural tourism, and the importance placed on tourism as a mainstay of economic renewal is a topic that also needs to be considered. To maximise the potential benefits from the extensive cultural heritage datasets largely inaccessible at the moment due to lack of resources, a robust knowledge transfer infrastructure needs to be put in place. This might be possible by the establishment of a Research and Technology Centre dedicated to RD&I in cultural heritage within the Enterprise Ireland scheme. This centre would fit into the Digital Platforms, Content and Applications priority area for research. It would be in line with the draft SSTI's objective of training graduates. It would extend the skills of graduates in a number of disciplines (e.g. archaeology, cultural heritage, landscape architecture, history, geo-surveying, digital humanities), thus strengthening multidisciplinary methodologies in these fields. In passing, it needs to be stated that the definition of science and technology as understood in the SSTI Consultation paper is somewhat restricted and does not necessarily conform to international norms. For example, the U.S. National Science Foundation includes the Behavioral and Cognitive Sciences (BCS) Division which funds research in archaeology, anthropology, archaeometry, geography and spatial sciences, linguistics and social psychology. This is also the philosophy on which the EU Horizon 2020 programme is based and this approach genuinely tackles issues of societal well-being following a modern holistic approach. The Humanities and Social Sciences are not an add-on to the sciences – they are an integral part of the sciences.

The following are comments in response to the key areas to be explored around the eight new pillars of the draft paper:

Pillar 1: 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 creative culture and cultural

heritage into their innovation policies. Funding for a Research and Technology Centre dedicated to culture/cultural heritage/tourism might be explored and this would include a cost/benefit analysis.

Pillar 2: In response to the call for 'horizon scanning' the management and knowledge transfer of cultural datasets already comes under the remit of Priority Area C (Digital Platforms, Contents & Applications) and M (Processing Technologies & Novel Materials). More detailed analysis of the potential of these datasets and their needs should be considered.

Pillar 3: Responding to the suggestion made by the consultants appointed to assess current RD&I policy that there should be 'better focusing of RD&I activities around public and societal challenges' (page 23), the transfer of cultural heritage knowledge to national and local platforms (e.g. archaeological and landscape data for planning purposes) could be of great benefit. In addition, the issue of building interdisciplinary skills capacity could be addressed through cultural heritage in that innovation in this field encompasses a broad spectrum of disciplines currently categorised as sciences and humanities.

Pillar 4: As previously mentioned creative culture and cultural heritage are coming to the fore in 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 current dire lack of resources, especially of personnel, in national cultural agencies and institutions, has had the effect that these bodies have not got the capacity to apply for EU funds even though they often identify potential projects and are already part of transnational networks.

Pillar 5: The pillar dealing with 'Organisational/Institutional arrangements to enhance research excellence and deliver jobs' is the most critical issue that needs to be addressed if the economic and societal benefits of cultural heritage are to be realised. There is (a) a fundamental need for a review of the current cultural heritage infrastructure and (b) a need to explore the place for a Research and Technology Centre for cultural heritage. Perhaps a lead could be taken from the role adopted by the Department of Agriculture, Food and the Marine in the agri-food sector.

Pillar 6: The provision of an open access knowledge transfer policy of cultural heritage datasets could become a template for other datasets in Ireland and indeed an international template if properly undertaken and managed.

Pillar 7: The focus of this pillar is on health, marine, agri-food and energy strategies which are regarded as the most likely areas to produce societal benefits and jobs. In the context of the Government's emphasis elsewhere on tourism, and the core role of cultural heritage in expanding the tourism industry, it would seem that this is an area worthy of exploration and of answering some of the questions posed on page 62.

Pillar 8: Objective 2 of the national framework for Higher Education Performance is 'societal cohesion, cultural development and equity at national and regional levels'. Moving away from an educational model that promotes a narrow sectoral and product driven culture to a model where the philosopher's capacity to problem solve is as valuable as the medical researcher's capacity to produce a medical device, is becoming a global trend. Ireland needs to be cognisant of this change of

attitude and not find itself as so often is the case adhering to an outmoded model. In response to how best Ireland can do more to harness the potential of our knowledge base for sustainable economic and social well-being, perhaps we might start with understanding and exploring the value of cultural heritage resources. These resources are also likely to engage citizens more actively in the innovation process as so much of the information is relevant to localities throughout the country.

Edel Bhreathnach

CEO

The Discovery Programme

www.discoveryprogramme.ie

edel@discoveryprogramme.ie

23 March 2015