

Project Partner Search Form

- I offer my expertise to participate as a Partner in a Horizon Europe Project
 I am planning to coordinate a project and I am looking for Project Partners

TOPICS OF INTEREST

Please insert the topics or areas of interest.

HORIZON-CL2-2024-HERITAGE-ECCCH-01-02: A European Collaborative Cloud for Cultural Heritage – Innovative tools for documenting, interlinking and organising data

HORIZON-CL2-2024-HERITAGE-ECCCH-01-03: A European Collaborative Cloud for Cultural Heritage – Innovative tools for advanced data enrichment

HORIZON-CL2-2024-HERITAGE-ECCCH-01-04: A European Collaborative Cloud for Cultural Heritage – Innovative tools for high-value interactions with visitors and heritage objects

PARTNER INFORMATION

Description of the Legal Entity

- Higher Education Research Institution Public Administration
 Industry /SME NGO Other

Short description of the Legal Entity

The [Natural History Museum Vienna](#) (NHMW) is one of the largest research institutions in Austria, encompassing biodiversity, geosciences, and cultural heritage. It has a unique capacity for inter- and transdisciplinary research that bridges these fields, supported by its extensive collections of over 30 million specimens and cutting-edge research infrastructure. Committed to Open Science principles, the NHMW ensures that its research outputs are accessible, reusable, and interoperable, adhering to FAIR standards. The museum actively engages in the development and dissemination of Open-Source tools to support the global research community. In addition, NHMW is dedicated to the dissemination of knowledge to a broad public, employing innovative methods such as interactive exhibitions, participatory experiences, and immersive technologies. Through initiatives like [Deck50](#) and web portals such as [Kulturpool](#), [bITEM](#) and [SALZZEIT](#), the museum connects diverse audiences with its research and collections, fostering education and engagement both online and offline.

Expertise

The **Natural History Museum Vienna (NHMW)** engages in interdisciplinary research across biodiversity, geosciences, and cultural heritage. Leveraging its extensive expertise in integrating and enriching cultural and scientific heritage data, the NHMW utilizes platforms such as Kulturpool (kulturpool.at) and bITEM (bitem.at) to ensure data accessibility and compliance with the FAIR principles: Findable, Accessible, Interoperable, and Reusable.

NHMW is dedicated to Open Science, making its research and data freely available and reusable. The museum also develops Open Source tools to support the global research community. Projects like the Kulturpool (kulturpool.at), SALZZEIT App (salzzeit.at) and bITEM (bitem.at) showcase how digital tools can enhance public understanding of science and cultural heritage.

Deck 50 is NHMW's innovative space for public engagement, combining interactive programs with advanced multimedia technology to connect science and society.

The advanced laboratories of the NHMW for 3D imaging, molecular analysis, and material studies facilitate the in-depth study and preservation of complex heritage objects.

NHMW, particularly through Kulturpool, also offers training in digitisation, metadata standards, and IIIF (International Image Interoperability Framework), supporting institutions in adopting modern workflows and technologies.

Kulturpool is Austria's national cross-domain aggregator for cultural heritage, connecting data from diverse institutions and ensuring interoperability through established standards. By 2026, Kulturpool will feature over 100 partner institutions in its portal, making a wealth of cultural data accessible to researchers and the public alike.

Already experience as a	Coordinator	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	Partner	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
	Expert Evaluator	<input type="checkbox"/> YES	<input type="checkbox"/> NO

PROJECT IDEA / CONTRIBUTION TO THE CALL TOPIC

Your potential role

- | | |
|---|--|
| <input checked="" type="checkbox"/> Research | <input checked="" type="checkbox"/> Technology Development |
| <input checked="" type="checkbox"/> Dissemination | <input checked="" type="checkbox"/> Training |

Our contribution to the projects:

Kulturpool, hosted at the NHMW, offers the following contributions to the ECCCH Calls:

1. AI-Driven Web Application for IIIF Pyramidization

This potential contribution focuses on developing an **AI-driven web application/service** that analyses provided images and automates the generation of multi-resolution image pyramids optimized for IIIF viewers. The tool may simplify the process of preparing high-resolution cultural heritage images by leveraging AI to enhance scalability, optimize formats, and streamline workflows.

Potential Roles:

- **Research:** Exploring AI optimization techniques for image scaling and resolution management.
- **Technology Development:** Building and implementing the AI-driven application/service for cultural heritage institutions.
- **Evaluation:** Testing and validating the tool's performance with Kulturpool's partner institutions.
- **Training:** Providing workshops on how to integrate the service into their workflows.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-02 (*Documenting, interlinking, and organising data*).
- HORIZON-CL2-2024-HERITAGE-ECCCH-01-03 (*Advanced data enrichment*).

2. AI-Driven Web Application for IIF Manifests generation with Embedded Standardized Metadata

This potential contribution involves creating an **AI-driven web application/service** to automate the generation of IIF manifests embedded with rich metadata. The tool may use machine learning to cross-reference and harmonize metadata, enabling seamless interaction, cross-mixing, and re-mixing of diverse data types. By enhancing metadata integration, this tool may improve discoverability, accessibility, and interoperability of cultural heritage collections, fostering innovative reuse.

Potential Roles:

- **Research:** Investigating AI methodologies for harmonizing and embedding metadata into IIF workflows.
- **Technology Development:** Designing and deploying the AI-driven manifest generator.
- **Evaluation:** Conducting usability tests with partner institutions to validate metadata workflows and assess interoperability.
- **Training:** Providing workshops for partner institutions on metadata management and IIF integration.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-02 (*Documenting, interlinking, and organising data*).
- HORIZON-CL2-2024-HERITAGE-ECCCH-01-03 (*Advanced data enrichment*).

3. AI-Driven Web Application for Metadata Enrichment

This potential contribution focuses on building an **AI-driven web application/service** that employs **Natural Language Processing (NLP)** and **Large Language Models (LLMs)** to enrich or validate metadata. The tool may align cultural heritage data with controlled vocabularies for agents, places, and concepts, ensuring semantic consistency and high-quality metadata. By automating these processes, the tool may reduce manual workload and improve data accuracy and interoperability.

Additionally, AI-powered **web app snippets** could be developed to simplify linking with vocabularies. These intuitive tools may support data entry staff by offering suggestions for controlled vocabularies, enhancing the efficiency and quality of metadata creation.

Potential Roles:

- **Research:** Developing AI models tailored to cultural heritage vocabularies.
- **Technology Development:** Implementing AI-driven enrichment tools and app snippets for practical use.

- **Evaluation:** Testing the AI-driven tools and snippets with real-world data from and with Kulturpool's partner institutions.
- **Training:** Hosting workshops for cultural heritage professionals on integrating AI into metadata workflows.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-03 (*Advanced data enrichment*).

4. AI-Driven Web Application for Intuitive Storytelling with IIIF

This potential contribution focuses on developing an **AI-driven web application/service** that allows users to easily create IIIF-based storytelling experiences. The tool may integrate intuitive drag-and-drop functionalities with AI-guided metadata embedding and content recommendations, enabling users to craft narratives from cultural heritage objects. These storylines may combine text, images, videos, and metadata, offering interactive and engaging presentations for education, exhibitions, and public engagement.

Potential Roles:

- **Research:** Exploring AI methodologies for automated narrative generation and metadata linking.
- **Technology Development:** Building an intuitive interface for storytelling with IIIF and AI-driven content enhancements.
- **Evaluation:** Testing the tool's usability and effectiveness with cultural heritage educators and institutions.
- **Dissemination:** Showcasing IIIF storytelling applications at Deck 50 and through collaborations with partner institutions.
- **Training:** Offering workshops on how to use the storytelling tool for exhibitions, education, and public engagement.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-04 (*High-value interactions with visitors and heritage objects*).

5. AI-Driven Tools for Intuitive Linking with Controlled Vocabularies

This potential contribution explores the development of small **AI-driven web snippets** designed to make linking with controlled vocabularies intuitive and user-friendly. These snippets may help data entry staff by dynamically suggesting relevant agents, places, or concepts during the metadata creation process. By reducing complexity, they aim to enhance efficiency and improve the quality of metadata for cultural heritage datasets.

Potential Roles:

- **Research:** Evaluating AI models for vocabulary alignment in cultural heritage contexts.
- **Technology Development:** Creating lightweight, AI-powered snippets to integrate with existing systems like Kulturpool.
- **Evaluation:** Testing snippets in collaboration with Kulturpool's partner institutions to assess usability and impact on data quality.
- **Dissemination:** Sharing findings and demonstrating applications in pilot institutions.
- **Training:** Conducting targeted workshops on implementing and using the snippets.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-03 (*Advanced data enrichment*).

6. Integration and Evaluation of Innovative Tools into Kulturpool

This potential contribution involves integrating innovative tools developed under the respective ECCCH Calls directly into **Kulturpool** and evaluating their performance in real-world workflows and use cases. As Austria’s national cross-domain aggregator for cultural heritage, Kulturpool provides a robust environment for **testing** and **refining** tools, ensuring their scalability, usability, and impact across the cultural heritage sector.

Potential Roles:

- **Evaluation:** Assessing the tools’ performance with real-world datasets and diverse institutional use cases.
- **Integration:** Embedding the tools into Kulturpool to enhance its functionality.
- **Dissemination:** Sharing insights and lessons learned from integration and evaluation processes.
- **Training:** Offering workshops for institutions on the use of these tools within Kulturpool.

Relevance to Call:

- HORIZON-CL2-2024-HERITAGE-ECCCH-01-02 (*Documenting, interlinking, and organising data*).
- HORIZON-CL2-2024-HERITAGE-ECCCH-01-03 (*Advanced data enrichment*).
- HORIZON-CL2-2024-HERITAGE-ECCCH-01-04 (*High-value interactions with visitors and heritage objects*).

We are also happy to discuss additional collaboration opportunities and tailor our expertise to your project needs.

CONTACT DETAILS

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Please send this form back to: contact@net4society.eu