



H²IOSC

Humanities and cultural Heritage Italian Open Science Cloud

A marble bust of a woman's head, likely a classical figure, is shown in profile. The right side of her face and the background behind her are overlaid with a glowing blue digital network of interconnected nodes and lines, symbolizing the intersection of humanities and technology.

**Strengthening
Research Infrastructures
Consolidating the Federation**

www.h2iosc.cnr.it

FOUNDATIONS AND VISION

H2IOSC is a federated and inclusive Cluster involving the Italian national nodes of 4 European Research Infrastructures (RIs) in the ESFRI domain of Social Sciences and Humanities. H2IOSC acts as an enabling platform, supporting digital research in various disciplines across humanities, language technologies, and cultural heritage, fostering collaboration and sharing of tools, services, and data.

4 FEDERATED RIs



Common Language Resources and Technology Infrastructure



Digital Research Infrastructure for the Arts and Humanities



European Research Infrastructure for Heritage Science



Open scholarly communication in the European research area for social sciences and humanities

12 CNR Institutes

The Cluster is managed by CNR, and involves the following institutes

ISPF	ILC	NANOTEC	IAC
ICAR		ISPC	
ILIESI	INO	ISTI	OVI
IMATI		SCITEC	



Consiglio Nazionale delle Ricerche



The Value PROPOSITION

ACCESS TO AN EXCLUSIVE PORTFOLIO OF TOOLS, SERVICES AND DATASETS

H2IOSC brings together excellent European linguistic, humanities, social science, and cultural heritage resources, providing access to advanced systems, high-quality data, state-of-the-art technologies, and excellent expertise. All the resources have been quality-controlled during the process of inclusion.

COORDINATED ACCESS TO FACILITIES AND SERVICES

H2IOSC streamlines service delivery by integrating distributed resources into a unified, high-performance ecosystem

QUALITY ASSURED PROCESSES

Driven by standardized protocols and supported by the technical expertise of H2IOSC and Node liaison staff.

A SINGLE-ENTRY POINT

The H2IOSC Marketplace provides a unified gateway for all information, resources and access procedures.



CURRENT ACHIEVEMENTS

DIGITAL Services

Software, tools, datasets and pilot projects, designed to concretely address the needs of professionals involved in the management, enhancement and study of cultural, linguistic and historical heritage, including support for virtual research environments, diagnostics, remote monitoring, data analysis and extraction, digital fabrication.

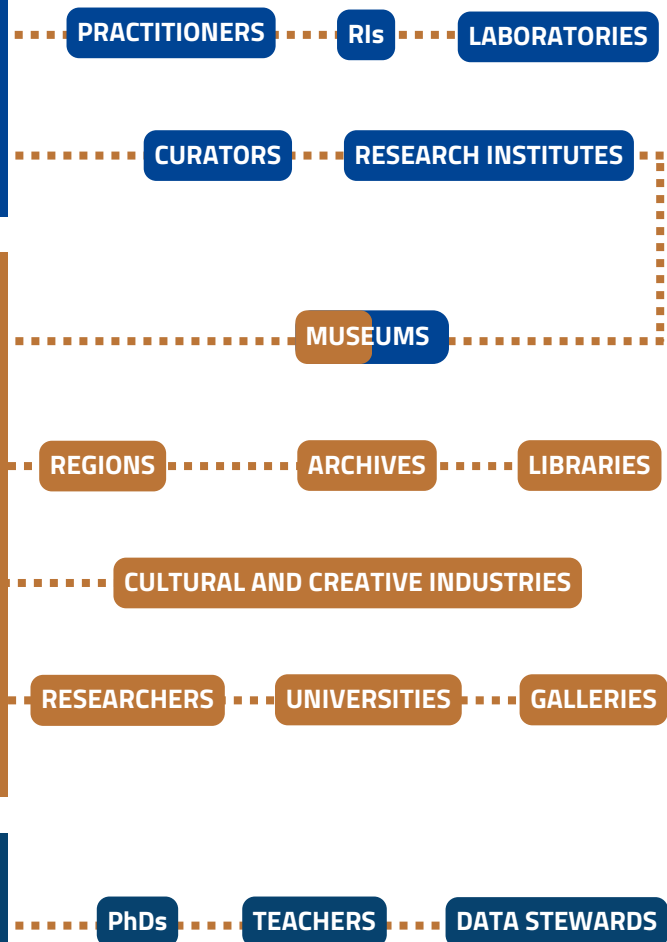
The Cluster has delivered a comprehensive portfolio of services designed to support research, innovation and capacity building across the humanities, linguistics, and heritage science sectors, also enabling the execution of complex scientific workflows.

ENABLING Services

Essential digital infrastructures for research and data management, including secure storage solutions, high-performance computing, artificial intelligence applied to the analysis of digital content and a range of advanced ICT services supporting: data processing, sharing and interoperability within virtual and collaborative research environments.

TRAINING Services

Open-access, self-paced courses and platforms to store and access openly available training materials, designed for both trainers and learners working in the humanities, social sciences and cultural heritage sectors, with the goal of strengthening interdisciplinary skills and promoting effective use of RIs.



SCAN TO EXPLORE
THE H2IOSC TRAINING
INFRASTRUCTURE





SERVICES Access Model

H2IOSC provides access to its services through a flexible model designed to address the needs of different user communities.

1

Open access resources

Access to a range of resources is freely available to all users.

2

Value-added services

Access to advanced services and infrastructure follows a flexible model based on user categories:

Scientific community users: access based on scientific excellence and impact, with a contribution covering service delivery costs.

Private sector users: access through fee-based models for advanced functionalities, specialised support, and customised solutions.

ASSESSING THE TECHNOLOGICAL MATURITY OF SERVICES

HOW WERE THE DIGITAL SERVICES VALIDATED?



To validate the digital services developed within the Cluster, H2IOSC implemented an evaluation model based on free service access through transnational and national access calls. These instruments made it possible to test services in real-world conditions, collect qualified feedback and ensure alignment between the technological offer and the needs of public/private scientific and professional communities.

TNA/NA Calls

Access to H2IOSC services followed an excellence-driven model, open to researchers, doctoral candidates, technical staff and students in the academic and industrial sectors, based on the scientific quality, originality and relevance of the research proposal.



SCAN TO EXPLORE THE
TNA/NA H2IOSC LIST
OF SERVICES.

EARLY ADOPTERS Call

Access was reserved to participants in the H2IOSC Roadshow event (Naples, July 2025), providing selected services to test advanced digital solutions directly within their organisational and research contexts.





HOW DID WE ASSESS IF SERVICES ARE USEFUL?

Service usefulness was assessed through ex-ante and ex-post evaluation activities, collecting feedback through questionnaires from both call users and service providers.

EX-ANTE Analysis

A mixed-methods approach combining questionnaires, interviews, focus groups, and mapping activities, with outcomes feeding into the H2IOSC Observatory, a permanent tool supporting evidence-based service design and improvement.



EX-POST Evaluation

H2IOSC conducted an ex-post evaluation based on questionnaires from users and service providers, assessing usage, satisfaction, impact, and areas for improvement to support continuous service refinement.



HOW DO WE KEEP OUR SERVICES ALIGNED WITH TECHNOLOGICAL DEVELOPMENTS?



H2IOSC ensures alignment with technological developments through market analysis and benchmarking, promotes stakeholder engagement to assess maturity and guide improvements. These activities are complemented by continuous dialogue with the business sector.

FUTURE DIRECTIONS

Aligning with **THE VALUE PROPOSITION**

H2IOSC is designed for longevity; we maintain the effectiveness of our services by staying responsive to stakeholder needs and ensuring our activities deliver on our core Value Proposition for the research and innovation sectors.

Expanding **THE USER BASE AND ENGAGING NEW PARTNERS**

H2IOSC aims to broaden its ecosystem by reaching new user communities and potential partners across research, culture, and industry. This strategy includes targeted calls, thematic events and collaborative initiatives designed to showcase H2IOSC services and stimulate the adoption of digital methodologies and tools across humanities and heritage science. H2IOSC aims to scale its impact by bringing its Value Proposition to new user communities across research and industry. By fostering partnerships with cultural and academic institutions, the Cluster drives the digital transformation of SSH research and solidifies its position as a leading strategic hub.



Increasing **PRIVATE-SECTOR ENGAGEMENT FOR INNOVATION**

To foster innovation and create new opportunities for technology transfer, H2IOSC seeks to intensify collaboration with private companies, SMEs and leading actors in the Cultural and Creative Industries. Dedicated calls, co-design initiatives, and industry-focused events will encourage the joint development of advanced digital solutions, supporting business innovation while enriching the Cluster's services offer. This engagement will also help align the H2IOSC's technological agenda with emerging market trends, promoting sustainable and mutually beneficial partnerships.





The **H2IOSC Observatory** will support this process by providing evidence-based insights to guide strategic decisions and services evolution over time.

Monitoring **CLUSTER EFFICIENCY AND IMPACT**



A structured monitoring framework will be implemented to assess the performance, quality, and impact of H2IOSC services over time. Key indicators will cover scientific excellence, user engagement, service uptake, operational efficiency, technological readiness, and socio-economic outcomes. Continuous evaluation—supported by both the H2IOSC Observatory and systematic feedback from users and service providers—will guide strategic decision-making, ensuring that the Cluster evolves in line with community needs and remains aligned with national and European priorities.

Strategic **COMMUNICATION PLAN**



Effective communication is essential to strengthen the identity of the Cluster, promote its services, and engage its diverse communities. H2IOSC will implement a comprehensive communication plan that combines coordinated branding, an active online presence, scientific dissemination, stakeholder outreach and participation in national and international events. Through newsletters, webinars, public presentations and collaborative communication with the national nodes, the Cluster will increase awareness of its mission, highlight success stories and foster a strong and connected community around research innovation in the humanities, linguistics, and heritage science.

H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud has been funded by the European Union Next Generation EU - National Recovery and Resilience Plan (NRRP) - Mission 4 "Education and Research" Component 2 "From research to business" Investment 3.1 "Fund for the realization of an integrated system of research and innovation infrastructures" Action 3.1.1 "Creation of new research infrastructures strengthening of existing ones and their networking for Scientific Excellence under Horizon Europe" - Project code IR0000029 - CUP B63C22000730005.
Implementing Entity: CNR - Consiglio Nazionale delle Ricerche, Italy.



www.h2iosc.cnr.it



Visit our website!

April 2026

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