European Parliament

Cultural heritage in EU discourse and in the Horizon 2020 programme

SUMMARY

The EU recognises its Member States' collective cultural heritage both as a European legacy that will be passed onto future generations and as a contributor to EU growth and development. Among others, in 2014 the Council of the EU identified cultural heritage as a strategic resource for a sustainable Europe, and the European Commission singled out the Horizon 2020 programme as one of the 'new generation of EU instruments' to support the implementation of the European Agenda for Culture, while also helping safeguard and enhance the EU's cultural heritage.

According to Commission data, between 2014 and early 2019, €495 million was invested in Horizon 2020 research actions related to the EU's tangible and intangible cultural heritage. In token of the value attached to cultural heritage as an intrinsic part of the EU's identity and an important element of the EU's international presence, the year 2018 was designated European Year of Cultural Heritage.

The concept of cultural heritage

According to Unesco, cultural heritage is the legacy of physical artefacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations.

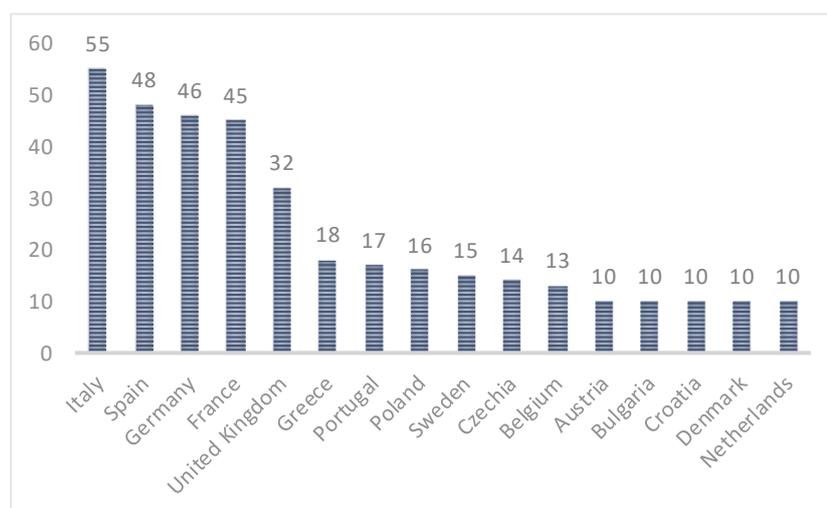Unesco also specifies two categories of cultural heritage:

− the tangible cultural heritage category:
  − movable cultural heritage (paintings, sculptures, coins, manuscripts);
  − immovable cultural heritage (monuments, archaeological sites, and groups of buildings);
  − underwater cultural heritage (shipwrecks, underwater ruins and cities);
  − the natural cultural heritage, which contains natural sites with cultural aspects;
− the intangible cultural heritage category:
  − oral traditions, performing arts (dance, music and theatre), traditional craftsmanship, rituals and beliefs.

An additional category – digital cultural heritage – is defined by the European Commission as resources that were created in digital form (for example digital art or animation) or were digitised as a way to preserve them (including text, images, video and records).

> *Cultural heritage is both the manifestation of cultural diversity passed down from previous generations and a resource for sustainable cultural, social, environmental and economic development in Europe.*
>
> The EU Work Plan for Culture 2019-2027

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Figure 1 – EU Member States with the biggest number of Unesco heritage sites

60
55
50 48 46 45
40
32
30
20 18 17 16 15 14 13
10 10 10 10 10 10
0

Italy Spain Germany France United Kingdom Greece Portugal Poland Sweden Czechia Belgium Austria Bulgaria Croatia Denmark Netherlands

Source: Unesco, 2019.

Introduction to Europe's cultural heritage

The Unesco World Heritage List contains 1 121 sites and is constantly expanding. According to two Unesco publications, World Heritage in Europe Today and World Heritage Journeys in the European Union, there are 453 European cultural heritage sites on this list, accounting for nearly half of the current entries.

Italy tops both the EU list and the global list of countries in terms of the number of Unesco-listed heritage sites (55), sharing its leading position on the global list with China, which also has 55 sites. Among the EU Member States with the biggest number of Unesco-listed sites are also Spain (48), Germany (45) and France (44). In total, 16 EU Member States have 10 or more Unesco heritage sites (see also Figure 1).

According to a European Commission factsheet, apart from the Unesco heritage sites, Europe has:

- 89 elements inscribed on the Unesco Representative List of the Intangible Cultural Heritage of Humanity, or a quarter of the entries on that list;
- 31 certified Council of Europe Cultural Routes, crossing 50 countries in Europe and beyond;
- six of the world's 10 most visited museums in 2016, according to The Art Newspaper, with over 35 million visitors in total that year;
- more than 54 million items from the collections of over 3 700 European cultural institutions, which are accessible through Europeana, Europe's digital platform for cultural heritage;
- a network of 27 000 protected Natura 2000 sites, which accounts for 18 % of the EU's land and almost 6 % of its marine territory.

The December 2017 Eurobarometer report on cultural heritage reveals that EU citizens' perception of Europe's cultural heritage is positive. For instance, 84 % of respondents stated that cultural heritage was important to them personally and 80 % stated that it was important for the EU. Some 73 % declared that they lived near some form of cultural heritage, and 82 % felt pride in a historical monument or site, work of art or tradition from their region or country. Yet again, 71 % believed that living close to places related to Europe's cultural heritage can improve people's quality of life.

Provisions related to cultural heritage in the EU treaties

EIL-CSID project

Title: European Leadership in Cultural, Science and Innovation Diplomacy

Participants: Belgium (coordinator), Germany, Kazakhstan, Singapore, Slovenia, Turkey and the United Kingdom

Objective: to identify how the EU and its Member States might collectively and individually develop a good institutional and strategic policy environment for extra-regional culture and science diplomacy

Results: among others, mapping science and cultural diplomacy; finding that the EU should use its 'soft power assets' in international relations; finding that science and culture could play an important role in strengthening relation with neighbouring countries in the Middle East and North Africa

Period: March 2016 – February 2019

EU contribution: €2 362 500

Call for proposals: H2020- INT-11-2015

The Treaty on European Union stipulates that the EU 'shall respect its rich cultural and linguistic diversity, and shall ensure that Europe's cultural heritage is safeguarded and enhanced' (Article 3(3)).

The Treaty on the Functioning of the European Union grants the EU 'supportive competences' with regard to culture and cultural heritage. The EU may carry out actions to support, coordinate or supplement actions of the Member States (Article 6). In detail, the EU 'shall contribute to the flowering of the cultures of the Member States, while respecting their national and regional diversity and at the same time bringing the common cultural heritage to the fore' and, if necessary, support and supplement Member States' actions, among others, in the area of 'conservation and safeguarding of cultural heritage of European significance' (Article 167).

Selected EU policies and actions on cultural heritage

Agenda for culture

In May 2014, the Council adopted conclusions on cultural heritage as a strategic resource for a sustainable Europe (2014/C 183/08), in which it underlined, inter alia, the role of cultural heritage in creating and enhancing social capital, as well as its economic impact and role in achieving the Europe 2020 goals for smart, sustainable and inclusive growth.

In July 2014, the Commission published a communication, Towards an integrated approach to cultural heritage for Europe, in which the Creative Europe and Horizon 2020 programmes were described as 'a new generation of EU instruments' to support the implementation of the European Agenda for Culture. Regarding Horizon 2020 in particular, the Commission stated that it would 'further reinforce the EU's position in the field of cultural heritage preservation, restoration and valorisation, supporting cooperation among researchers across a broad range of themes'.

In May 2018, the Commission published a New European Agenda for Culture (a recast of the 2007 European Agenda for Culture), which has three objectives:

- – 1: Harnessing the power of culture for social cohesion and wellbeing;
- – 2: Supporting culture-based creativity in education and innovation, and for jobs and growth;
- – 3: Strengthening international cultural relations.

According to the Commission staff working document accompanying the new agenda, €9 million from Horizon 2020 will contribute to achieving objective 1.

In December 2018, the European Parliament adopted a resolution on the New European Agenda for Culture (2018/2091(INI)). With regard to support from the EU programmes, the Parliament underlined the 'positive contribution of digital technologies in facilitating and broadening the

scope for conservation of, and access to, cultural, artistic, creative and audio-visual content and services' and called on the Commission and Member States to ensure more synergy in those areas.

The Commission also launched a Mapping of Cultural Heritage actions in European Union policies, programmes and activities (last updated in August 2017) with the aim 'to contribute to the development of a strategic approach to the preservation and valorisation of European heritage'. The mapping was done in response to the 2014 Council conclusions, and complements the 2014 Commission communication (both documents mentioned above). It also provides information about recent EU policy initiatives and actions with regard to cultural heritage.

International cultural relations

In its 2016 joint communication, Towards an EU strategy for international cultural relations (JOIN(2016) 29), the Commission pointed out that 'Horizon 2020 supports research and innovation for cultural heritage activities through multinational, interdisciplinary projects that also engage local and regional authorities, businesses and civil society, aiming at new solutions for the preservation and management of cultural heritage in Europe that is jeopardised by climate change'. The document also encouraged participation from non-EU countries, including in the mobility of researchers through the Marie Skłodowska-Curie Actions. In 2016, the EU Cultural Diplomacy Platform was set up to support the implementation of the planned actions.

In its resolution of 5 July 2017, Towards an EU strategy for international cultural relations (2016/2240(INI)), the Parliament called upon the Commission 'to strengthen the international dimension of Erasmus+, Creative Europe, Europe for Citizens and Horizon 2020', while recalling 'the crucial role that EU programmes in the fields of culture, education, youth and sport have as core elements in tackling intolerance and prejudices, as well as in fostering the sense of common belonging and respect for cultural diversity.'

In its response to this resolution (SP(2017)619), the Commission pointed out that 'Horizon 2020 association agreements with Ukraine and Tunisia pave the way for their further integration into the European Research Area'.

In a 2018 factsheet on culture, the European External Action Service underlined that 'culture is an essential part of our relationship with today's world to make the EU a stronger and more sovereign global actor. Culture is a powerful tool to build bridges between people, notably the young, and reinforce mutual understanding. It can also be an engine for economic and social development in and outside the EU' (see description of the EIL-CSID project in the box).

In June 2019, the Council adopted conclusions on an EU strategic approach to international cultural relations and a framework for action, which called to 'further strengthen the role of culture in policies and programmes within the framework of external relations' and to 'make better use of existing fora, mechanisms, networks and databases ..., including the Cultural Diplomacy Platform'.

European Year of Cultural Heritage 2018

The year 2018 was designated European Year of Cultural Heritage (hereafter EYCH 2018), as a means to 'encourage the sharing and appreciation of Europe's cultural heritage as a shared resource, to raise awareness of common history and values, and to reinforce a sense of belonging to a common European space'.

One of the objectives of EYCH 2018 was to 'promote research and innovation in relation to cultural heritage', and hence actions supported by the Horizon 2020 programme. EYCH 2018 was implemented on the basis of 10 European initiatives, the last one being Science for heritage, addressed directly to researchers, innovators, academics, cultural heritage professionals and experts, and public authorities.

Inception project

Title: Inclusive Cultural Heritage in Europe through 3D semantic modelling

Participants: Italy (coordinator), Bulgaria, Croatia, Cyprus, France, Germany, Greece, the Netherlands, Slovenia and Spain

Objective: to prepare time-dynamic 3D reconstruction of artefacts, built and social environments for understanding European cultural assets

Results: 3D models of San Sebastian in Mantua, Santa Maria Novella in Florence, the Laurentian Library in Florence and the Cathedral in Pisa

Period: June 2015 – May 2019

EU contribution: €3 990 205

Call for proposals: H2020-REFLECTIVE-7-2014

Commission data show that throughout EYCH2018, over 6.2 million people took part in more than 11 700 events organised across 37 countries; and that over 10 000 projects received the official EYCH 2018 label, and the Commission implemented 10 long-term European initiatives on cultural heritage.

Horizon 2020 supported the implementation of EYCH 2018 with €66 million for research and innovation projects on cultural heritage. Additionally, €5 million from the Creative Europe programme was allocated to 29 cultural projects.

Again in 2018, the Commission published two reports on projects supported by Horizon 2020:

- Safeguarding cultural heritage from natural and man-made disasters. A comparative analysis of risk management in the EU. The document presents the existing know-how, strategies and tools for disaster risk management in the EU-28, including those financed by Horizon 2020;
- a results pack on Heritage at risk. EU research and innovation for a more resilient cultural heritage. The document presents selected projects supported by Horizon 2020 (see description of the Iperion CH project in the box).

2018 European Framework for Action on Cultural Heritage

In November 2018, EU ministers of culture adopted conclusions on the Work Plan for Culture 2019-2027, which established 'sustainability in cultural heritage' as the work plan's first priority. The document pointed out that 'conservation, preservation and safeguarding, research, educational activities and knowledge transfer, financing, participatory governance and contemporary interpretation' would benefit the most from a comprehensive strategic approach. The document also highlighted the need to ensure that the legacy of the EYCH 2018 is taken forward.

To complement the conclusions, in December 2018 the Commission published a staff working document on a European Framework for Action on Cultural Heritage that would 'capture and scale-up' the success of EYCH2018 and 'ensure that the efforts initiated during the Year have a lasting impact beyond 2018'. The framework sets 'a common direction for heritage-related activities at European level'.

Implementation of the framework over the 2019-2020 period is being done in accordance with the following five pillars

Iperion CH project

Title: Integrated Platform for the European Research Infrastructure ON Cultural Heritage

Participants: Italy (coordinator), Belgium, Germany, Denmark, Spain, France, Greece, Hungary, the Netherlands, Poland, Portugal, the United Kingdom and the United States

Objective: to establish a pan-European research infrastructure for restoration and conservation of cultural heritage, by integrating national facilities at research centres, universities and museums

Period: May 2015 – October 2019

EU contribution: €7 994 987.73

Call for proposals: H2020-INFRAIA-2014-2015

(these are further divided into 14 clusters and 60 actions): 1) Cultural heritage for an inclusive Europe: participation and access for all; 2) Cultural heritage for a sustainable Europe: smart solutions for a cohesive and sustainable future; 3) Cultural heritage for a resilient Europe: safeguarding endangered heritage; 4) Cultural heritage for an innovative Europe: mobilising knowledge and research; and 5) Cultural heritage for stronger global partnerships: reinforcing international cooperation. An example of a project implemented within pillar 2 is 'Ruritage' (see box). Additionally, in the same pillar, the Commission plans to launch a call for proposals with a total budget of €25 million to finance innovative actions on strategies and solutions for cities, with the aim to re-activate and re-generate historic urban areas and cultural landscapes.

Digitisation of cultural heritage

Digitisation is one of the horizontal issues of the Work Plan for Culture 2019-2027. The document highlights that 'digitalisation creates new and innovative possibilities for art and culture in terms of access, expression, preservation, dissemination and consumption'.

Digitisation of cultural heritage in Europe is also supported by the 2015 Digital single market strategy, focusing inter alia on copyright, which 'underpins creativity and the cultural industry in Europe'. For example, the digitsation of Europe's film heritage is done with such support.

In 2011, the Commission published Recommendations on the digitisation and online accessibility of cultural material and digital preservation, which invited Member States, inter alia, to improve access to and the use of digitised cultural materials in public domains and to improve conditions for the digitisation and online accessibility of digitised materials.

In its June 2016 conclusions on The role of Europeana for the digital access, visibility and use of European cultural heritage, the Council underlined, inter alia, that 'digitisation and online access to cultural heritage and its long-term preservation are essential to enable access for all to culture and knowledge, promote richness and diversity of European cultural heritage.' (see box on the Inception project). It also pointed out that 'digital preservation of world cultural heritage, held in European collections, is important notably in light of the destruction of and threat to cultural heritage in conflict zones' (see box on the Scan4Reco project).

Scan4Reco project

Title: Multimodal Scanning of Cultural Heritage Assets for their multi-layered digitization and preventive conservation via spatiotemporal 4D Reconstruction and 3D Printing

Participants: Greece (coordinator), Germany, Italy, Switzerland and the United Kingdom

Objectives: to develop a portable, integrated and modular solution for automatic digitisation and analysis of cultural heritage objects, even in situ

Results: a system that creates 'digital surrogates' of cultural artefacts, analysing the original object's condition to assist restoration and the prevention of further degradation

Period: October 2015 – September 2018

EU contribution: €3 417 762

Call for proposals: H2020-REFLECTIVE-7-2014

Ruritage project

Title: Rural regeneration through systemic heritage-led strategies

Participants: Italy (coordinator), Austria, Colombia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, the Netherlands, Norway, Poland, Romania, Slovenia, Spain, Turkey and the United Kingdom

Objective: to help to develop 'a new heritage-led rural regeneration approach' and to promote rural areas as drivers for competitiveness, sustainable and inclusive growth and development

Period: June 2018 – May 2022

EU contribution: €9 975 651.25

Call for proposals: H2020-SC5-21-2016-2017

The 2015 Survey report on digitisation in European cultural heritage institutions, prepared within the EU funded ENUMERATE project, estimated that on average, 23 % of the heritage collections have been digitally reproduced and 50 % still need to be reproduced. The institutions participating in the survey reported that 32 % of their digitally reproduced or 'born' digital heritage collections are available online for general use.

In 2017, the Commission set up an Expert Group on Digital Cultural Heritage and Europeana, with the aim to review and discuss policies for digital cultural heritage (in particular, the group monitors progress and assesses the impact of the implementation of the Commission's recommendations and Council conclusions). The group also provides a platform for cooperation and exchange of good practices, and contributes to the evolution and sustainability of Europeana.

In March 2019, the Commission published a report on Common challenges and perspectives for Digital Cultural Heritage in H2020 projects, based on the results of a workshop organised by the Commission and the Research Executive Agency. The report highlighted 'the potential of digital cultural heritage to contribute to sustainable and inclusive economic development'. It also underscored that the EU 'will continue to build on digital for cultural heritage with particular emphasis on promising technologies such as 3D, Virtual Reality, Augmented Reality and Artificial Intelligence' and that 'a European platform on cultural heritage preservation and conservation using digital technologies may also be funded'. Last but not least, the report also noted that 'the importance of digital technologies for cultural heritage as a means for promoting innovation and sustainability in cultural heritage is recognized by all relevant EC [European Commission] Directorates-General (DGs)'.

In April 2019, 24 European countries (Austria, Belgium, Cyprus, Czechia, Estonia, Finland, France, Greece, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the UK) signed a Declaration of cooperation on advancing digitisation of cultural heritage, with the main aim being to better use digital technologies in addressing the risks that Europe's rich cultural heritage is facing. The declaration is based on three pillars of action:

- 1: A pan-European initiative for 3D digitisation of cultural heritage artefacts, monuments and sites;
- 2: Re-use of digitised cultural resources to foster citizen engagement, innovative use and spill-overs in other sectors;
- 3: Enhancing cross-sector and cross-border cooperation and capacity-building in the sector of digitised cultural heritage.

EU discourse and the Horizon 2020 programme

Research and innovation provide new possibilities for safeguarding and deriving greater benefit from cultural heritage, by: a) visualising and interpreting cultural heritage in new ways; b) encouraging sustainable tourism; and c) helping the emergence of new cultural and creative sectors.

In 2015, the Horizon 2020 expert group on cultural heritage published a report, Getting cultural heritage to work for Europe, in which it underlined that cultural heritage is recognised both as a legacy and a contributor to EU growth, being an 'economic, social and environmental driver'. The experts pointed out that cultural heritage should be looked upon as a strategic resource for the society of the future and the economy. They also recommended, inter alia, supporting municipal leaders to: use heritage as a means of regenerating their towns; and promote the integration of culture and biodiversity with a view to creating successful and vibrant rural landscapes.

In March 2018, the Commission organised a high-level Horizon 2020 conference on innovation and cultural heritage (streamed), where it showcased its contribution to long-term synergies between science, research, innovation and culture for the benefit of cultural heritage. The panellists underlined that cultural heritage has a leading role in urban regeneration and the transformation of

cities and regions. They also pointed out that 'from a global perspective, investment in cultural heritage can be effective in conflict prevention and resolution'.

The conference panellists [agreed](#) that 'Europe needs to keep the leadership in cultural heritage research and innovation', while also underlining that 'digitalization can be an effective instrument of democratisation of cultural heritage as it opens new forms of access'. They also pointed out that the approach to cultural heritage within Horizon 2020 is too fragmented, and that 'the next programme should mention cultural heritage in the title of one of its thematic clusters'.

During the above-mentioned conference, the Commission presented a study on [Innovation in Cultural Heritage Research](#), in which it stated that Horizon 2020 funds enable researchers to develop new methods and technologies for heritage preservation and protection, and 'encourage innovative use of cultural heritage for creating new jobs, developing sustainable tourism, improving education and preserving our urban and rural cultural landscapes'.

The study also pointed out that the considerable increase in EU-funded research on cultural heritage since the year 2000 has to do with 'the ever-expanding notion of ''heritage'' – currently including natural and cultural, tangible and intangible entities as well as urban and rural areas and landscapes, tourist destinations, places of creative economy, digitalized archives and registers, etc.'. In other words, 'practically every academic discipline has become involved in the study of cultural heritage'.

In a June 2018 report on [EU research and innovation for a resilient cultural heritage](#), the Commission highlighted that neglect, pollution, natural hazards and climate play their part in the damage to cultural heritage. The report also presented numerous examples of cultural heritage projects that had received support from the [7th research Framework Programme](#) (2004-2014) and Horizon 2020, and had in turn provided 'innovative solutions and techniques, assessment systems, mitigation strategies, risk management models, disaster prevention, quick damage assessment, ICT tools and guidelines'.

Horizon 2020 also supports actions related to the [Sendai Framework for Disaster Risk Reduction 2015-2030](#), a voluntary non-binding global agreement on disaster risk management that the United Nations adopted in 2015. The framework is based on four priorities: 1) understanding disaster risk; 2) strengthening disaster risk governance to manage disaster risk; 3) investing in disaster risk reduction for resilience; and 4) enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation and reconstruction. According to [experts](#), the

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[Netcher](#) project

Title: NETwork and digital platform for Cultural Heritage Enhancing and Rebuilding

Participants: France (coordinator), Belgium, Germany, Italy and Spain

Objective: to address the topic of the protection of endangered cultural heritage and the prevention of illicit trade in cultural heritage artefacts. Having the form of a structured network (a social platform), the project brings together different initiatives and their authors (international bodies, umbrella organisations, national governments, researchers, public policy makers, NGOs, and public and private foundations) in the field.

Period: January 2019 – December 2020

EU contribution: €1 499 606.25

Call for proposals: [H2020-SC6-Transformations-2018](#)

[RIBuild](#) project

Title: Robust Internal Thermal Insulation of Historic Buildings

Participants: Denmark (coordinator), Austria, Belgium, Croatia, Germany, Greece, Italy, Latvia, Norway, Sweden, Switzerland and the UK

Objective: to develop guidelines on how to install internal thermal insulation in historic buildings, to reduce energy consumption by 15-20 %, while maintaining the architectural and cultural heritage of the buildings

Period: January 2015 – December 2019

EU contribution: €4 962 375

Call for proposals: [H2020-EE-2014-1-PPP](#)

Sendai Framework 'is breaking new ground in recognizing the role of culture and cultural heritage as components of disaster risk management'.

In June 2016, the Commission published an Action Plan on the Sendai Framework, which stresses that 'a range of research projects has been funded by the EU within the 7th Framework Programme with a direct or indirect support to the previous Hyogo Framework for Action [2005-2015], while further actions are being developed in the Horizon 2020 Framework Programme for Research and Innovation, which have a direct impact on the Sendai recommendation on the science-policy interaction'.

The action plan envisages further engagement of the research community 'to better address disaster risk management knowledge and technology gaps and to encourage stronger science-policy interface in decision-making'. The community's role is inter alia to identify 'key research priorities for disaster risk management at EU level through dialogue with relevant stakeholders, and promote dissemination and use of research results on disaster risk management through Horizon 2020'.

In 2018, the Commission launched a Horizon 2020 social platform on endangered cultural heritage and on illicit trafficking of cultural goods, bringing together EU and international researchers, public and private players and policy-makers to brainstorm on initiatives for tackling issues related to the illicit trade of cultural goods (see the Netcher project in the box).

Horizon 2020 support to cultural heritage – structure and results

As already mentioned, Horizon 2020 is one of the main sources of support for cultural heritage projects. Similar EU support has been available since 1986 under previous programmes, in areas such as conservation, disaster resilience and energy efficiency in historic buildings, the arts, humanities and underwater cultural heritage.

In its 2017 Assessment of the Union added value and the economic impact of the EU Framework Programmes – Final Report, the Commission pointed out that 'research funded by FP7 in the area of digitisation and digital preservation had a clear positive impact on making European historical and cultural resources better accessible to the general public, the researchers (e.g. historians) and to people working in the audio-visual industries'. It also underlined that 'research funded by FP7 in the area of digitisation and digital preservation often has not only public, but also EU-level rationale, since it is related to protecting the European cultural and historical heritage'.

Horizon 2020 helps to support initiatives related to the safeguarding and valorisation of cultural heritage. Support is offered in two areas: research and innovation (R&I) (in the remit of the Commission's Directorate-General for Research and Innovation, DG RTD); and digital culture (in the remit of the Commission's Directorate-General for Communications Networks, Content and Technology, DG CONNECT).

Nanorestart project

Title: NANOmaterials for the REStoration of works of ART

Participants: Italy (coordinator), Brazil, Denmark, France, Germany, Ireland, the Netherlands, Slovenia, Spain, Sweden, the United Kingdom and the United States

Objective: to develop nanomaterials so as to ensure the long-term protection and security of modern/contemporary cultural heritage, taking into account environmental and human risks, feasibility and cost of materials.

Results: a number of products, among which innovative gels for surface cleaning and new disposable sensors, as well as conservation/restoration case studies, e.g. of Pablo Picasso's painting, 'The Studio', conducted in Venice.

Period: June 2015 – November 2018

EU contribution: €7 918 397

Call for proposals: H2020-NMP-2014-two-stage

Support for cultural heritage research and innovation is provided through all [three pillars of Horizon 2020](#), and within pillar III – with regard to four societal challenges (SCs):

1   Pillar I: Excellent Science: Research Infrastructure, Marie Skłodowska-Curie actions (MSCA) and European Research Council (ERC) grants;

2   Pillar II: Industrial Leadership: Leadership in Enabling and Industrial Technologies (LEIT);

3   Pillar III: Societal Challenges:

   –   SC3 Secure, clean and efficient energy;
   –   SC5 Climate action, environment, resource efficiency and raw materials;
   –   SC6 Europe in a changing world – inclusive, innovative and reflective societies;
   –   SC7 Secure societies – protecting freedom and security of Europe and its citizens.

Support for the digitisation of cultural heritage is provided under Pillar III, SC6.

The RIBuilt project (see box) is an example of action taken under SC5 of Pillar III with the aim of reducing energy consumption and the carbon footprint through smart and sustainable use, while the Nanorestart project (see box) is an example of action taken under Pillar II, with the aim of conserving modern/contemporary cultural heritage.

Table 1 – H2020 investments in cultural heritage projects (2014 – early 2019)

Programme	Amounts invested (in € million)
Societal Challenge 3	5
Societal Challenge 5	52
Societal Challenge 6	156
Societal Challenge 7	14
LEIT-NMBP*	47
Research Infrastructure	56
European Research Council	45
Marie Skłodowska-Curie actions	120
Total	**495**

Source: European Commission, October 2019.

* LEIT on Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology

In May 2017, the Commission published an [In-depth Interim Evaluation of Horizon 2020](#). According to the staff working document (SWD(2017)220, part 3) accompanying the evaluation, within Pillar III, Societal Challenge 5, cultural heritage had received 2 % of the funding (three projects), and 37.3 % of projects related to the transmission of European cultural heritage had had an impact on Societal Challenge 6.

Investment in cultural heritage under the 7th Framework Programme (2007-2014) [amounted](#) to €300 million).

Latest Commission data show that investment in cultural heritage projects (both tangible and intangible projects, including arts, museums and cultural tourism) totalled €495 million in grants between 2014 and early 2019 (see Table 1). This amount can increase further, as it does not include the 2019 agreements that are yet to be finalised.

Cultural heritage and Horizon Europe 2021-2027

According to the Commission's proposal to establish Horizon Europe – the Framework Programme for Research and Innovation for the 2021-2027 period (COM(2018) 435), this new programme will be implemented through the following pillars:

a) Pillar I: Open science;
b) Pillar II: Global challenges and industrial competitiveness;
c) Pillar III: Open Innovation;
d) Widening participation and strengthening the European Research Area.

The annexes to the Commission proposal establishing the specific programme implementing Horizon Europe (COM(2018) 436) specify that support for cultural heritage is envisaged under cluster 2 in Pillar 2: Culture, Creativity and Inclusive Society, within which there will be three areas of intervention: culture, cultural heritage and creativity. They will include, inter alia, heritage studies and sciences using cutting-edge technologies, including digital ones. They will also seek to connect cultural heritage with emerging creative sectors and to ensure that cultural heritage contributes to sustainable development through conservation, safeguarding and regeneration of cultural landscapes.

During the legislative process (2018/0225(COD)) which is not yet concluded, the European Parliament has insisted on enhancing support for cultural heritage under the new programme, inter alia, by adding a recital 7, wherein it states that 'the European cultural and creative sectors build bridges between arts, culture, business and technology. Cultural heritage is an integral part of European cohesion and supports the link between tradition and innovation. Preserving cultural heritage and developing creative solutions, in particular in the field of digitalisation, will be a priority of [the] Programme'. The Parliament also insists on paying more attention to the cultural and creative sector in the new programme and on establishing a '"European Cultural Heritage Cloud", a research and innovation collaboration space granting accessibility of cultural heritage through new technologies'.

Among other changes the Parliament wants to introduce is to extend the scope of the intervention of the new programme – from support to the preservation of cultural heritage, as proposed by the Commission – to research on the economic and social contribution of the cultural and creative sectors, including the development of statistics and support for the preservation of tangible and intangible cultural heritage.

In 2019, to better adjust to the planned changes with regard to cultural heritage in the Horizon Europe programme, the Commission created a new Unit on Fair Societies and Cultural Heritage within its DG RTD.

In September 2019, the Commission organised the Research and Innovation Days in Brussels as part of the public consultation on Horizon Europe. During the discussions held in the panel on cultural heritage, it was underlined that it is 'a privilege and responsibility' to live in the vicinity of cultural heritage. It is indispensable to the well-being of humanity but is also threatened by humans (for instance, through tourism, military conflicts and climate change). The panellists highlighted the importance of digitising cultural heritage (particularly the most valuable artefacts, in order to preserve and to restore them if needed) and science heritage (where humanities, sciences and engineering disciplines are joined together). They furthermore observed that cultural heritage policy should be more long term than it is now and it should also be more visible, including in Horizon Europe.

Conclusions

Cultural heritage is recognised both as a legacy and an identity of EU citizens, and as a contributor to EU growth and development. Horizon 2020 is the main EU programme supporting actions related to research and innovation, as well as the digitisation of cultural heritage.

The fact that between 2014 and early 2019, Horizon 2020 funding worth €495 million was invested in actions related to cultural heritage and that the programme provided a wide range of other support make it an important player in safeguarding and enhancing cultural heritage, and in contributing to the EU cultural policy on cultural heritage. This role is underlined in many EU documents and experts' opinions.

EU support for cultural heritage is also built into the 2021-2027 Horizon Europe programme, not only to ensure continuity with its predecessor but also to strengthen the involvement of other sectors, such as the cultural and the creative sectors. Support should also contribute to keeping the legacy of the European Year of Cultural Heritage. Still, cultural heritage experts call for more visibility and a long-term approach to the subject in EU policies, which, if achieved, may have a direct implication on the financing of cultural heritage projects from the framework programmes.

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