

Response to the EC's public consultation on digital heritage

NOTE TO READERS:

This is the first public draft of Wikimedia Sverige's response to the European Commission's [Public consultation on opportunities offered by digital technologies for the culture heritage sector | Shaping Europe's digital future](#).

The response has two parts: 1. The answers to the online survey of the consultation, and 2. A position paper providing input that is not limited to the answers to the specific questions asked in the survey.

Input and feedback in the form of comments, questions and suggested edits is very welcome from all who consider themselves a part of the Swedish Wikimedia community or the international GLAMwiki community. When providing input please accept that the Position Paper is intended to be brief, is not intended to provide great detail on technical concerns nor to call out poor practices by specific cultural heritage organisations. If you have such input feel free to respond to the consultation as a private citizen.

This document will be open for input until September 14, 08:00 CET. It must be submitted no later than 23:59 CET that same day.

Annex - Relevant Questionnaire Questions (to be filled in online)

10. Based in particular on the lessons learned from the COVID-19 crisis, to what extent do you agree with the following statements about the importance of digital technologies for cultural heritage and that of digitised cultural heritage for society?

- Digital technologies can help in the reconstruction of damaged cultural heritage. **Our answer: Agree**
- Digital technologies can help to increase the number of people accessing cultural heritage through the Internet. **Our answer: Strongly agree**
- Digitisation, online access and digital preservation of cultural heritage are important to society. **Our answer: Agree**

11. In your view, in particular in the light of the COVID-19 crisis, how important is it to digitise the following categories of cultural heritage?

- Endangered cultural heritage objects, buildings or sites (threatened by deterioration, neglect, destruction or alteration, pollution, or disappearance). **Our answer: Very important**
- National masterpieces, as selected by experts or academics in the field. **Our answer: Not very important**
- Collections from museums, libraries, archives (including audiovisual and sound archives) **Our answer: Important**
- Historical buildings, monuments and archaeological sites. **Our answer: Important**
- Intangible cultural heritage (for example, festivals, traditions, or national and regional customs). **Our answer: Very important**

12. Are there other categories of cultural heritage that you think would be important to digitise?

Our answer:

- Personal histories (via oral storytelling). Of especial importance is to capture personal histories representing 20th-century industrial society, conflicts, movements, etc. Once those generations are gone so will their stories be.
- Local heritage. Very small and vocationally run GLAMs - local history societies, industrial museum cooperatives, and so on - are not as well funded or otherwise well resourced as institutional GLAMs. As a result their collections and buildings are not digitised and available online to the same extent.
- Manuscript collections. Advances in Handwritten text recognition, combined with citizen science and crowdsourcing methodologies, can transform these type of collections from images to true text.

13. In your view, how valuable are the following applications of 3D technologies in the area of cultural heritage:

- For creating digital twins of cultural heritage buildings, monuments and sites such as Notre Dame, before they are damaged by fire or other disasters. **Our answer: Valuable**
- For creating high-quality 3D models of museum objects like the ones in the Green Vault jewellery collection, before they are lost as a result of theft or another catastrophe. **Our answer: Valuable**
- For creating 3D models of cultural heritage buildings, monuments and sites or museum object for online visualisation. **Our answer: Valuable**
- For creating 3D models of cultural heritage buildings, monuments and sites or museum object for immersive experiences. Our answer: Valuable
- Other (please specify)
 - **Our answer:** 3D-models can be used to create the objects on which tactile experiences for people with visual impairments are. The value of this cannot be overstated. Replicas, made from realistic materials, can also reinforce museum experiences in general without compromising the preservation of the originals. [The Swedish National Heritage Board has provided a guide on the subject.](#)
 - Our answer: Ipsum

Using and re-using digitised cultural heritage assets

14. In your opinion, in the light of the COVID-19 crisis, how important is it to improve online access to digital cultural heritage?

Our answer: Very important

15. (Optional) Which of the following forms of presenting cultural heritage are appealing to you? You can select multiple answers, or no answer if you do not know or have no opinion on this aspect.

- **Curated content (online exhibitions, ...)**
- **Tutorials, online classes on specific topics**
- Serious games (for example, for education or for scientific exploration)
- Virtual visits of sites (such as in 3D or VR)
- Personalised recommendations
- Other (please specify):
 - Wikipedia articles (in the users' preferred language), backed by structured data from Wikidata and enhanced by media from Wikimedia Commons, providing encyclopedic introductions and good *starting points* for further research in secondary and primary sources - including GLAM-collections and publications.

16. (Optional) In your opinion, what are the main difficulties or shortcomings when accessing or re-using European cultural heritage content online? You can select multiple answers, or no answer if you do not know or have no opinion on this aspect.

- Not enough content is available
- Insufficient quality (for example, low resolution images, or poor or no explanatory text)**
- The content that I like is not available online
- The explanatory text is not available in my language**
- I don't know where to find digitised European cultural heritage content
- The copyright and re-use status of digital objects are unclear**
- Other (please specify):
 - Broken links to pages, media files, and data remains a frequent issue

18. Are there other sectors where you think the re-use of digitised cultural heritage would be particularly valuable? (apart from Research, Education, Tourism, Creative industries, Technology)

Our answer:

The [Free Knowledge Movement](#) specifically and civil society in general.

20. In your view, and in the light of the COVID-19 crisis, what are the most important aspects of digital transformation in the cultural heritage sector? You can select multiple answers

- Adopting advanced digitisation technologies
- Creating a more agile digital environment (e.g. in terms of processes, awareness, culture, leadership)**
- Acquiring advanced digital skills**
- Carrying out mass digitisation of existing and new material
- Providing online access to digitised content
- Using digitised content in immersive experiences with the help of interactive technologies such as VR and AR
- Organising virtual exhibitions online
- Putting in place curation structures for digital assets**
- Other (please specify):
 - Acquire basic digital skills. Most institutions are in the beginning stages of their digital capacity building.

21. In your view, what are the core sets of digital skills that the professionals of the cultural heritage sector should acquire? You can select multiple answers:

- Digitisation (2D and/or 3D)**
- Data and metadata management and analytics**
- Copyright and licensing
- Interactive technologies (e.g. VR and AR)
- Other (please specify):

- ❑ Audience analysis and user-centric methodologies. In general “soft skills” must not be underestimated in conversations about digital transformation.

22. In your view, how valuable are the following applications of data and AI technologies in the area of cultural heritage:

- Automated annotation of digitised cultural heritage (e.g. metadata describing and classifying an object or an image). **Our answer: Valuable**
- Automated recognition of objects and fragments of objects (e.g. identifying the source object when just fragments are available). **Our answer: Not very valuable**
- Reconstruction of lost cultural heritage information (e.g. predicting what a building such as a castle looked like originally when only some ruins are left and no other specific information about it). **Our answer: Not valuable at all**
- Extraction of new knowledge from cultural heritage data (e.g. research on influences between artists, styles, or periods). **Our answer: Not very valuable**
- **Other:**
 - Please note that we have answered this question from the perspective of future value. Currently it's only an extremely small minority of GLAMs that use AI/Machine Learning, it's not a mainstream technology for GLAMs. Neither should the vast majority of GLAMs, with their limited resources, invest in becoming early adopters of such technology.
 - We estimate the AI/ML-technology with the greatest potential to be HTR, Hand-Written Text Recognition. It's maturing rapidly and can make huge amounts of digitised images of writing become true text: searchable, readable, automatically translatable, open to text-analytical methods of research, and so on.
 - Automated sound/speech track transcription also has great potential value both to make such content findable, but also understandable once found, across languages. It's also an accessibility bonus - people with visual disabilities or reading impairments gain better access to these types of heritage resources.
 - Higher quality translation services between the official languages and minority languages of the EU remains key to make European heritage findable and useful across language boundaries. Such languages services increasingly rely on AI/ML.

23. In your view, how valuable would the following digital infrastructure elements be for the area of cultural heritage:

- Common data spaces for sharing cultural heritage data and building up high-value data sets. **Our answer: Valuable**
- Repository infrastructure for digitised cultural heritage content. **Our answer: Valuable**
- Cloud infrastructure for research on digitised cultural heritage material. **Our answer: Valuable**
- Supercomputing capabilities for large-scale cultural heritage simulations (e.g. models of entire cities or regions across time). **Our answer: Not very valuable**

24. Do you agree or disagree with the following statements about the importance of and the need to support digital transformation in the cultural heritage sector in the aftermath of the COVID-19 crisis?

- The EU and the Member States should intensify their actions in order to help cultural heritage institutions to address the challenges and seize the opportunities of the digital era. **Our answer: Agree**
- The digital transformation of European cultural heritage institutions should be addressed and coordinated at EU level. **Our answer: Disagree**
- The EU's support to [Europeana](#), Europe's only digital platform for cultural heritage, is important. **Our answer: Agree**

25. Would you like to answer more specific questions about the Recommendation?

Yes

No

26. Do you agree or disagree with the following statements about the Recommendation?

- The provisions of the Recommendation have been implemented effectively and have achieved their objective to improve conditions in the areas addressed. **Our answer:**
- The benefits of implementing the Recommendation are significant and justify the costs, which are proportionate. **Our answer:**
- The Recommendation has been coherent with other EU policies and initiatives (for example, with the Public Sector Information Directive, relevant copyright provisions including the Orphan Works Directive and the Directive on Copyright in the Digital Single Market, or Europeana's mission). **Our answer:** Agree
- As an instrument at EU level, the Recommendation provides added value, compared to the initiatives that Member States would have taken in the absence of it. **Our answer:** Agree
- Having such a Recommendation continues to be important, but it should be updated to reflect better today's needs in the area of digitised cultural heritage, and increase the potential of Europe's cultural heritage. **Our answer:** Strongly agree

27. In your view, what would be the best future course of action concerning the Recommendation?

- Broadening the scope of the Recommendation to include cultural heritage currently not addressed or minimally addressed (e.g. intangible and immovable cultural heritage)
- Broadening the scope of the Recommendation to include the digital transformation of cultural heritage institutions, in addition to digitisation, online access and digital preservation of cultural heritage
- Both of the above**
- No change, continue with the provisions of the Recommendation as they stand

28. Do you have something else to suggest for the future of the Recommendation?

Please see our Position Paper.

29. Which of the following would be especially important to you in the event of a revision of the Recommendation, considering the lessons learned from the COVID-19 crisis? You can select multiple answers.

- Digital transformation of the cultural heritage sector, including capacity building through acquisition and development of advanced digital literacy and skills**
- Cultural heritage currently not addressed (e.g. intangible and born-digital cultural heritage)**
- More consideration of immovable cultural heritage (archaeological sites, monuments and historic buildings)
- Pan-European efforts for 3D digitisation of cultural heritage artefacts, monuments and sites
- New quantitative targets for immovable cultural heritage to be digitised in 3D
- Europeana's role as the EU flagship for online access to cultural heritage and as an enabler of digital transformation
- Qualitative targets per Member State for Europeana content Encouraging Member States to provide high-quality content to Europeana
- More multilingual content, functionality and tools to enable users to experience content in their own language
- Creating high-value cultural heritage data sets (e.g. sets of digitised cultural artefacts with high-quality metadata) for helping innovation in AI and for research
- Provisions on online engagement, online participation, and online re-use
- Empowerment of citizens as consumers, creators and 'prosumers'**
- Ethical and privacy issues arising in the context of digitising cultural heritage and providing online access to it
- Other (please specify):
 - The European Commission advocating for and continuing to lead by example when it comes to open licensing of in-copyright
 - The European Commission itself or via Europeana, to follow up on the national implementations of the Digital Single Market directive in regards to its effect on GLAMs. This goes especially for Article 14 of the directive.

30. Do you have other suggestions for or comments on improving digitisation, online access, digital preservation and digital transformation in the cultural heritage Sector?

Please see our position paper

31. If you like, you can also submit a file (e.g. position paper).

Position paper

We, Wikimedia Sverige, welcome the European Commission's consultation on the opportunities offered by digital technologies to the cultural heritage sector.

We're convinced that digital technologies are a decisive factor for the relevance of Cultural Heritage, now and in the future. However, the survey does not address key aspects that we consider central to a successful EU-policy on access to digital cultural heritage. This is why, beyond responding to the public consultation, we wish to contribute to the conversation with a position paper where we would like to reinforce certain aspects as being of great importance to future and improved access to digital cultural heritage.

Our survey response and this paper has been shaped in dialogue with the Swedish Wikimedia community. Wikimedia Sverige has also coordinated with, and contributed to the responses of, the [Free Knowledge Group EU](#) and [Avoim GLAM](#), the Finnish group of the [OpenGLAM network](#). Even if we may differ in details and emphasis, we fully support their responses.

A note on COVID-19, access and inaccess

First a note on COVID-19 as the consultation often refers to the current crisis. The note is that, in regards to access to cultural heritage, what *most have now experienced is what many have always experienced* i.e. that they cannot access and experience cultural heritage, on location or digitally. Because they're too far away to visit, because their broadband connection is poor, because their computer crashes when it tries to open a big 3D-model, because what they're interested in is not exhibited but in storage, because the website of the museum they're interested in doesn't work with their assistive technology, and so on. There are multiple reasons individuals, even in "normal times", cannot access cultural heritage or perhaps don't even feel invited to experience it, even when it's free.

The issue of and importance of access to digital cultural heritage has not really grown during COVID-19, it's just that many more people and people with a strong voice in society have now experienced inaccessibility to cultural heritage.

The importance of open practices

Wikimedia Sverige firmly believes that for the public, and the cultural heritage organisations themselves, to fully benefit from the digital transformation it's essential to increasingly adopt open practices and that citizens and communities are actively invited to participate in the work of cultural heritage organisations.

Open licences and a safeguarded public domain

The vast majority of cultural heritage objects were created by individuals who have been long dead, well beyond the typical Life+70 years requirement for a work to be free of copyright limitations.

We believe it is imperative that what is in the public domain in physical formats must remain in the public domain when represented digitally. This principle is well expressed in [Europeana's Public Domain charter](#). The principle is also, at least partially, intended to become law as part of the implementation of [Article 14 of the Directive on Copyright in the Single Digital Market](#). We call on the Commission, itself or via Europeana, to monitor the implementation of Article 14 at the national levels and its practical effect on under what terms digital representations of out of copyright works of art are made available. Further, we call on the Commission to require that digital representations of out of copyright works of art resulting from EU-funded projects must be marked in a standards compliant and machine readable way as being in the public domain.

For digital representations of works that remain in copyright, or born digital works, where cultural heritage organisations hold the copyright we call on the Commission to require the use of standards compliant and machine readable licences and to encourage the use of [open licences](#).

Metadata free of copyright

Descriptive, technical, and administrative metadata does not typically meet the criteria of original creation to be considered as falling under copyright. However, leaving the copyright status implicit puts the onus of clarifying the status on the user and prohibits machines from “reading” the copyright status of datasets.

We therefore encourage the EU to when funding digital heritage projects to require that metadata resulting from the funding be dedicated to the public domain via a [CC0 waiver](#) and by doing so explicitly also relinquish the [database rights](#). Without relinquished database rights metadata cannot be imported in bulk to [Wikidata](#), the free knowledge database of the Wikimedia movement.

An extended and harmonised freedom of panorama in Europe

Freedom of panorama is a prerequisite to comprehensive digitisation of public art and architecture. Conversely, lack of freedom of panorama may negatively impact digitisation, including 3D-captures, of public spaces and monuments. A more permissive and harmonised freedom of panorama in Europe would be beneficial to the digital documentation of public spaces, especially urban spaces.

Open file formats

To facilitate use, reuse, and long-term availability and preservation of digital representations of heritage and of born-digital works we encourage the Commission to, when funding digital projects, require that resulting digital representations of heritage is made available in open file formats. By open file formats we mean file formats unencumbered by patents or is in other ways limited in their use by intellectual property rights.

Open source software

Cultural heritage organisations represent a (comparatively) small market while at the same time having (comparatively) rare and specific functional needs. That type of market structure typically results in customers with a high degree of dependence on a small group of vendors.

Cultural heritage is no exception - it's the vendors' market and vendor lock-in effects are often in play.

Given the large proportion of cultural heritage organisations that are publicly funded we would encourage the Commission to support the development of openly sourced alternatives to proprietary softwares aimed at the cultural heritage market. This should in no way be seen as being in opposition to a free market, but an encouragement towards a switch towards one where companies sell services rather than licences.

Open to collaboration with citizens

By OpenGLAM we do not only refer to the work of (some) GLAMs to release their digital collections under free licences or marked as out of copyright. We refer also to participatory practices where GLAMs involve and work with their communities and users. Volunteer contributions are essential to GLAMs, many GLAMs are indeed completely volunteer-driven, and this should increasingly translate also to the digital space - to "digital volunteers".

Digital volunteers can work with GLAMs in many ways e.g. photographing sites, monuments, and protected natural environments, transcribing texts, translating texts, correcting OCR:d texts, translating descriptive metadata, geolocating where photographs were taken, and identifying motifs in images. To name but a few!

The Wikimedia movement's [GLAMWiki community](#) is already active in such collaborations and eager to participate in more.

The importance of digital fundamentals

The survey questions focus almost exclusively on 3D-technologies and immersive experiences. While these are technologies that are currently riding high on the hype cycle and are likely to become more important in the future the vast majority of GLAMs are still working to get their digital fundamentals right.

We believe it is important that the EU and the Commission consider these fundamentals as being equally important as technologies in the vanguard. The tip of the pyramid needs a strong base to stand on.

Persistent identifiers

Link rot remains a major issue when linking to or citing digitised cultural heritage resources. All too frequently links from other online resources to digitised cultural heritage resources lead only to a missing page. This issue is of great importance to the Wikimedia community who rely on authoritative sources when eg. writing Wikipedia articles or adding objects to Wikidata. It's also harmful to the cultural heritage organisations themselves

Consistent, correct, and standards compliant rights statements

Large amounts of digitised content is still published with unclear or undeclared copyright status. While this has partially been alleviated through the good works of many - including the EU-funded Europeana initiative - the issue is not solved.

Claiming copyright over faithful digital reproductions of works that have long since passed into the public domain also remains common. We encourage the Commission to follow-up on the implementation of Article 14 of the Directive on Copyright in the Digital Single Market and give preferential treatment in funding projects that adhere to it.

Shared linked data vocabularies

While there has been great progress in aggregating the digital collections of European heritage organisations on the national, thematic and European levels the aggregations suffer from poor discoverability as a result of semantic non-interoperability. Multilingual discovery and access also suffers as a consequence (see below).

We suggest that greater emphasis should be given to overcome this issue in the EU funding programmes. Further, we suggest that the Wikimedia-provided Wikidata platform can be a key component in overcoming this issue and would encourage GLAMWiki-collaboration in this regard.

Multilingual discovery and access

With 24 official languages in the EU, and many more minority languages and languages represented in heritage materials, multilingual discovery and access is very far from a solved problem. We would therefore like to reinforce the importance of language technology, as well as curation and contextualisation, to truly make heritage findable and understandable across language barriers.

We encourage the Commission to look into ways to combine development of language technology and discoverability and accessibility, including accessibility for users with disabilities, of cultural heritage resources. Further, we urge the Commission to in particular grant support to the development of highly multilingual and linked open data compliant cultural heritage vocabularies, authorities, and thesauri. Starting from existing resources it would be one of the quickest and most efficient ways to improve cross-language discoverability and semantic interoperability of digitised cultural heritage collections.

Accessible and usable web services

Digital cultural heritage is of little value if it cannot be made available so in an accessible fashion. The [EU Web Accessibility Directive](#) has now been in force since 2016 and the implementation period is approaching its deadline. Yet even a cursory review of the web services of publicly funded cultural heritage organisations would reveal a high proportion of non-compliance.

We encourage the Commission to, itself or via the Europeana DSI, monitor and follow-up on web accessibility compliance within the sector.

The importance of local heritage and “small histories”

Numerically, the large majority of cultural heritage organisations are local, small and often volunteer driven. It's the local history or archaeology society closely connected to the community that is the most common touchpoint with heritage for many European citizens. Small, local and volunteer driven cultural heritage organisations are in great need of support, financial and professional. This includes support to digitise their collections - in a very cost-efficient manner - and to “digitise” their people, to record and document personal stories and local histories before they are gone.

We encourage the Commission to consider how it, and resource-rich national heritage organisations, can better support the digital development of local and small cultural heritage organisations.

The importance of capacity building

Digital transformation is not primarily a technological challenge, different technologies will always come and go. Intelligently adapting them and utilising them in heritage requires a higher level of in-house digital knowledge, know-how, and organisational preparedness than what is typical now. This is of far greater importance in the long-term than focused R&D on specific technologies.

We encourage the Commission to not focus as much on specific technologies, be they 3D or something else, but to encourage and fund digital capacity building in the cultural heritage sector with a focus on the tactics and practices of leading and responding to digital transformation.