MISSIONE 4
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ABSTRACT

The *D1.2 H2IOSC Access Coordination and Management Procedures/Report* illustrates the activities of the Access Coordination and Management Unit (A1.2), which centrally prepared and managed four Trans-national access (TNA) and National Access (NA) calls for proposals. The aim was to ensure the highest degree of integration in accessing the wider range of tools, services and facilities offered by the H2IOSC Cluster.

The report highlights the results achieved, describes the TNA/NA process designed to support access, and details the implementation, promotion and coordination of the calls. The successful execution of the four TNA/NA calls was made possible through strong collaborative work with the Infrastructure Manager, Project Coordinator, and Infrastructure Coordinators, as well as with the Service Providers, who were responsible for feasibility evaluation and service access, and the External Advisory Board (EAB), in charge of the evaluation process. Metrics for evaluating the outcomes were also defined and collected.

This version of the report covers achievements up to the third call, for which feedback collection is ongoing, and the fourth call, for which accesses activities are still ongoing.

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LIST OF ACRONYMS

CLARIN	Common Language Resources and Technology Infrastructure
CLARIN-IT	Common Language Resources and Technology Infrastructure - Italian node
DARIAH	Digital Research Infrastructure for the Arts and Humanities
DARIAH-IT	Digital Research Infrastructure for the Arts and Humanities - Italian node
E-RIHS	European Research Infrastructure for Heritage Science
E-RIHS.it	European Research Infrastructure for Heritage Science - Italian node
EAB	External Advisory Board
ECHOES	European Cloud for Heritage OpEn Science
EOSC	European Open Science Cloud
ERIC	European Research Infrastructure Consortium
ESFRI	European Strategy Forum on Research Infrastructures
H2IOSC	Humanities and Heritage Italian Open Science Cloud
NA	National Access
OPERAS	Open scholarly communication in the social sciences and humanities
OPERAS-IT	Open scholarly communication in the social sciences and humanities - Italian node
RIs	Research Infrastructures
SSHOC	Social Sciences & Humanities Open Cloud
TNA	Trans-national Access
TNA/NA	Trans-national and National Access

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1 INTRODUCTION

The H2IOSC project aims at creating the Humanities and Heritage Italian Open Science Cloud (H2IOSC): an Italian cloud network for research in humanities, linguistics and heritage science, by fostering the collaboration of the Italian nodes of 2 ESFRI Landmarks in Social and Cultural Innovation – CLARIN (Common Language Resources and Technology Infrastructure) and DARIAH (Digital Research Infrastructure for the Arts and Humanities), and 2 Projects in the same domain – E-RIHS (European Research Infrastructure for Heritage Science), which became an ERIC in March 2025, and OPERAS (open scholarly communication in the social sciences and humanities).

Within the work breakdown structure of H2IOSC, **WP1** aimed at ensuring that the work programme objectives, milestones and deliverables were met in a timely manner and within budget constraints; it enabled an interface with MUR as well as addressed external relationships between the project and other external stakeholders, put in place the project agreements, ensured conformance compliance with the ministerial and PNRR's rules, and reporting requirements.

The activity **A1.2 H2IOSC Access Coordination and Management Unit** served to centrally prepare and manage four Trans-national access (TNA) and National Access (NA) calls for proposal to provide the highest degree of integration in accessing the wider range of H2IOSC's tools, services and facilities. **This result was fully achieved.**

The calls for the H2IOSC network, held during the period October 2024 to September 2025, were open to both academics and industrial research projects, establishing unified access procedures and a single working point of access, following up with financial and activity reporting on the project TNA/NA programme.
The coordination efforts of the activity provided access to virtual services and pilots identified in WP6 and WP7 through the calls, by:

1. promoting the testing and use of services and pilots provided by the H2IOSC Cluster;
2. provide metrics to effectively assess the use and access to the H2IOSC Resources;
3. provide assessment of the services;
4. report the results of the periodic assessments to the MUR in this Deliverable.

The activity ensured excellence-driven access through a rapid, transparent and efficient feasibility check, evaluation and selection process. It supported users and access providers to facilitate the offer of integrated TNA/NA. An active desk was set up in order to respond to users, providers and evaluators' needs. Moreover, this activity ensured a cross-coordination of all the providers in the diffusion of information on the opportunities offered by the H2IOSC TNA/NA programme, giving maximum publicity to its advantages and innovations.

The output of the activity is the **Deliverable D1.2 H2IOSC Access Coordination and Management Procedures/Report**, already delivered at M14 in its intermediate version and at M36 in this current version.

The first release of the deliverable D1.2 concentrated on a description of the current landscape of Trans-national access for European Research Infrastructures in general and the four Infrastructures involved in H2IOSC, also based on a survey distributed across the H2IOSC network. In this release, the report also highlights the achieved results of the activity, describes the TNA/NA process to support access, and illustrates the implementation of the TNA/NA calls. At the date of submission of this version of the deliverable, the access period of the fourth call and the feedback questionnaire of the third and fourth calls are still ongoing.

2 STATE OF THE ART OF ACCESS TO H2IOSC RESEARCH INFRASTRUCTURES

2.1 TRANS-NATIONAL AND NATIONAL ACCESS

Within Research Infrastructures (RIs), **Access** refers to the legitimate and authorised physical, remote and virtual admission to, interactions with and use of RIs and to services offered by RIs to **Users**, which are individuals, teams and institutions from academia, business, industry and public services, engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in the management of projects; teams can include researchers, doctoral candidates, technical staff and students participating in research in the framework of their studies. Such access can be granted, amongst others, to machine time, computing resources, software, data, data-communication services, trust and authentication services, sample preparation, archives, collections, the set-up, execution and dismantling of experiments, education and training, expert support and analytical services.
Depending on the type of resources, access can be offered by **Providers**, which are laboratories, entities, and institutes participating in the RIs and hosting and granting access to their facilities and services to users.

As a general term, **Trans-national access (TNA)** can be broadly defined as the process by which users (as defined above) can access services or facilities located in another country. The term has been used for many decades over a range of contexts and actors, including governmental organisations, international relations, and scientific domains. **National access (NA)** refers to access to services and facilities located in the same country as the user.
TNA/NA to RIs entail the possibility of accessing services, facilities and resources made available to the European and global scientific community, according to specific procedures depending on the type and structure of the infrastructure itself and the data provided. TNA/NA opportunities have strongly promoted international collaboration and have increased value and visibility of hubs and national nodes, by helping researchers with high-excellence equipment and knowledge from specialised research sites, laboratories and observatories across the EU. They also promote multi-disciplinarily and mobility across the RIs and encourage the expansion of their services to support diverse public and private communities in the scientific and industrial sectors. Maximising the use and access to RIs in Europe is a key factor for competitiveness in both fundamental and applied research, enabling collaborative research and technological development efforts across geographical and disciplinary boundaries.

Apart from the market-driven access described below, which represents a fraction of accesses, and depending on individual procedures, **access is generally free of charge**, including technological, scientific and logistical support (for example, travel costs) and, when appropriate, the specific training that is needed to use the services provided by the Research Infrastructure. Access to data, especially digital resources, should follow the **Open Access** principles: "as open as possible, as closed as necessary" and be offered on an open and **FAIR** (Findable, Accessible, Interoperable, Reusable) basis.

Several TNA/NA models for Research Infrastructure have been developed; however, one of the most relevant difference can be found between physical, remote and virtual access:

- **physical access** involves "hands-on" access of users to the facility, equipment, services, etc., e.g., the direct visit to a laboratory. As these resources are generally subject to limited availability, a competitive process is required, following a specific procedure and criteria for the selection of users;
- **remote access** happens when the users do not employ the physical resources of the Research Infrastructure directly; instead, it can involve remote operation or interaction with a facility, service or resource with access through a network connection, or remote service by an operator from the staff of the Research Infrastructure, to conduct analyses, sampling, modelling, monitoring, etc. according to a shared research plan. In this case, the physical location of the Research Infrastructure could become less relevant for the user. Similar to physical access, remote access is also generally subject to a competitive process;
- **virtual access** entails the employment of digital resources, tools and data provided through communication networks, which can be simultaneously available to a certain number of users.

For both physical and remote access, and for virtual access when resources are limited, a competitive process is required, which is generally implemented through one of the following types of access:

- **standard access** to members according to their proportion on some key parameter, e.g. financial contribution;
- **competitive excellence-driven access**, which is based on application and is exclusively dependent on its scientific excellence, originality, quality and technical, logistical, and ethical feasibility, evaluated through peer review conducted by internal or external experts;
- **competitive market-driven access** (generally a small fraction of the total of competitive access, depending on the infrastructure's Statute), which is defined by an agreement between the user and the Research Infrastructure, with the application of a fee.

Another mode of access, typical of virtual access models when resources are not limited, is **wide access**, which guarantees the broadest possible access to scientific data and digital services provided by the Research Infrastructure to users wherever they are based. RIs adopting this mode maximise the availability and visibility of the data and services provided.

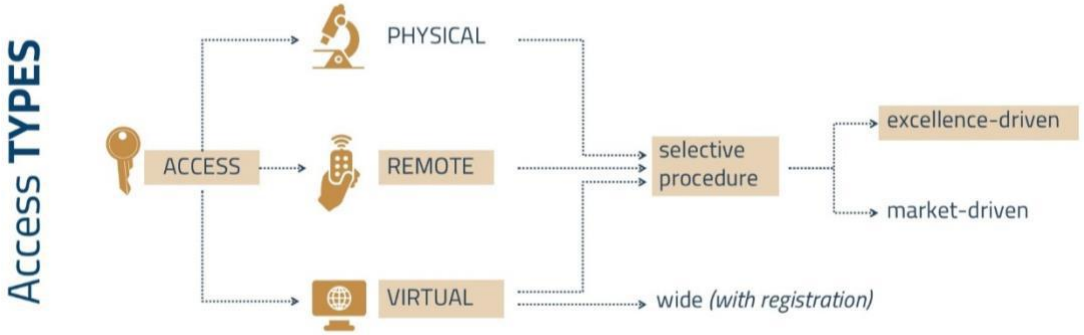


Figure 1: Access Types for TNA/NA of Research Infrastructures.

Although well-established in the European Research Area[1], TNA/NA can face challenges related to a lack of funds, when specific funding mechanisms are not available. Moreover, there are issues related to personal data, security or intellectual property, often more sensitive in a trans-national context. The bottlenecks vary depending on the scientific domain, the modality of access for a class of infrastructures, or the nature of costs and the funding mechanism used.

As regards humanities, linguistics and heritage sciences, which are the domains of the RIs involved in H2IOSC, the development of digital tools, data and resources requires innovative environments and procedures of access, to maximise their research potential for a range of stakeholders, generating opportunities for growth and engagement. Moreover, the effective handling of exponentially growing digital data demands complex strategies and additional costs for its access, curation and storage. Connectivity will be a main challenge for these Infrastructures in terms of FAIRification and integration of data from different sources, which calls for joint standards and procedures to make data findable, accessible, interoperable and reusable throughout the infrastructures. Another challenge to access is the awareness of potential users about the services provided, which requires a sound communication and dissemination strategy.

The "European Charter for Access to Research Infrastructures"[2] proposes non-regulatory principles and guidelines for access, in order to conduct research, undertake experimental development, provide education and training and deliver services. The Charter aims to promote the harmonisation of access procedures as well as the enhanced transparency of access policies. This should enable innovative research and development for users, improve the related methods and skills in the workforce and foster collaboration.

[1] https://research-and-innovation.ec.europa.eu/strategy/strategy-research-and-innovation/our-digital-future/european-research-area_en

[2] European Commission. Directorate General for Research and Innovation. (2015). *European charter of access for research infrastructures: Principles and guidelines for access and related services.* Publications Office. https://data.europa.eu/doi/10.2777/524573

The **main principles** of the Charter are:

- Research Infrastructures should have a defined **access policy** on how they regulate, grant and support access;
- Users should **acknowledge the contribution** of the Research Infrastructure in any output deriving from research conducted within its realms;
- Research Infrastructures must **comply with national and international law** and agreements;
- **Costs need to be covered** and fees for access should contribute to the financial sustainability of the Research Infrastructure;
- Research Infrastructures and users should adhere to the **standard codes of conduct** and ethical behaviour in scientific research and to research integrity;
- Research Infrastructures **shall not discriminate** on any personal grounds in granting access;
- The **administration** connected to requesting and granting access to Research Infrastructures **should be kept to a minimum**;
- Research Infrastructures should have a **research data management** policy;
- Research Infrastructures should **provide** the users with **instructions** for effective and efficient access.

The Guidelines proposed for the access to RIs can be summarised as follows:

- The **access policy** of a Research Infrastructure should define the access in terms of access Units, state the specific access mode, clarify the conditions for access, describe the processes and interactions involved in the access and elaborate on the support measures facilitating the access;
- Access to RIs may be provided according to three different **access modes**: excellence-driven, market-driven and wide;
- RIs may **restrict access** by means of quota or pre-defined user groups, as long as they clearly communicate such conditions to the users;
- The **processes and interactions** involved in the access to RIs may consist of application, negotiation, evaluation, feedback, selection, admission, approval, feasibility check, setting-up, use, monitoring and dismantling;
- To facilitate access, RIs are encouraged to offer **support measures** to users;
- RIs are encouraged to offer **education and training** in the areas of their activities;
- Access to any given Research Infrastructure should be based on a **regulatory framework** that should cover, at least, access, intellectual property rights, data protection, confidentiality, liability and possible fees;
- Each Research Infrastructure should have a **single point providing** clear and transparent **information** on the Research Infrastructure itself, its services, access policy, data management policy and the terms and conditions;
- RIs and users should agree on a **data management plan**, outlining how research data of the project will be handled;

- RIs should undertake the necessary actions, including instruction, to ensure the **health, security and safety** of any user accessing the Research Infrastructure as well as to minimise the impact on the environment;
- RIs are encouraged to put in place mechanisms to evaluate the quality of the access;
- Access to RIs **may be limited**, amongst others, by national security and defence, privacy and confidentiality, commercial sensitivity and intellectual property rights, and ethical considerations in accordance with applicable laws and regulations.

These Principles and Guidelines should be followed by any trans-national procedure developed for European Research Infrastructures.

2.2 SURVEY ON PREVIOUS TNA/NA PROCEDURES FOR THE RIs PARTICIPATING IN H2IOSC

Informative and technical data on the TNA/NA procedures carried out by each of the four RIs involved in H2IOSC was collected during the first semester of the activity by developing a template (see **Annex 1**), distributed across the H2IOSC network, to help define a set of selection procedures to synchronise access and to provide useful knowledge for users/potential applicants. In line with the web-based survey for identifying the needs and requirements of the H2IOSC communities, developed in WP2 "Landscaping and building communities" (see D2.1 "First report on the H2IOSC Landscapes" and D2.2 "Updated report on the H2IOSC Landscapes"), it was decided to build a single, brief questionnaire, to efficiently concentrate information and avoid data dispersion. The survey was carried out during the second and third semesters of the H2IOSC project.
It is important to note that the survey was administered before E-RIHS became an ERIC in March 2025; therefore, its results represent only a part of the current operativity of E-RIHS.

The survey concentrates on the current TNA/NA policies of the Italian nodes of the RIs, by asking for a brief description of:

- Available resources and services
- Typology of access
- Eligibility
- Selection-evaluation procedure
- Use
- Metrics on access.

It was first conducted on the national coordinators and the persons in charge of the TNA/NA of the RIs. More information was gathered by consulting researchers involved in the H2IOSC servification, virtualisation and remotisation of existing tools and services to enhance collective access (WP6) and the definition of H2IOSC Marketplace (WP5), which has the role to act as a single point of entry for the services.

The survey highlighted the similarities and differences in the access procedures for the four RIs, prior to the implementation of H2IOSC.
Access typology varied depending on the type of resources. Available resources were both digital and physical; therefore, virtual, physical and remote accesses were provided.

Digital resources were generally open access, FAIR and followed the principle “as open as possible, as closed as necessary” (if not, the fairification process was ongoing). Access was mostly open and wide throughout the infrastructures: everyone could use the tools and services by accessing them through the respective websites; however, subscription or authentication could be requested. In addition to access to resources and services, users were assisted by scientific staff as needed, providing the necessary expertise for tools and equipment employment, data analyses and interpretation. Metrics on access were often not collected for virtual access.

The results of the survey offered the basis to develop the H2IOSC TNA/NA procedure, capitalising on the results and experiences of each Research Infrastructure, harmonising their processes and integrating the services and pilots developed by the H2IOSC Cluster.

The detailed presentation of the questionnaire and the single results for each infrastructure were described in the intermediate version of this delivery D1.2, delivered in M14.

3 TNA/NA ACTIVITY RESULTS

The activity managed to achieve all the objectives established by H2IOSC project. Four Trans-national access (TNA) and National Access (NA) calls for proposal to H2IOSC services were carried out as planned, defining and testing both the TNA/NA process and the functioning of the offered services and pilots, looking forward to the fully operational phase of the H2IOSC Cluster. The added value of the offered services and pilots was also investigated, in terms of storage space, computing power, customization and support.
During the development phase of the calls, one of the most significant aspects was the integration of National Access (NA) as an additional type of access to H2IOSC services reserved to users who operate in Italy. This enhanced the impact of the project beyond the trans-national Access. This decision was made in agreement with the Ministry of Education, Universities and Research (MUR) to broaden and diversify the user base as much as possible, facilitating the validation of the services offered.

Access was granted through excellence-driven access mode, which is based on application and is exclusively dependent on its scientific excellence, originality, quality and technical, logistical, and ethical feasibility, assessed through a feasibility check by the service providers and a peer review evaluation conducted by the **H2IOSC External Advisory Board (EAB)**. **Access offered techno-scientific assistance** to the users by the service providers of H2IOSC for a period of a month, and **an active desk** was available as the single information point to respond to users’ needs.

Overall, the activity managed to achieve the following main results:

- Development of the access procedure for the TNA/NA calls, integrating providers, evaluators and users;
- Production and update of call documents;
- Implementation of four TNA/NA calls (updates as of the date of October 31^{st,} 2025), including:

a. Promotion of the calls by the H2IOSC official channels
b. Coordination of backend activities, in particular the technical and scientific feasibility check from providers and the evaluation from the EAB;

c. Coordination of access, acting as a single point of contact among users and providers, up to the feedback questionnaire.

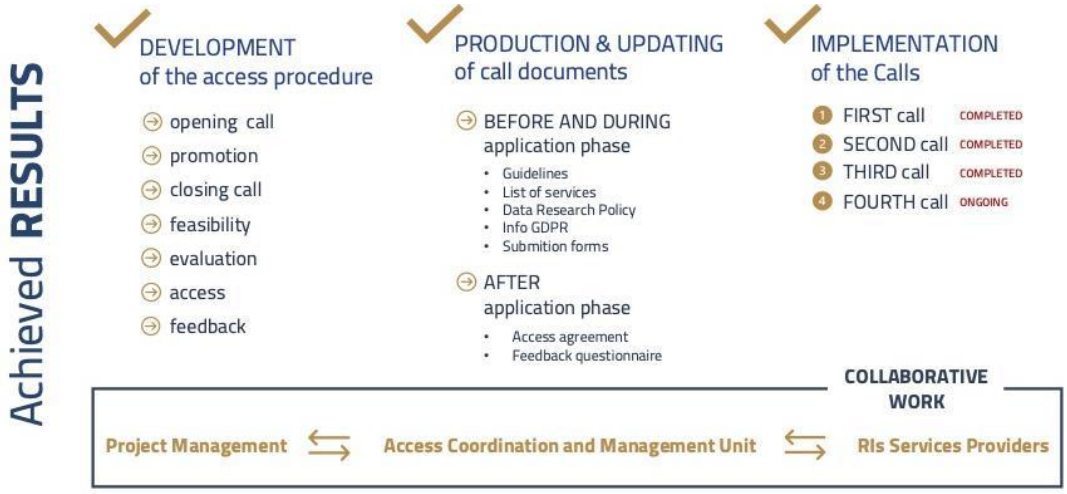


Figure 2: Achieved results of the A1.2 Activity.

4 TNA/NA CALLS PROCEDURE

The TNA/NA calls procedure is outlined in the **TNA/NA Guidelines** (see **Annex 2**). It was fine-tuned throughout the implementation of the calls, by capitalising on the experience gained and the feedback received during each iteration and by reviewing and adapting the documents to accommodate the growing number of services and pilots offered.

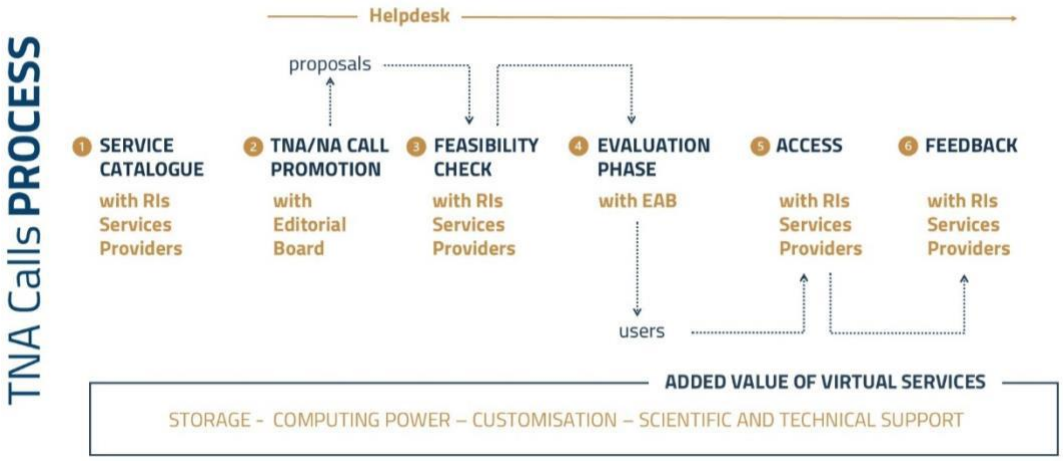


Figure 3: TNA/NA Calls overall procedure.

4.1 APPLICATION PROCESS

Each H2IOSC TNA/NA call was **open, at least, for three weeks from its announcement**. Indeed, the first call and fourth call were extended for an additional week, to accommodate for a higher number of requests.
Applicants could be individuals or teams from academia, business, industry and public services; teams could include researchers, doctoral candidates, technical staff and students participating in research in the framework of their studies.

The services provided by H2IOSC during its TNA/NA calls were **advanced digital services and tools** from the Italian nodes of the four RIs, either refactored or implemented during H2IOSC.

Starting from the third call, they also included **cross-domain services** and **proof-of-concept sets of resources** developed as H2IOSC **community pilots**. Each service and pilot were given a maximum of users per TNA/NA call, depending on resource availability and techno-scientific assistance availability.
Access could be requested for general research activities or for a specific project. Although the EAB evaluation was mandatory in case of overbooked services, it has always been requested to obtain the opinion of the external committee on the project proposals submitted and the type of users.

All the access to H2IOSC services offered **techno-scientific assistance to the users** throughout their research activities. This included expert guidance on utilising the available resources and helping resolve any technical or scientific issues that may arise. For specific services, it also included data analysis and measurements via digital and analytical resources, or the support for data sharing and exposing. Additionally, a **helpdesk** from the Access Coordination and Management Unit of H2IOSC was available as **a central information hub** to respond to any inquiries or needs of the applicants during the application process. The added value of these calls for access lay in the robust support framework, which not only facilitated smooth and efficient research processes but also enhanced the overall user experience, contributing significantly to the success of the participants' scientific endeavours.

4.2 SUBMISSION PHASE

BEFORE SUBMISSION
Among the proposals, priority was given to TNA, i.e. applicants who operate outside Italy.
All personal data collected from applicants during the application process were used solely by the H2IOSC project for the operational management of TNA/NA Calls and for the proper performance of its legal tasks and duties related to communication and research, in accordance with **H2IOSC TNA/NA Calls - Information on processing of personal data** (see **Annex 4**).
Moreover, the applicant had to comply with the user's Obligations described in the **TNA/NA Guidelines** (see **Annex 2**) and with the **H2IOSC Research Data Policy** (see **Annex 5**).

DURING SUBMISSION: APPLICATION FORM

The submission had to be presented by filling in the **online application form** available in the dedicated section of the website H2IOSC (https://www.h2iosc.cnr.it/) during the calls' opening time.

The **application form** (see **Annex 6**) consists of three sections, tailored to collect specific information necessary for the evaluation and consideration of the applicant(s) and the research activity/project for which access is requested.

A. APPLICANT INFORMATION

This section comprises information about the applicant(s), including names, affiliations, and contact details, as well as a short description of their research interests, experience and scientific excellence (max 800 characters incl. spaces). If the application is presented by a team, the team leader is responsible for the application process and hold all correspondence regarding the TNA/NA.

B. ACTIVITY/PROJECT INFORMATION AND SELECTION OF SERVICE

This section provides essential information on the research activity/project for which access is requested:

- Project's title and acronym (if any)
- Activity/project brief description (max 1000 characters incl. spaces)
- Scientific and technical main objectives of the activity/project, describing its innovative aspects and potential for scientific development (max 500 characters incl. spaces)
- Impact of the activity/project, describing its benefits and interest for the scientific community, expected results and dissemination plan (if any) (max 500 characters incl. spaces)
- List of keywords to describe the activity/project focus.

Applicants also specified the service they intend to use for their project/activity, providing a brief explanation of its relevance (max 1000 characters incl. spaces); some of the services also require specific additional information.

Given the limited opening time of the calls, there was no room for extensive discussion between applicants and providers before the submission; therefore, the form was fine-tuned to each added service and pilot, together with the providers, with specific sections/branches, to collect all the required practical and logistical information necessary for an informed feasibility check.

C. COMPLIANCE WITH THE H2IOSC TNA/NA POLICY

Single applicants or team leaders had to agree with the terms and conditions for access described in the **TNA/NA Guidelines** (see **Annex 2**) and the **H2IOSC Research Data Policy** (see **Annex 5**) and accept the **H2IOSC TNA/NA Calls - Information on processing of personal data** (see **Annex 4**).

AFTER SUBMISSION: PROPOSALS EVALUATION

The EAB of H2IOSC constitutes the evaluation panel. Appointed by the Project Management Board, the EAB performed international-level advice and evaluation both on the quality of the services provided by H2IOSC and on the quality of the users allowed to access the RIs. The EAB is composed of representatives of the main stakeholders in the field of research on Social Science and Humanities domain of the European Strategy Forum on Research Infrastructures (ESFRI).

Proposal evaluation started after proposal reception and lasted approximately four weeks for each call. Upon receiving applications, the Helpdesk conducted an **initial eligibility check** to ensure compliance with H2IOSC TNA/NA regulations. Afterwards, service providers conducted a **technical, logistical, and ethical feasibility assessment** on the proposals requesting their service/pilot, by filling up a form and sharing detailed comments on each proposal for the evaluators.

Applications compliant with regulations and feasible were sent to the EAB for scientific evaluation. Their ranking was mandatory in case of overbooked services.

The scientific evaluation criteria included:

- **Scientific excellence and innovativeness of the proposal**: clarity of the project/activity's objectives, originality, soundness of the proposed methodology;
- **Impact of the proposal**: broader scientific, social, environmental effects and benefits to the economy, society, culture, public policy; dissemination strategy, if any;
- **Clarity** of the proposal text.

Each proposal was evaluated against each evaluation criterion with a score from 1 to 10. The overall result was the weighted mean of the results for each criterion.
Proposals not feasible or with a ranking too low to guarantee access could be resubmitted in future calls.

After the evaluation, communication of the results was sent to the Applicants by the Helpdesk via email. The communication of negative results was given to the applicants with the evaluators and providers' comments, to help them in resubmitting. For the proposals to which access was granted, an **Access Agreement** (see **Annex 7**) was sent with the communication of results, to be filled in and signed by both the single applicants or team leaders and the director of the Institute of reference of the Italian node of each infrastructure.

The Access Agreement detailed the terms and conditions governing access within H2IOSC calls, ensuring clarity, accountability and a smooth collaborative process. It addressed various aspects, including schedule, access protocols, compliance with H2IOSC research data policy, and privacy standards. Once signed, the document was forwarded to the Helpdesk and collected through a dedicated repository. Specific provisions were accommodated, if needed.

4.3 OPERATIONAL PHASE

Successful proposals were granted access to the requested services with the techno-scientific assistance of the providers, for a period of approximately four weeks. Most of the users, in accordance with the providers, were able to continue the access autonomously after the first month, to finalise their research activities.

According to H2IOSC access policy, services had to be used only for activities attributable to the field of Humanities and Cultural Heritage. The services provided, as well as any scientific contributions made by the techno-scientific assistance, had to necessarily be recognised as supporting the scientific activity of the users. Users could not use the resources or services for illicit and/or fraudulent purposes and may not in any way engage in behaviour that circumvents any administrative and/or security controls that may be required. Users are requested to respect intellectual property rights, any confidentiality agreements, and the principles of Open Access.

4.4 POST TNA/NA

Data produced during access within H2IOSC services had to adhere to **FAIR principles**. This means data should be:

- easy to find for both humans and computer systems, thus deposited through trusted repositories and based on mandatory description of metadata (**Findable**);
- made available long-term under well-defined licences, possibly open, whether at the level of metadata, or of the actual data content, and have persistent identifiers (**Accessible**);
- ready to be combined with other datasets by humans as well as computer systems, by using common formats following open data standards (**Interoperable**);
- ready to be used for future research and to be processed further using computational methods, and complying with high-quality documentation practices (**Reusable**).

FEEDBACK QUESTIONNAIRE

After access, users were asked to fill in a comprehensive **Feedback Questionnaire** to assess the TNA/NA user experience. The questionnaire covered aspects about the application and proposal submission process, the quality of communication with the helpdesk, the techno-scientific assistance, the interest in H2IOSC services and tools, and overall satisfaction with the TNA/NA program. Users were encouraged to share their suggestions for improvements, any challenges encountered, and recommendations for fellow researchers. By collecting this valuable feedback, the aim was to enhance the TNA/NA program and better cater it to the needs of the research community, ensuring a seamless and productive experience for all participants, also in view of H2IOSC future operation after the end of the project.

4.5 LIST OF SERVICES - FINAL CALL

H2IOSC PILOTS
PILOT Interlumo: Analytics services for remote interactions
PILOT ArchaeoHub - Open Digital Archaeology Hub
PILOT LLOD: Linked Open Data for Linguistic Resources
PILOT DPH - Digital Philology HUB

E-RIHS.IT FOR H2IOSC
ATON: WebXR services for Heritage Science
SENNSE: Spatial hEritage scieNce oNline Sensor Environment
Painting Collection Hub: Digital and Analytical services for micro-scale mechanochemical investigations of painting materials and samples
X-ART: X-ray fluorescence Artificial intelligence Reasearch Tool for cultural heritage
Kapto: capture services (Third Call)

CLARIN-IT FOR H2IOSC
EpiLexO Editor
eScriptorium: a web platform for Handwritten Text Recognition (HTR)
SKOSMOS Vocabulary Service

DARIAH-IT FOR H2IOSC
MFE - MetaFAIR Ecosystem
AEON - dAriah sErvice Oriented iNfrastructure
RAISE - Restore dAta Integration SuitE (First and Second call)
TIGRO - Tesoro Italiano delle Origini, gestore ricerche (First, Second and Third Call)

For a detailed description of each pilot and service, see the **Annex 3** List of Service.

5 TNA/NA CALLS IMPLEMENTATION

The achieved target to implement four TNA/NA calls was made possible by a strong **collaborative work** with the Infrastructure Manager, Project Coordinator and Infrastructure Coordinators, who were actively involved in all of the steps of the activity, as well as with the Service Providers, responsible for the feasibility evaluation and the access to services, and the EAB, in charge of the evaluation process.

5.1 PREPARATION – MANAGEMENT OF THE CALLS

Until October 2024, the application process was defined in its general elements (proposal, evaluation, access) and the necessary documents to provide to the users were outlined, which include:

1. TNA/NA Guidelines
2. List of Services
3. Research data policy
4. TNA/NA Application form
5. Information on processing personal data

Working with the Infrastructure Manager, WP1 Leader and WP6 Leader, already refactored digital services were identified for the first TNA/NA call, together with the personnel in charge of techno-scientific assistance (Providers), which is linked to the services provided.
The List of Service was developed with the Providers. The Application form was developed as a Microsoft Form, within the CNR platform used to support all project activities. This allowed the Access Coordination and Management Unit to keep track and develop statistics on the applications, and to define specific questions for single services, allowing for a greater flexibility in getting information on the applications, given the differences in services.

Moreover, during this period, the GANTT chart of the whole activity has been developed, including, for each call:

- Opening time (submission phase)
- Evaluation process
- Access phase
- Feedback questionnaire

Figure 4: TNA/NA calls timetable.

An active desk, complete with management tools, was set up to follow and support the combined efforts of users, providers and evaluators. The email *tna.h2iosc@h2iosc.cnr.it* was created for official communication.

Within the dedicated H2IOSC project Microsoft Teams channel, in the WP1 folder, a specific internal folder named “TNA CALLS Unit” was created, to manage all the documentation produced. The folder was accessible by the personnel in charge of the activity, by the Infrastructure Manager and Project Coordinator; single subfolders were made accessible to Providers when needed, following the requirements of the Information on processing personal data.

The feasibility check was carried out in a specific folder accessible to the Providers, divided into subfolders for each call, where the applications submitted in the call were organized based on the service requested. An excel file was prepared for each call, containing an Instruction tab, followed by a tab for each service, listing the corresponding applications; the Providers could indicate the feasibility of each application and leave a comment to explain their decision. The comments on applications deemed unfeasible would be sent to the Applicants to support them in a future application.

A folder for the evaluation was also created in the team of the EAB, divided into subfolders for each call and for each EAB member, with the applications to evaluate and the evaluation matrix, discussed and revised with the EAB, the Infrastructure Manager, Project Coordinator and the Infrastructure Coordinators. The matrix, in the form of an excel file, identified the evaluation criteria, as described in the Guidelines (see **Annex 1**), and provided instructions for the evaluation process, the comments by the Providers, the scoring and the final comments of the evaluation.

5.2 DEVELOPMENT OF THE CALLS

FIRST CALL

The first call was launched from October 7 to October 27, 2024. Following the suggestions of service providers, the TNA/NA call was **extended until October 31**. The call was promoted through H2IOSC official channels (website, Linkedin account), relevant external channels (CNR, RIs channels, etc.), direct mailing activities to the mailing list of stakeholders developed with the service providers.

The Access Coordination and Management Unit collected the applications of the first TNA/NA call and managed the technical and scientific feasibility check performed by service providers. Fifteen proposals were received and evaluated for technical and scientific feasibility by the service providers. Three applications did not pass the feasibility check; the applicants were notified with the comments and were invited to modify their proposals and participate again.

Most of the accesses started in December 2024 and continued through January 2025. Many of the users asked to continue the access after the techno-scientific assistance period of one month, to carry out their activities; the request was granted.

The feedback questionnaire was sent individually to each team member, to have a better overview of their opinion.

First call summary – Opening from October 7 to October 27, 2024. Extended until October 31, 2024

N. application forms	N. applications rejected	N. feedback received
15	3	12

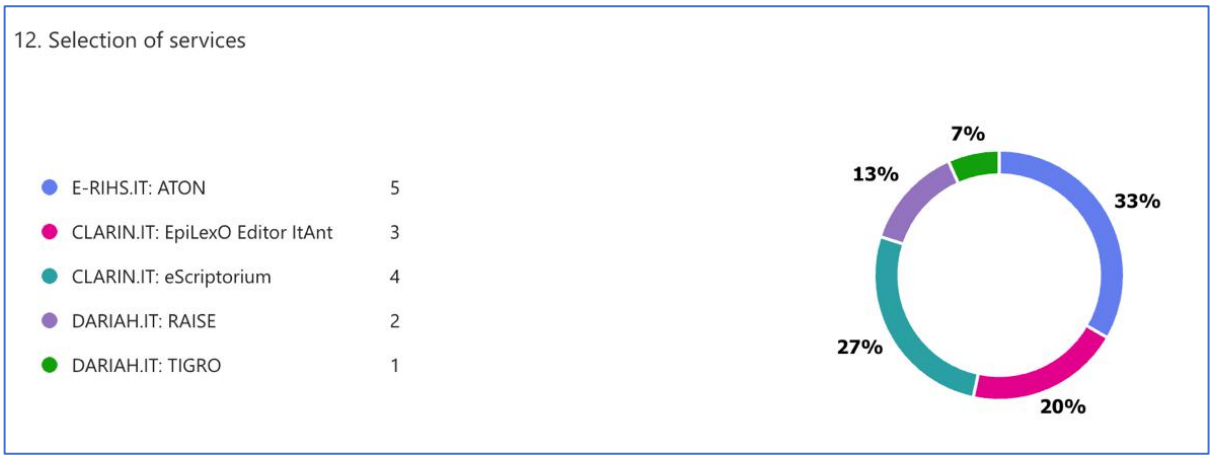


Figure 5: Application form results: services selected during the first call.

SECOND CALL

The second TNA/NA call was opened from January 13 to February 2, 2025. New services (Kapto for E-RIHS.it, SKOSMOS for CLARIN-IT and MFE for DARIAH-IT) were added to the list of services, and the documentation was revised, when necessary, considering the results of the first call. Fifteen proposals were received and evaluated for technical and scientific feasibility by the service providers. The service selection preferences showed a particular interest in eScriptorium and ATON, while some services, such as EpiLexO and RAISE, did not receive any applications in the second call.
The feedback questionnaire was administered also to the users of the second call.

Second call summary – Opening from January 13 to February 2, 2025

N. application forms	N. applications rejected	N. feedback received
15	-	7

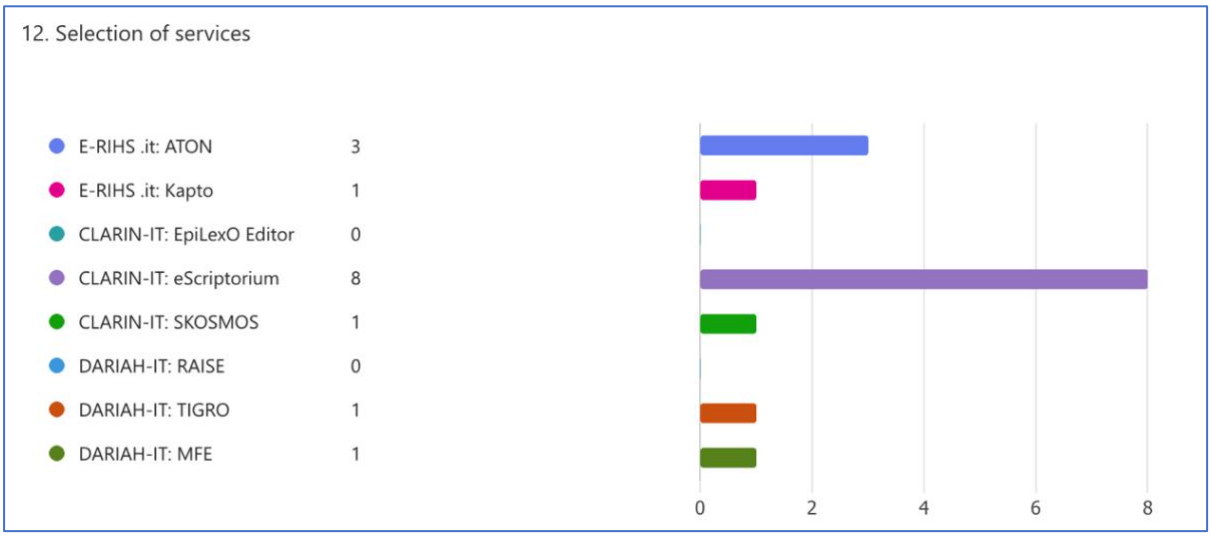


Figure 6: Application form results: services selected during the second call.

THIRD CALL

The third TNA/NA call was launched from March 31 to April 20, 2025. The first two pilots were added to the call: "Interlumo: Analytics services for remote interactions" and "DPH – Digital Philology HUB".

The new service SENNSE (E-RIHS.it) was added to the list of services, and the documentation was revised again, when necessary. Nine proposals arrived, which were evaluated for technical and scientific feasibility by the service providers. The service selection preferences showed a particular interest in ATON and the new pilot Interlumo.

The feedback questionnaire on the call is ongoing.

Third call summary – Opening from March 31 to April 20, 2025

N. application forms	N. applications rejected	N. feedback received
9	2	feedback questionnaire not sent yet

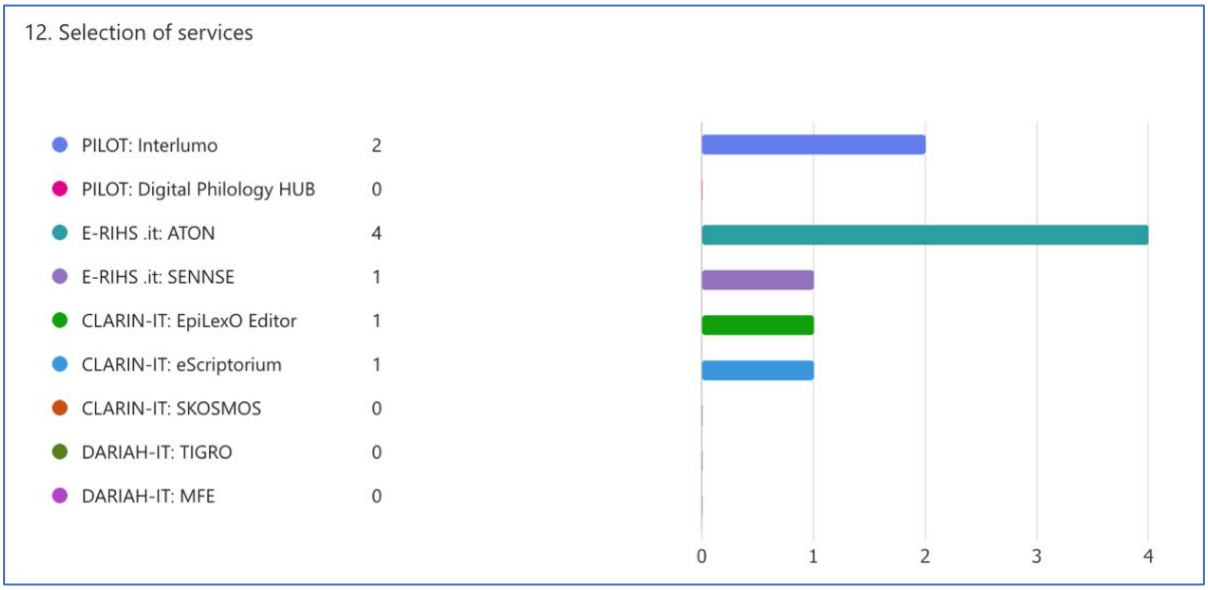


Figure 7: Application form results: services selected during the third call.

FOURTH CALL

The fourth and last TNA/NA call was opened from June 16 to July 6, 2025. There was a significant increment of the H2IOSC pilots and services provided (see **Annex 5**). The call was **extended until July 16**, to be presented during the **event "H2IOSC meets the public and private sectors: presentation of advanced digital services and tools for the cultural field",** held on July 8–9, 2025, in the headquarters of CNR ISPC in Naples. The initiative was designed to introduce the services and digital tools developed within the H2IOSC Cluster, and to promote their accessibility and use by public institutions, private companies, non-profits, and cultural operators working in the fields of humanities, social sciences, and heritage.

Thanks to the effectiveness of the event, and an intense promotional activity, the proposals submitted were forty-three. The service selection included pilots and showed a particular

interest in ATON. After the feasibility check and evaluation, eleven proposals were deemed unfeasible or did not reach a score high enough to guarantee access to overbooked services. **The access activities are still ongoing**.

Fourth call summary – Opening from June 16 to July 6, 2025. Extended to July 16, 2025

N. application forms	N. applications rejected	N. feedback received
43	11	feedback questionnaire not sent yet

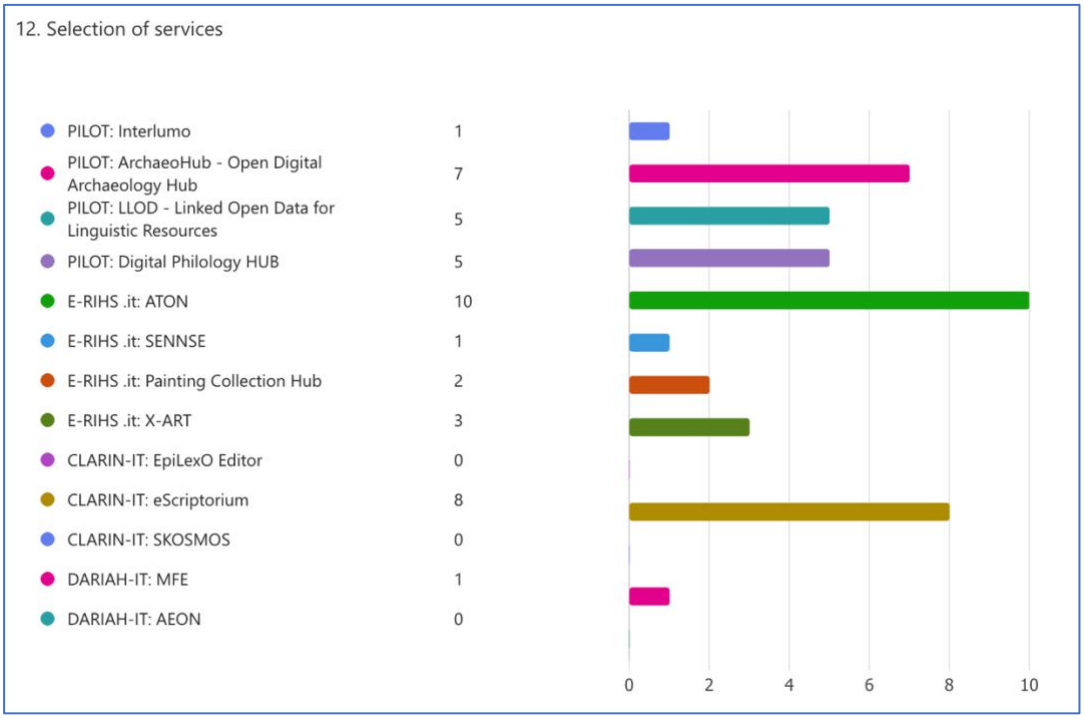


Figure 8: Application form results: services selected during the fourt call.

5.3 PROMO ACTIVITIES

To effectively promote the H2IOSC TNA/NA Calls, a comprehensive communication strategy was implemented, encompassing multiple coordinated actions:

- the creation of a dedicated section on the official website;
- the design of custom graphics aligned with the project's visual identity;
- the development of a communication plan for the project's LinkedIn account;
- the launch of direct email campaigns targeting relevant stakeholders;
- the preparation of a promotion kit shared with external partners and related organizations to amplify outreach efforts;
- a specific effort to simplify the descriptions of services, making communication more effective and accessible to different target audiences (institutions, policy makers, private sector, and society as a whole), beyond the scientific communities of the H2IOSC research domains.

Creation of a Dedicated Website Section for TNA/NA Calls

As the first action implemented to promote the H2IOSC TNA/NA Calls, we developed a **dedicated section on the official project website**, made easily accessible through a newly added item in the main navigation menu labeled "TNA/NA Calls". This section was designed with SEO-optimized content to enhance online visibility and improve accessibility for potential applicants. The main page of this section provides a comprehensive introduction to the Calls, including all essential information for users.

Key features of the page include:

- a prominently displayed 'Call to Action' button linking directly to the application form, with clearly visible opening and closing dates.
- detailed information on the services available (with direct access to the "List of Services" document), target audience, access model, and the added value of the technical and scientific support offered by the service providers.
- clear timelines and guidance on compliance with the H2IOSC TNA/NA Policy.
- a step-by-step guide summarizing the application process, along with all required documentation, linked for easy viewing and download in PDF format.

Additionally, the section is structured into **subsections that host all the documentation** created and regularly updated for each of the four Calls, ensuring that applicants can easily access historical and current information (see the section "**10 H2IOSC LINKs**" to visit the dedicated webpages).

Figure 9: A detail of the dedicated webpage screenshot.

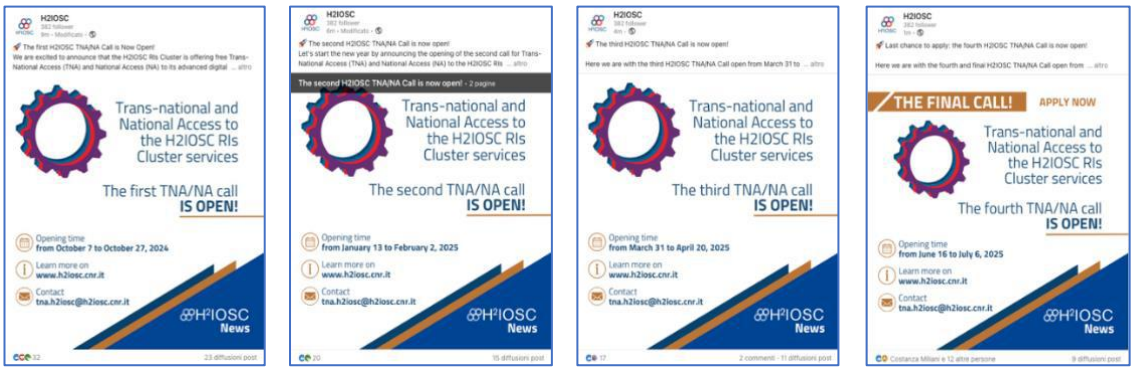
Social Media Promotion (LinkedIn)

A structured communication plan was designed and executed to promote each of the four calls through the project's official LinkedIn account (https://www.linkedin.com/company/h2iosc/)

CAMPAIGN STRUCTURE

For each call, a minimum of three posts were published:

- Launch post announcing the opening of the call.
- A follow-up post detailing the List of Services available.
- A reminder post (and for some calls, an additional post announcing an extended deadline).



POST DESIGN AND OPTIMIZATION

Posts were designed using the project's visual identity to ensure brand consistency and recognition.

Messaging was progressively refined to increase clarity and highlight key benefits for potential applicants, leveraging insights from previous campaigns.

For the final calls, simplified and visually engaging descriptions of services were included, making them more appealing to broader audiences such as policy makers, institutions, and private sector representatives.

Direct Email Campaigns

Direct email communication was implemented as a parallel promotional strategy taking into account:

- **Targeted Audiences**: researchers, public institutions, private sector stakeholders, and cultural organizations identified as potentially interested in accessing H2IOSC services.
- **Content**: each campaign included a concise introduction to the project and TNA/NA Calls; direct links to the application form and call details; highlighted benefits such as free access to advanced digital services and full technical-scientific support.
- **Timing**: emails were scheduled to align with key milestones (call launch, mid-phase reminder, deadline extensions).

Figure 10: Screenshot of the first published LinkedIn posts for the promotional campaign.

Promotion Kit and External Collaborations

To maximize the visibility of the TNA/NA Calls beyond the project's official channels, a Promotion Kit was designed and distributed.

PROMOTION KIT CONTENT

The kit included ready-to-use materials such as:

- Visuals aligned with the project's visual identity (social media banners, graphics for newsletters).
- Short, customizable texts for emails and posts.
- Direct links to the application form and documentation.
- A concise overview of available services and the benefits of applying.

EXTERNAL COMMUNICATION CHANNELS

The kit was shared with a network of affiliated and external organizations to amplify outreach:

- RIs: both national and European channels of CLARIN, DARIAH, E-RIHS, and OPERAS.
- CNR Ecosystem: the CNR Department of Humanities and Social Sciences, Cultural Heritage (DSU), CNR central communication channels, and CNR Institutes partnering in the project.
- Specialized Portals: leading platforms addressing research topics relevant to H2IOSC, including Heritage Research Hub, SSHOC, EOSC, and ECHOES.

This collaborative approach ensured that the promotion reached diverse communities, including researchers, cultural heritage institutions, policymakers, and private stakeholders, both within and outside the scientific domains traditionally linked to H2IOSC.

6 METRICS ON RESULTS

6.1 ANALYSIS OF THE PROMOTIONAL ACTIVITIES

This paragraph provides an analysis of the promotional activities carried out for the H2IOSC TNA/NA Calls. The objective is to evaluate the effectiveness of communication efforts on the official website[3] and LinkedIn channel[4], identifying trends in audience reach, engagement, and website traffic, and assessing the overall impact on visibility and potential participation.

Website Performance | Period: October 1, 2024 – August 1, 2025 compared to Dicember 1, 2023 – September 30, 2024

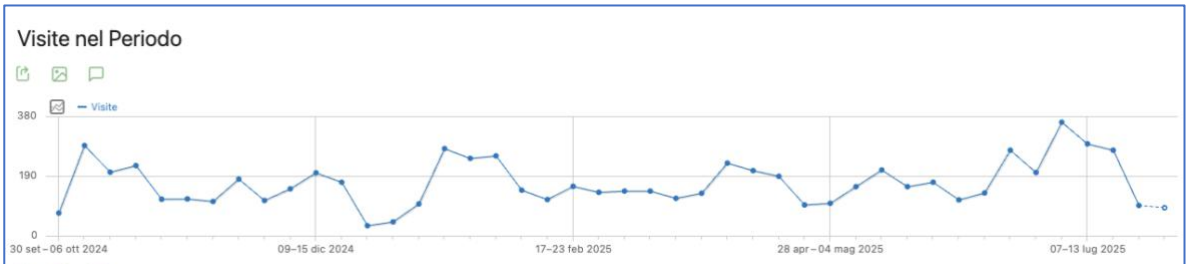


Figure 11: Website visits overview from October 1, 2024 to August 1, 2025.

[3] https://www.h2iosc.cnr.it/
[4] https://www.linkedin.com/company/h2iosc/

OVERALL TRAFFIC
Visits: 7,327 (+75%) compared to 4,181 in the previous period
Pageviews: 13,896 (+31%) compared to 10,588
Unique Pageviews: 11,156 (+42%) compared to 7,845

USER ENGAGEMENT
Returning Visits: 1,846 (+22.8%)
New Visits: 5,481 (+104.7%)

Analysis of the TNA Calls Webpage[5] | Period: October 1, 2024 – August 1, 2025

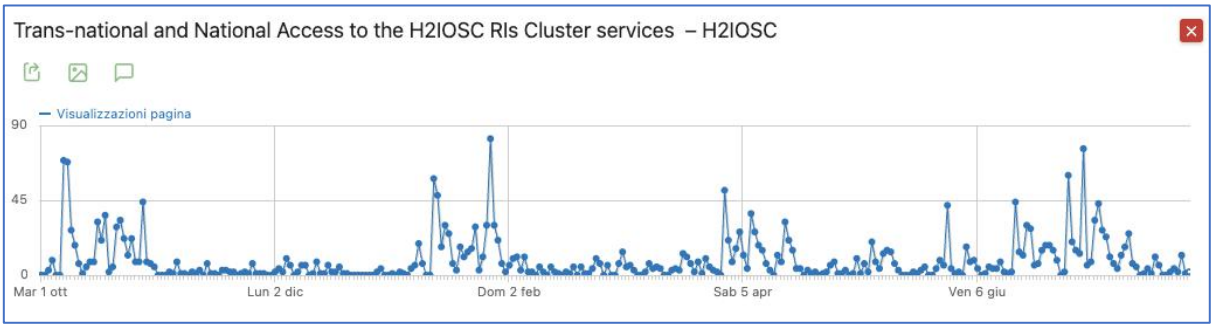


Figure 12: TNA Calls webpage: pageviews from October 1, 2024 to August 1, 2025.

Pageviews: 2,665
Unique Pageviews: 2,279
Average time on page: 01:46
Bounce rate: 55%

MONTHLY HIGHLIGHTS
Peaks in October, January, April, and June coincide with TNA Call launches.
In these months, the TNA Calls page accounted for 25-33% of total monthly visits, indicating a strong connection between promotional posts and website visits.

LinkedIn Campaign Performance
A total of four campaigns were launched, one for each call, consisting of multiple posts: launch, list of services, reminders, deadline extensions.

REACH AND ENGAGEMENT
Total impressions: ~12,500
Average CTR:

- Launch posts: 5-7%
- List of services posts: 20–35% (highest engagement)
- Reminders and extensions: 3–6%

Interactions (clicks, reactions, shares): ~1,800

[5] https://www.h2iosc.cnr.it/tna-na-calls/

BEST-PERFORMING CONTENT

Posts featuring the list of available services consistently achieved the highest CTR and engagement (up to 35%).

Reminder posts had significantly lower interaction, suggesting that content with practical information performs better than generic deadline alerts.

KEY FINDINGS

LinkedIn is the main driver of new traffic to the website, particularly through posts detailing services.

Once on the site, users spend a considerable amount of time, indicating that the content meets expectations.

Conclusions

The promotional strategy successfully increased awareness and engagement:

- Significant growth in website visits and new users confirms effective outreach.
- LinkedIn campaigns generated high engagement, especially with informative content.
- Traffic peaks aligned with campaign timings, showing a strong correlation between promotion and interest.

6.2 RESULTS OF THE QUESTIONNAIRE

First call - Synthetic summary

In the first TNA/NA call, **75%** of users rated the services excellent and **25%** good. The services were considered fully aligned with project needs by **83%**, and partially aligned by 17%.

Regarding usability, **50%** found the tools very easy and **50%** somewhat easy.

H2IOSC services were reported to improve research quality and efficiency (**50%**), provide access to advanced digital tools (**83%**), foster collaboration (**42%**), and support FAIR methodologies (**25%**). Users expressed interest in enhanced visualisation (**25%**), advanced analytical tools (**25%**), customised datasets (**17%**), training (**17%**), and extended computing time (**8%**).

Regarding potential contributions to cover the costs of additional functionalities, **25%** of users expressed their willingness, **42%** answered 'possibly depending on available resources', while **33%** declared they would not contribute.

Technical support was rated excellent by **75%** and good by **25%**, while helpdesk support was rated excellent by **67%** and good by **33%**. Documentation was judged clear or very clear by 100%, and the application timeline effectively communicated by **67%** (completely) and **33%** (partially).

Overall, **75%** were very satisfied and **25%** satisfied with the programme, and **100% would recommend it to others**. (see **Annex 10**)

Second call - Synthetic summary

In the second TNA/NA call, **57%** of users rated the services excellent, **29%** good, and **14%** fair. The services were considered fully aligned with project needs by **71%**, and partially aligned by **29%**.

Ease of use was positive overall: **43%** found the tools very easy, **43%** somewhat easy, and **14%** difficult.
All respondents (**100%**) reported that the services enabled access to advanced digital tools. Additionally, **43%** highlighted improved research quality and efficiency, while **14%** each mentioned collaboration and support for FAIR methodologies.
Requested additional features included enhanced visualization (**29%**), expanded/customized datasets (**14%**), training (**14%**), customized support (**14%**), extended computing time (**14%**), and other requests (**14%**). No one indicated interest in advanced analytical tools.
Regarding costs, none of the respondents were willing to contribute directly; **71%** answered possibly depending on resources, while **29%** said no.
Technical support was very well rated: **86%** excellent and **14%** good. Helpdesk support was rated excellent by **71%** and good by **29%**.
Application process communication and documentation were judged very positively: **100%** rated them as clear or very clear and **100%** found the documentation easy to locate; the timeline was communicated completely for **86%** and partially for **14%**.
Overall satisfaction was high, though slightly less unanimous than the first call: **43%** were very satisfied, **43%** satisfied, and **14%** neutral. **Importantly, 100% of respondents would recommend the programme to others**. (see **Annex 11**)

Due to project-level deliverable submission deadlines, the information in this document is updated as of M36 (October 31, 2025). However, the project management intends to also publish the data from the last two calls (the third and fourth) as soon as they are available. This will provide comprehensive information to inform improvement actions, refining strategic action within the cluster.

7 CONCLUSIONS

The implementation of the four H2IOSC TNA/NA calls has proven highly successful in establishing transparent, user-friendly, and excellence-driven access procedures. The implementation of the calls run smoothly and there was a high participation, especially in the last call. Feedback from the first two calls shows a very positive user experience: in both cases, the majority of respondents rated the services as excellent or good, with full or partial alignment to project needs. Technical and helpdesk support were consistently evaluated as timely, effective, and of high quality. The services provided tangible added value to research activities, especially through access to advanced digital tools and improvements in research efficiency.

Satisfaction was consistently high across both calls (100% in the first, 86% in the second), and all respondents unanimously confirmed their willingness to recommend the programme. Interest in further functionalities such as enhanced data visualisation, training, customised datasets, and extended computing time highlights the potential for future service development.

Overall, the activity **A1.2 H2IOSC Access Coordination and Management Unit** demonstrated the effectiveness of a coordinated approach to access management, resulting in broad user

engagement, high satisfaction, and valuable insights for the future operational phase of the H2IOSC Cluster.

The TNA/NA calls represented an important test to validate some of the services and pilots offered by H2IOSC, to intercept any customization requests from users and in general to raise awareness of the federation, its infrastructures and services to an increasingly large user community with the ultimate goal of working towards the long-term sustainability of the cluster.

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9 H2IOSC LINKs

9.1 Link to dedicated Website Section for TNA/NA Calls

Main page: https://www.h2iosc.cnr.it/tna-na-calls/

Subsection First call: https://www.h2iosc.cnr.it/first-tna-na-call-documents/

Subsection Second call: https://www.h2iosc.cnr.it/second-tna-na-call-documents/

Subsection Third call: https://www.h2iosc.cnr.it/third-tna-na-call-documents/

Subsection Fourth call: https://www.h2iosc.cnr.it/fourth-tna-na-call-documents/

9.2 Link to the Guidelines

June 2025, Fourth Call - Guidelines: https://www.h2iosc.cnr.it/wp-content/uploads/2025/06/01.TNA-NA_Guidelines_giu-25.pdf

March 2025, Third Call - Guidelines: https://www.h2iosc.cnr.it/wp-content/uploads/2025/03/01.TNA-NA_Guidelines_mar-25.pdf

January 2025, Second Call - Guidelines: https://www.h2iosc.cnr.it/wp-content/uploads/2025/01/TNA-NA_Guidelines_jan-25_01.pdf
October 2024, First TNA/NA H2IOSC Call - Guidelines

9.3 Link to the List of Services

June 2025, Fourth Call - List of Services: https://www.h2iosc.cnr.it/wp-content/uploads/2025/06/02.List-of-Services_giu-25.pdf

March 2025, Third Call - List of Sevices: https://www.h2iosc.cnr.it/wp-content/uploads/2025/03/02.H2IOSC-List-of-Services_mar-25.pdf

January 2025, Second Call - List of Sevices: https://www.h2iosc.cnr.it/wp-content/uploads/2025/01/H2IOSC-List-of-Services_jan-25_01.pdf

October 2024, First Call - List of Services: https://www.h2iosc.cnr.it/wp-content/uploads/2024/10/List-of-Services-first-call.pdf

9.4 Link to the information on processing of personal data

October 2024, First to Fourth Call - Info personal data: https://www.h2iosc.cnr.it/wp-content/uploads/2024/10/Info_Personal-data_TNA-NA-Calls.pdf

9.5 Link to the Research Data Policy

January 2025, Second to Fourth Call - Research Data Policy: https://www.h2iosc.cnr.it/wp-content/uploads/2025/01/TNA_NA_Data-Policy_jan-25_01.pdf

October 2024, First Call - Research Data Policy: https://www.h2iosc.cnr.it/wp-content/uploads/2024/10/Research-Data-Policy.pdf

9.6 Links to Published LinkedIn Posts

FIRST CALL

POST n1: Call launch | October 7, 2024:
https://www.linkedin.com/posts/h2iosc_the-first-h2iosc-tnana-call-is-now-open-activity-7248969100075388928-SeNe?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n2: List of services | October 14, 2024:
https://www.linkedin.com/posts/h2iosc_first-h2iosc-tnana-call-discover-the-list-activity-7251494418640240642-mK-G?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n3: Extended deadline | October 28, 2024:
https://www.linkedin.com/posts/h2iosc_extended-deadline-for-the-first-h2iosc-activity-7256647915757051904-v3Ep?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

SECOND CALL

POST n1: Call launch | January 13, 2025:
https://www.linkedin.com/posts/h2iosc_the-second-h2iosc-tnana-call-is-now-open-activity-7284502025822736385-Cfwk?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n2: List of services | January 21, 2025:
https://www.linkedin.com/posts/h2iosc_second-h2iosc-tnana-call-a-new-list-of-activity-7287453899777544193-5jZN?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

THIRD CALL

POST n1: Call launch | March 31, 2025:

https://www.linkedin.com/posts/h2iosc_the-third-h2iosc-tnana-call-is-now-open-activity-7312384170490527744-xu0l?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n2: List of services | April 7, 2025:
https://www.linkedin.com/posts/h2iosc_third-h2iosc-tnana-call-new-services-available-activity-7315007970281455617-h-X1?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n3: Reminder | April 16, 2025:
https://www.linkedin.com/posts/h2iosc_reminder-third-h2iosc-tnana-call-still-activity-7318195585633677312-TZK4?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

FOURTH CALL
POST n1: Call launch | June 16, 2025:
https://www.linkedin.com/posts/h2iosc_the-fourth-h2iosc-tnana-call-is-now-open-activity-7340277902820675585-ugin?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n2: List of services | June 23, 2025:
https://www.linkedin.com/posts/h2iosc_the-final-h2iosc-tnana-call-new-services-activity-7342838864203427840-rdm5?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n3: Reminder | June 30, 2025:
https://www.linkedin.com/posts/h2iosc_reminder-fourth-and-final-h2iosc-tna-activity-7345466189227147264-KMw0?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

POST n4: Extended deadline | July 4, 2025:
https://www.linkedin.com/posts/h2iosc_extended-deadline-for-the-fourth-and-final-activity-7346814915774402560-nXql?utm_source=share&utm_medium=member_desktop&rcm=ACoAABKrKK0BIMOAwKZibZR5W4qnBGn7GzsxlMU

10 LIST OF ANNEXES

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ANNEX 1: Survey on the access policies of the Research Infrastructures involved in H2IOSC prior to H2IOSC implementation

Name of the Research Infrastructure:

_____

Available resources and services:

[Please list the resources, tools, services and facilities made available to the community by the Research Infrastructure, with a brief description, if relevant; if there are too many, please briefly group and summarise the most relevant resources.]

Typology of access:

[Please state if the access to the resources is restricted or open. Please also state if said access is physical (with users physically visiting the facility/installation and receiving the service "hands-on"), remote (with resources and services offered without users physically visiting the facility/installation) or virtual (through communication networks in which resources can be simultaneously accessed by an unlimited number of users).]

Eligibility:

[Please describe the eligibility criteria to access the resources, if any. Please also state if a subscription or authentication is needed for access.]

Selection-evaluation procedure:

[If the access is restricted, please briefly describe the selection and evaluation procedure.]

Use:

[Please briefly describe the procedure to use the resources once the access is provided.]

Metrics on access:

[Please state which are the metrics available to assess the use and access to the resources and how they are calculated.]

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H2IOSC
Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

GUIDELINES

June 2025

www.h2iosc.cnr.it

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Introduction

The H2IOSC project, implemented by the National Research Council of Italy (CNR - Consiglio Nazionale delle Ricerche), aims at creating the **Humanities and cultural Heritage Italian Open Science Cloud**: an Italian Cloud Network for research in humanities, linguistics and heritage science, by fostering the collaboration of the **Italian nodes** of the European Research Infrastructures (RI) committed in the Social Science and Humanities domain: **CLARIN** (Common Language Resources and Technology Infrastructure), **DARIAH** (Digital Research Infrastructure for the Arts and Humanities), **E-RIHS** (European Research Infrastructure for Heritage Science) and **OPERAS** (open scholarly communication in the social sciences and humanities). They have in common the focus on cultural materials and content, the interdisciplinary scientific communities, the move toward open access practices and FAIR approaches and the increasing use of digital data, formats and tools to create, collect, assemble and curate relevant information, which has prompted remarkable changes in the scale and scope of research in these disciplines.

The landscape of humanities, linguistics and heritage science is still fragmented, with data often collected and shared in a punctual and isolated way; conversely, the usability and impact of data can significantly increase if it is more easily accessed from a single-entry point, simplifying procedures and allowing comparative analyses and pattern detection. Effective interconnection among these Research Infrastructures, collaboration and interdisciplinarity can contribute to an integrated ecosystem of research that allows coherence between European, national and regional priorities and policies, better alignment of the national systems, shared good practices and long-term sustainability.

The H2IOSC Cluster is offering **free-of-charge Trans-national access (TNA)** and **National access (NA) to advanced digital services and tools** from CLARIN-IT, DARIAH-IT, E-RIHS.it and OPERAS-IT, for conducting innovative and computationally intensive research on complex digital data and objects. Looking forward to the end of the H2IOSC project, the Humanities and cultural Heritage Italian Open Science Cloud, with a one-stop, easy-entry place, will be accessible with all the optimised RIs Cluster

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services, where users will find a set of software, tools, datasets, and pilot projects supporting specific needs of humanities, linguistics and heritage sciences sectors.

This document outlines the guidelines for the TNA/NA to the H2IOSC RIs Cluster services made available by the project. It provides information about the available services, type of access, eligibility and evaluation criteria, documentation to produce, privacy and data policies.

The **Access Coordination and Management Unit** of H2IOSC serves to centrally prepare and manage the TNA/NA calls for proposal to provide the highest degree of integration in accessing the wider range of H2IOSC's services. The calls for the H2IOSC network will be open to both academics and industrial research/activities, establishing unified access procedures and a single working point of access.

Definitions

Research infrastructure:

Research Infrastructures (RIs) are facilities, resources and services that are used by research communities to conduct top-level research and foster innovation in their fields. They can include: scientific equipment or instruments; knowledge-based resources such as collections and archives or structures for scientific information; Information and Communications Technology-based infrastructures such as grid, computing, software and communication, or any other entity of a unique nature essential to achieve excellence in research. They aim at integrating and making available key regional and national facilities throughout Europe, ensuring their optimal use and joint development.

Access:

Within Research Infrastructures, Access refers to the physical, remote and virtual admission to, interactions with and use of Research Infrastructures. It makes available services, facilities and resources to the European and global scientific community, according to specific procedures depending on the type and structure of the infrastructure itself and the data provided. It promotes multi-disciplinarity and mobility to support diverse public and private communities in the scientific

and industrial sectors. Access in H2IOSC follows the "European Charter for Access to Research Infrastructures" and the single infrastructures' rules.

Trans-national access (TNA) in H2IOSC represents the access to H2IOSC services, facilities and resources for applicants/users employed outside Italy (the host country of the H2IOSC consortium).

National access (NA) in H2IOSC represents the access to Research Infrastructures on a national scale for applicants/users employed in Italy, who are external to H2IOSC Cluster and participating infrastructures.

Within access types, **virtual access** entails the employment of digital service, tools and data provided through communication networks, which can be simultaneously available to users. In the case of limited resources available (e.g. storage capacity and computing power), users can be selected. Within the modes of selection, **competitive excellence-driven access** is based on application and is exclusively dependent on its scientific excellence, originality and quality, evaluated through peer review.

Applicant:

Applicants can be individuals or teams from academia, industry and public services, who apply to a call for proposals of H2IOSC services. They are engaged in the conception or creation of new knowledge, products, processes, methods and systems and also in project management. Teams may include PhD students, technical staff and students who participate in research as part of their studies.

User:

Users are the individuals or teams from academia, industry and public services, which, having positively passed the application process of TNA/NA, are granted access to the services and tools offered by H2IOSC.

Application process

Who can apply

As a general term, TNA can be broadly defined as the process in which users can access services located in another country, while NA is the access to services located in the same country of the

user, excluding intra-institutional access. TNA/NA calls will be open to both academics and industrial research projects.

Applicants can be individuals or teams from academia, business, industry and public services; teams can include researchers, doctoral candidates, technical staff and students participating in research in the framework of their studies.

Available services

The services provided by H2IOSC during its TNA/NA calls are advanced digital services and tools from the Italian nodes of the four research infrastructures, either refactored or implemented during H2IOSC; they can also include cross-domain services and proof-of-concept sets of resources developed as H2IOSC community pilots. Each service is given a maximum of users per TNA/NA call, depending on resource availability and techno-scientific assistance availability.

Access model

The H2IOSC TNA/NA offers **virtual services and resources** through **excellence-driven access** mode, which is based on **application** and is dependent on scientific excellence, originality and quality of the access proposal, **evaluated** through a peer review conducted by the **H2IOSC External Advisory Board (EAB**), after a technical, logistical, and ethical feasibility assessment from the service providers. Access can be requested for general research activities or for a specific project, by a single researcher or a team.

The added value

All the access to H2IOSC services will offer **techno-scientific assistance** to the users throughout the research activities. This includes expert guidance on utilising the available resources and helping resolve any technical or scientific issues that may arise. For specific services, it also includes data analysis and measurements via digital and analytical resources, or the support for data sharing and exposing. Additionally, a **helpdesk** from the Access Coordination and Management Unit of H2IOSC will be available as a central information hub to respond to any inquiries or needs of the applicants during the application process (e-mail: **tna.h2iosc@h2iosc.cnr.it**). The added value of these calls for access lies in the robust support framework, which not only facilitates smooth and efficient research

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processes but also enhances the overall user experience, contributing significantly to the success of the participants' scientific endeavours.

Timing

The H2IOSC TNA/NA call is open for **three weeks** from its announcement.

Submission phase: before submission

Among the proposals, priority is given to TNA, i.e. applicants located outside Italy.

Compliance with the H2IOSC TNA/NA policy

All personal data collected from applicants during the application process are used solely by the H2IOSC project for the operational management of TNA/NA Calls and for the proper performance of its legal tasks and duties related to communication and research, in accordance with H2IOSC TNA/NA Calls - Information on processing of personal data. No personal data is shared with parties external to the TNA/NA process, nor will personal data be rented, sold, or otherwise shared with or provided to third parties other than for reporting purposes. Applicants are required to view and consent to the H2IOSC TNA/NA Calls - Information on processing of personal data upon application. Moreover, the applicant must comply with the User's Obligations described in these Guidelines and with the H2IOSC Research Data Policy.

Submission phase: during submission

The submission should be presented by filling in the **online application form** available in the dedicated section of the website (https://www.h2iosc.cnr.it/) during the calls' opening time.

Application form

The **application form** consists of three sections, tailored to collect specific information necessary for the evaluation and consideration of the applicant(s) and the research activity/project for which access is requested.

A. Applicant information

This section comprises information about the applicant(s), including names, affiliations, and contact details, as well as a short description of their research interests, experience and scientific excellence

(max 800 characters incl. spaces). If the application is presented by a team, the Team Leader will be responsible for the application process and hold all correspondence regarding the TNA/NA.

B. Activity/Project Information and Selection of Service

This section should provide essential information on the research activity/project for which access is requested:

- Project's title and acronym (if any)
- Activity/project brief description (max 1000 characters incl. spaces)
- Scientific and technical main objectives of the activity/project, describing its innovative aspects and potential for scientific development (max 500 characters incl. spaces)
- Impact of the activity/project, describing its benefits and interest for the scientific community, expected results and dissemination plan (if any) (max 500 characters incl. spaces)
- List of keywords to describe the activity/project focus.

Applicants also specify the service they intend to use for their project/activity, providing a brief explanation of its relevance (max 1000 characters incl. spaces); some of the services also require specific additional information.

C. Compliance with the H2IOSC TNA/NA Policy

Single applicants or Team Leaders must agree with the terms and conditions for access described in these Guidelines and the **Research Data Policy** and accept the **H2IOSC TNA/NA Calls - Information on processing of personal data.**

Each applicant or team may submit only one application proposal per service per call.

Submission phase: after submission

Evaluation panel: External Advisory Board (EAB)

The **External Advisory Board (EAB**) of H2IOSC constitutes the evaluation panel.

Appointed by the Project Management Board, the EAB performs international-level advice and evaluation both on the quality of the services provided by H2IOSC and on the quality of the users allowed to access the RIs. EAB is composed of representatives of the main stakeholders in the field

of research on Social Science and Humanities domain of the European Strategy Forum on Research Infrastructures (ESFRI).

Proposal Evaluation

Proposal evaluation starts after proposal reception and lasts approximately 4 weeks. Upon receiving applications, the Helpdesk conducts an initial eligibility check to ensure compliance with H2IOSC TNA/NA regulations, and service providers conduct a technical, logistical, and ethical feasibility assessment. Applications compliant with regulations and feasible are sent to the External Advisory Board (EAB) for scientific evaluation.

The scientific evaluation criteria include:

- Scientific excellence and innovativeness of the proposal: clarity of the project/activity's objectives, originality, soundness of the proposed methodology;
- Impact of the proposal: broader scientific, social, environmental effects and benefits to the economy, society, culture, public policy; dissemination strategy, if any;
- Clarity of the proposal text.

Each proposal is evaluated against each evaluation criterion with a score from 1 to 10. The overall result is the mean of the results for each criterion.

This result is used for the proposals' ranking in case of overbooked services.

Proposals with a score under 6 are excluded from the ranking. Among the proposals reaching the minimum passing score of 6, priority is given to TNA; if the number of users per service is not reached, the NA, in order of ranking, up to the maximum number of users per service, are also granted access. Therefore, a positive evaluation does not guarantee access provision by itself.

Proposals not reaching the minimum passing score or with a ranking too low to guarantee access can be resubmitted in future calls.

Communication of the Evaluation results and Access Agreement

After the evaluation, communication of the results will be sent to the Applicants by the helpdesk via email.

For the proposals to which access is granted, an **Access Agreement** will be sent with the communication of results.

The **Access Agreement** details the terms and conditions governing access within H2IOSC calls, ensuring clarity, accountability and a smooth collaborative process. It addresses various aspects, including schedule, access protocols, compliance with H2IOSC research data policy, and privacy standards. A template for the access agreement will be sent to the Applicants of accepted proposals, to be filled in and signed by both the Single applicants or Team Leaders and the Director of the Institute of reference of the Italian node of each infrastructure, before the starting date of each TNA/NA. Once signed, the document should be forwarded to the helpdesk, and it will be collected through a dedicated repository.

Operational phase

Access to services and techno-scientific assistance

Successful proposals are granted access to the requested services, for a period of approximately **four weeks**.

Access policy and users' obligations

H2IOSC services must be used only for activities attributable to the field of Humanities and cultural Heritage. The services provided, as well as any scientific contributions made by the techno-scientific assistance, must necessarily be recognised as supporting the scientific activity of the users.

Users may not use the resources or services for illicit and/or fraudulent purposes and may not in any way engage in behaviour that circumvents any administrative and/or security controls that may be required. Users must respect intellectual property rights, any confidentiality agreements, and the principles of Open Access.

Post TNA/NA

Data sharing

Data produced during access within H2IOSC services must adhere to FAIR principles. This means data should be:

- easy to find for both humans and computer systems, thus deposited through trusted repositories and based on mandatory description of metadata (Findable);

- made available long-term under well-defined licences, possibly open, whether at the level of metadata, or of the actual data content, and have persistent identifiers (Accessible);
- ready to be combined with other datasets by humans as well as computer systems, by using common formats following open data standards (Interoperable);
- ready to be used for future research and to be processed further using computational methods, and complying with high-quality documentation practices (Reusable).

Feedback questionnaire

After access, users will be asked to fill in a comprehensive **Feedback Questionnaire** to assess the TNA/NA user experience. The questionnaire covers aspects about the application and proposal submission process, the quality of communication with the helpdesk, the techno-scientific assistance, the interest in H2IOSC services and tools, and overall satisfaction with the TNA/NA program. Users will be encouraged to share their suggestions for improvements, any challenges encountered, and recommendations for fellow researchers. By collecting this valuable feedback, the aim is to enhance the TNA/NA program and better cater it to the needs of the research community, ensuring a seamless and productive experience for all participants, also in view of H2IOSC future operation after the end of the project.

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LIST OF SERVICES

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H2IOSC PILOTS

PILOT Interlumo: Analytics services for remote interactions

The Interlumo service provide a comprehensive suite of functionalities design to capture, process and inspect interactive sessions performed in remote infrastructural nodes/equipment, public exhibits or web-applications, with a strong focus on Visual/Immersive Analytics.
This service enables remote applications to define and track custom attributes for interactive sessions. These attributes may include spatial data (such as virtual/physical 3D locations, 2D eye movements, focal points, HMD location in physical space, GPS coordinates, etc.), interaction states related to application logic or equipment (e.g., EEG voltages from BCI headsets, signals from wearable device, sensor data, etc.) or other relevant attributes.
Interlumo operates as an integrated pipeline, consisting of three stages, encompassing a series of web-based services tailored for analytics workflows. The process begins with data tracking and recording (Kapto), allowing remote applications, equipment or installations to capture raw interactions. It is followed by the examination and filtering of incoming raw data, processed using advanced techniques and Machine Learning models (Procezo). Finally, such data can be analyzed through Visual/Immersive Analytics inspection tool (Merkhet): this end-to-end solution ensures a seamless and efficient approach to deriving actionable insights from complex interactive sessions, including real-time collaboration with remote analysts in the virtual space.
CATEGORIES: Analytics and descriptive statistics; Data analysis; Data representation & visualization; Query and data extraction; Data curation and preservation; Data processing; XR interaction & spatial interfaces; Machine Learning

Slide show

Max number of Users/User teams for the call: 1
Specific data policy on reuse: Captured records (sessions) will be stored on the hub for a period of 6 months. The User/Team can access and save a copy of the data at any time via session ID provided by the service. For the last stage (Visual/Immersive Analytics) the User/Team is required to upload 3D data on ATON service preferably under an open license.
Providers: CNR ISPC | Operating Units: Rome
Contact person: Bruno Fanini
Email: bruno.fanini@cnr.it

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PILOT ArchaeoHub - Open Digital Archaeology Hub

The Open Digital Archaeology Hub (ArchaeoHub) is a comprehensive digital infrastructure designed to facilitate the integration, exploration, and analysis of archaeological and heritage data. It enables seamless access to heterogeneous data sources, fostering findability and accessibility for long-term data preservation and usage.

The platform aggregates diverse resources, including scientific texts, images, bibliographic metadata, datasets, interactive resources, and research projects. These resources are accessible through a common interface, spatially organized on a map, and structured into thematic collections with an archaeological focus. Currently, six collections are available, focusing on Cerveteri, Etruria, Sabina, Pompeii, Sicily, and Sardinia. These are based on data from the scientific journal *Archeologia e Calcolatori* and its associated image repository, enriched with digital projects and datasets related to these locations and areas.

As an open and dynamic platform, ArchaeoHub enhances data findability and accessibility, making it a valuable tool for the digital archaeology and heritage science communities. This approach allows researchers to explore and efficiently contextualize heterogeneous data, promoting collaboration and new research opportunities. The system is designed to be open, allowing the integration of new image and text repositories from academic journals, cultural associations or research institutes, provided their use of standard metadata and data exchange formats.

The present call is aimed at users who wish to:

- freely **explore** the portal, the collections and provide feedback
- learn how to **share** and expose **data** from their own repositories through ArchaeoHub.

CATEGORIES: Data representation & visualization; Query and data extraction; Data curation and preservation; Bibliography

Slide Show
Demo Video

Max number of Users/User teams for the call: Consultation access: unlimited. Data integration access: up to 5 users.

Specific data policy on reuse: The User/User team is required to share the data produced during the TNA/NA activities under the terms of an open access license, such as those defined by Creative Commons.

Providers: CNR ISPC | Operating Units: Rome

Contact person: Giacomo Mancuso
Email: giacomo.mancuso@cnr.it

PILOT LLOD: Linked Open Data for Linguistic Resources

The LLOD pilot enables the publication and management of linguistic resources as Linked Open Data (LOD). The system integrates tools for creating, validating, and publishing RDF/SKOS resources, with a focus on multilingual vocabularies and controlled lexicons. The platform leverages Skosmos (see below the SKOSMOS Vocabulary Service) as a vocabulary browser and offers a dashboard for quality assessment, ensuring interoperability and long-term accessibility. Through federated access and intuitive editing interfaces, users can upload, modify, and share resources. The pilot also supports training through interactive tutorials, fostering the adoption of LOD practices within the research community. We therefore provide the possibility of helping users in converting and hosting their linguistic linked open data on our dedicated triple store.

CATEGORIES: Linguistics Linked Open Data, Web Semantic, FAIR

Slide show

Max number of Users/User teams for the call: N/A (unlimited users)

Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is encouraged to share the data produced during the TNA/NA activities under an open license and, in the case of inclusion of data in the Pilot LLOD triple store, the deposit of said data on the repository **ILC4CLARIN**

Providers: CNR ILC | Operating Unit Pisa

Contact person: Michele Mallia, Fahad Khan

Email: **michele.mallia@ilc.cnr.it; fahad.khan@ilc.cnr.it;**

PILOT DPH - Digital Philology HUB

The Digital Philology HUB (DPH) is a platform for the development of a workflow to make born digital critical editions of texts in ancient Italian with manuscript tradition.
The Digital Philology HUB consists of an application workflow for digital philology that aims at the construction of a critical edition assisted by digital and, in part, (semi-)automatic tools. The added value of the DPH lies in the modular architecture of the system, whereby all services necessary for the construction of the critical edition will be available in the same environment.
Currently, the DPH is divided into modules corresponding to the phases of philological work:

- Manuscripts addition
- Transcription
- Collation
- Varia lectio analysis
- Critical text and apparatus

The user will be able to use a single service, concentrating vertically on a single phase of philological work, or use several services linked together to produce a digital edition.
CATEGORIES: Data processing; data collection; digital philology; workflow

Slide show

Max number of Users/User teams for the call: 2
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is recommended to use open licenses and deploying data in the DARIAH-IT repository to make it more accessible and reusable.
Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

E-RIHS.it for H2IOSC

ATON: WebXR services for Heritage Science

ATON is an open-source framework to present and interact with 3D models and scenes on the web, primarily targeting Heritage Science communities. Its adaptive presentation layer allows interactive, liquid 3D visualization - ranging from mobile devices, museum kiosks, workstations, up to immersive XR devices - without any installation required for final users. The adoption of robust open-source ecosystems and international standards, alongside a REST API, maximize interoperability and integration with other platforms and H2IOSC services. The E-RIHS.it service offers public access to research institutes, laboratories, museums, experts and researchers, willing to rapidly integrate interactive 3D tools into their workflows. User-friendly interfaces, modular components and multi-user capabilities allow wide customizations for different use cases. Furthermore, a plug&play architecture provides an accelerator for development and deployment of cross-device and interoperable Web3D/WebXR applications or pilots.

CATEGORIES: 3D Presentation; Immersive Visualization; PWA; Data representation and Visualization; Data curation and Preservation; Data collection

Slide show

Demo Videos

- → **Built-in tools**
- → **Multiresolution 3D models**
- → **Navigation tools**
- → **Immersive VR (WebXR) and Multiresolution**
- → **Mixed Reality presentation (WebXR)**
- → **Plug&Play Apps**

Max number of Users/User teams for the call: 3

Specific data policy on reuse: The User/User team is required to share the data produced during the TNA/NA activities under an open license.

Providers: CNR ISPC | Operating Units: Naples and Rome

Contact person: Bruno Fanini

Email: **bruno.fanini@cnr.it**

H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud funded by the European Union - NextGenerationEU - NRRP M4C2 - Project code IR0000029 - CUP B63C22000730005

Website
www.h2iosc.cnr.it
E-Mail
info.h2iosc@h2iosc.cnr.it

SENNSE

SENNSE is a hardware/software platform for the monitoring and preservation of cultural heritage assets through the acquisition and subsequent analysis of multiple data feeds acquired from a large-scale wireless sensor network. The sensors and related nodes, based on widely used commercial technologies and microcontrollers such as Arduino, Esp32 and Raspberry PI, cover a wide range of micro-environmental measurements such as temperature, humidity, air quality, light quantity and many others. SENNSE natively implements the MQTT IOT protocol, ensuring that the data sent from the sensors, through the relevant nodes, will be small in size, and that transmission, even under difficult conditions and poor network coverage, will occur correctly.

The open infrastructure can be easily customized facing the needs of users who, thanks to the implemented software platform can create their own dashboards and have the clearest possible information about the status of the monitored property. SENNSE can implement customized alarms to inform the user that certain preset thresholds are exceeded. In the future, thanks to the use of actuators, users will be able to respond to these alarms by activating direct and effective countermeasures, and thanks to the use of artificial intelligence modules (under development) the system will be able to discovery data trends, to predict possible site Issues and to suggest correct tasks to be performed.

Thanks to the immersive 3D visualisation of the monitored locations, an innovative method of viewing data via vr-headset, mobile phone or tablet is available.

CATEGORIES: Remote monitoring; Diagnostic; Analytics and descriptive statistics; Data representation & visualization; Data processing; Documentation, Virtual research environment; XR interaction & spatial interfaces; Data analysis; Query and data extraction

Slide show

Max number of Users/User teams for the call: 1
Specific data policy on reuse: to be defined with the providers
Providers: CNR ISPC | Operating Units: Lecce
Contact person: Alberto Bucciero, Francesco Valentino Taurino
Email: alberto.bucciero@cnr.it, francescovalentino.taurino@cnr.it

Painting Collection Hub: Digital and Analytical services for micro-scale mechanochemical investigations of painting materials and samples

This service provides access to digital and analytical resources for the study of paintings through a hardware and software laboratory platform for mechanochemical measurements of (micro)samples/stratigraphic sections. Compositional characterization and viscoelastic properties of the materials are correlated by combining vibrational microspectroscopies, namely infrared (IR), Raman and Brillouin (BLS). Micro-IR, in the different modalities (transmission, reflection and ATR modes) is performed at varying spatial resolutions with MCT and FPA detectors providing scanning and hyperspectral imaging of the paint material composition exploiting the high analytical strengths of the mid and near IR spectral ranges. Correlative Raman and BLS microspectroscopies (BRaMS) measurements are carried out by a combined set-up able to map composition and mechanical characteristics of painting materials. The study at the micro-scale of the materials, their layering sequence, micro compositional and structural heterogeneities enable to inform about the original paint technique, the material state of conservation, to unveil possible degradation and monitor the effect of conservation treatments. The analytical platform, yet developed for investigating painting materials, is also accessible for the more general studies of material science.
The access includes data processing and elaboration tools through workstations for analysis of spectral data with data processing including chemometrics and machine learning approaches (Python and RStudio environments), of samples provided by the Users.
CATEGORIES: Innovation services. Exploration of instrument synergies and novel innovative research capabilities. Data and digital services: Data analysis; Data processing; Query and data extraction; Analytics and descriptive statistics

Slide show

Max number of Users/User teams for the call: 5
Specific data policy on reuse: The user/user team is required to share the data produced during the TNA/NA activities under an open license. Where necessary, this may follow a defined embargo period, as previously discussed and agreed upon with the providers, in accordance with the sensitive nature of the research data.
Providers: CNR SCITEC | Operating Units: Perugia
Contact person: Francesca Rosi, CNR SCITEC
Email: francesca.rosi@cnr.it

X-ART: X-ray fluorescence Artificial intelligence Reasearch Tool for cultural heritage

X-ART is an AI powered digital platform designed for advanced interrogation and analysis of macro X-ray fluorescence (XRF) datasets. The platform leverages state-of-the-art convolutional neural networks trained to enable automated spectral analysis of XRF datasets, obtained from Macro XRF scanning systems, and provides resulting elemental maps. The platform features an intuitive web-based dashboard that provides researchers with interactive tools for real-time exploration and investigation of XRF datasets. Users can visualize elemental distribution maps and perform additional spectral datacube analysis including spectra comparison, ROI selections, and scatter plots.

Built on a cloud-native architecture, X-ART uses containerized microservices that are deployed on high-performance computing infrastructure with GPU support.

X-ART supports non-invasive cultural heritage diagnostics by providing practical tools for XRF data interpretation and documentation. It is designed to integrate with the MOLAB and E-RIHS.it research infrastructures, facilitating collaborative analysis of cultural heritage materials through standardized data processing workflows.

CATEGORIES: Data analysis, data processing, data representation & visualization

Slide show

Max number of Users/User teams for the call: 3
Specific data policy on reuse: To be defined with the providers
Providers: CNR ISPC | Operating Units: Catania
Contact person: Zdenek Preisler, Francesco Paolo Romano
Email: zdenek.preisler@cnr.it, francescopaolo.romano@cnr.it

CLARIN-IT for H2IOSC

EpiLexO Editor

EpiLexO is an interface for creating lexica for epigraphic languages conformant to Semantic Web principles linked to their testimonies (encoded in TEI-EpiDoc) and related bibliographies.
EpiLexO is a web-based platform designed for the creation, editing, and linking of lexical resources for ancient languages. It is based on a Service-Oriented Architecture exposing RESTful APIs. The platform facilitates historical linguists in encoding multilingual lexica, linking lexical data to inscriptions, bibliographies, and other external Linked Open Data resources. Its user-friendly interface supports collaborative editing and is particularly aimed at scholars in historical linguistics and digital humanities, providing essential tools for managing and interlinking lexical information and inscriptions.
CATEGORIES: Data representation & Visualization

Slide show

Max number of Users/User teams for the call: 2 (teams of max 5 collaborators each)
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is encouraged to share the data produced during the TNA/NA activities under an open license and, possibly, the deposit of said data on the repository **ILC4CLARIN**
Providers: CNR ILC | Operating Unit Pisa
Contact person: Michele Mallia, Valeria Quochi
Email: michele.mallia@cnr.it, valeria.quochi@ilc.cnr.it

eScriptorium: a web platform for Handwritten Text Recognition (HTR)

eScriptorium is a web platform which integrates Handwritten Text Recognition (HTR) through kraken HTR engine and cooperative proofreading of automated transcriptions. Through the HTR United Project not only new performant HTR models are provided, but the entire process of image acquisition / recognition / HTR model refinement / proofreading / deposit of digital resources is open and replicable, in compliance to the principle of Open Science.

CATEGORIES: Data processing; HTR & Proof Reading

Slide show

Max number of Users/User teams for the call: 12

Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is encouraged to share the data produced during the TNA/NA activities under an open license and, possibly, the deposit of said data on the repository **ILC4CLARIN**

Providers: CNR ILC | Operating Unit Pisa

Contact person: Federico Boschetti, Michele Mallia

Email: federico.boschetti@ilc.cnr.it, michele.mallia@cnr.it

SKOSMOS Vocabulary Service

Skosmos is an open-source web application designed to offer a standardised way of publishing and browsing vocabularies, taxonomies, ontologies, and thesauri as linked data, encoded using the popular SKOS (Simple Knowledge Organization System) vocabulary. Skosmos offers an intuitive, user-friendly interface for searching, exploring, and retrieving concepts through hierarchical or alphabetical navigation. The platform supports internationalization and customization, making it ideal for academic, library, and research projects. The service includes data conversion into SKOS from formats such as CSV/TSV or JSON, and vocabulary hosting. Advanced features such as autocomplete, semantic relationship visualization, and output in various formats enhance usability may also be available, in addition to integration with GraphDB, ensuring high performance even with large RDF datasets.
CATEGORIES: Data representation and visualization; Knowledge representation and visualization

Slide show

Max number of Users/User teams for the call: unlimited users
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is required to share the data produced during the TNA/NA activities under the open license Creative Commons CC BY-SA in the repository **ILC4CLARIN**
Providers: CNR ILC | Operating Unit Pisa
Contact person: Michele Mallia
Email: michele.mallia@cnr.it

DARIAH-IT for H2IOSC

MFE - MetaFAIR Ecosystem

MFE is a Platform for the integrated management of digitised manuscripts. Designed for researchers, scholars, and institutions such as libraries, archives and museums, it enables them to catalogue, preserve and enhance documents in a unified environment.
Some of its key features include:

- **Cataloguing**: Supports national and international cataloguing standards, enabling an accurate description of cultural assets.
- **Digitisation:** Manages digitisation processes, ensuring the acquisition and archiving of images and documents in digital format.
- **Digital Preservation**: Ensures the long-term preservation of digital content, implementing strategies for the preservation of data integrity and accessibility.
- **Access and Use**: Provides tools for consultation and research of digital collections, facilitating public or restricted access to materials.
- **Integration**: Integrates with other information systems and platforms, facilitating interoperability and data exchange between different cultural institutions.

MFE is in the development phase. A dedicated version will be selected from the current development phase for the TNA call. The federation authentication service developed by Nanotec and integrated in the project's API manager is used.
CATEGORIES: Data processing; data collection; query and data extraction.

Slide show

Max number of Users/User teams for the call: 2
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is recommended to use open licenses and deploying data in the DARIAH-IT repository to make it more accessible and reusable.
Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

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Website
www.h2iosc.cnr.it
E-Mail
info.h2iosc@h2iosc.cnr.it

AEON - dAriah sErvice Oriented iNfrastructure

AEON is a digital platform that empowers researchers and professionals in the Social Sciences and Humanities to design, manage, and automate complex scientific workflows. Its key features include:

- a graphical **Workflow Manager** for intuitive service composition;
- multi-level **compatibility checks** (semantic, syntactic, and I/O) via intelligent Connectors;
- integration with **RESTful APIs** described through standardized JSON manifests;
- supporting the **generation of GUIs and scripts** for the seamless execution of workflows;
- secure, federated **authentication and access control** (AAI & ACL);
- orchestration of services via **WSO2 Micro Integrator** and XML-based mediators.

AEON ensures interoperability, reproducibility, and efficiency, making it a reliable and FAIR-aligned solution to support collaborative, scalable, and cross-disciplinary digital research.

CATEGORIES: Workflow management, Service orchestration, Data interoperability, Process automation, Scientific workflow design

Slide show

Max number of Users/User teams for the call: 3
Specific data policy on reuse: The User/User team is responsible for the data redistribution policy. The User/User team is recommended to use open licenses and deploying data in the DARIAH-IT repository to make it more accessible and reusable.
Providers: CNR OVI | Operating Unit Florence
Contact person: Federica Spinelli
E-mail: federica.spinelli@cnr.it

Helpdesk Contact

For any questions, please contact the Access Coordination and Management Unit of H2IOSC at **tna.h2iosc@h2iosc.cnr.it**

www.h2iosc.cnr.it

H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud
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Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
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Consiglio Nazionale delle Ricerche

H2IOSC
Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

INFORMATION ON PROCESSING OF PERSONAL DATA

October 2024

www.h2iosc.cnr.it

Information on the processing of personal data required for the application to the H2IOSC TNA/NA Calls

Art. 13 EU/2016/679 – GDPR

This is to inform you that the personal data you will provide as an applicant in the Trans-National Access (TNA) and National Access (NA) to the H2IOSC RIs Cluster services within the H2IOSC project will be processed in accordance with Regulation EU 2016/679 (hereinafter referred to as the "GDPR"), Legislative Decree 196/2003, as amended by Legislative Decree 101/2018 (hereinafter referred to as the "Privacy Code"), and any other binding provisions (e.g. laws, legislative decrees, regulations, etc.), including the provisions of the WP29, of the European Data Protection Board ("EDPB") and the Data Protection Supervisory Authority as applicable from time to time, and in accordance with the following policy.

H2IOSC (Humanities and cultural Heritage Italian Open Science Cloud) is a project funded by the European Union Next Generation EU and the Italian Ministry of University and Research as part of the National Recovery and Resilience Plan (NRRP) M4C2 - Project code IR0000029 - CUP B63C22000730005. It is coordinated by the CNR-National Research Council of Italy.

Joint Data Controllers

The Joint Data Controllers are the CNR-National Research Council of Italy (hereinafter referred to as the CNR), having its registered office in Piazzale Aldo Moro 7, 00185 Rome, Italy, and the Access Coordination and Management Unit of H2IOSC (hereinafter collectively referred to as the "Joint Data Controllers"). An internal joint data control agreement has been entered into between the Joint Data Controllers setting out their respective responsibilities with regard to compliance with the obligations arising from the General Data Protection Regulation in accordance with Article 26 thereof.

Owner and Data Protection Officer

CNR - CNR-National Research Council of Italy, Piazzale Aldo Moro 7, 00185 Rome, Italy. The point of contact for the exercise of the rights of the data subjects is the Access Coordination and Management Unit of H2IOSC, who can be reached at the email address: tna.h2iosc@h2iosc.cnr.it
The Data Protection Officer, appointed by order 91/2023 of 04/07/2023, can be reached at the following email address: rpd@cnr.it

Purpose of processing

Your personal data (name, surname, email, institutions, and country) will be processed by CNR and H2IOSC project with the exclusive purpose of enabling you to apply for TNA/NA to the H2IOSC RIs Cluster services.

Legal basis of processing

The processing of your personal data by the Data Controllers for the above purposes requires your explicit consent, in accordance with Article 6(1)(a) and Article 9(2)(a) of the GDPR. Failure to provide your consent to the processing of your personal data will not prevent you from accessing treatment but will only make it impossible for you to apply for TNA/NA to the H2IOSC RIs Cluster services.

Categories of type of personal data processed

Applicants requires the collection and processing of common personal data, for example, name, surname, email address, institutions, and country.

Data processing methods

The data collected are processed, for the aforesaid purposes, with the aid of such suitable computer and paperbased means as to ensure the security and confidentiality of the data. All data processing operations will be based on the principles of fairness, lawfulness and transparency as laid down by Legislative Decree 196/2003 and Regulation (EU) 2016/679.
In particular, you will provide your personal data during the first step of the application process.
The data are processed through electronic means. Specific security measures are in place to prevent data loss, illegal or inappropriate use and unauthorised access.
No automated decision-making processes within the meaning of Article 22 of the GDPR will be used.
H2ISOC project uses the Microsoft forms that have been meeting GDPR compliance requirements since May 2018.

Data retention time

Your personal data collected will be kept for the time strictly necessary, from the application process until the end of the H2IOSC project and immediately thereafter they will be destroyed.

Nature of data provision and consequences of failure to provide the data

Providing your personal data for the aforesaid purposes is voluntary. The provision of data is compulsory to manage registrations and communicate updates, changes, and further details relating exclusively to the TNA/NA to the H2IOSC RIs Cluster services. Failure to provide the data will not allow participation to the TNA/NA to the H2IOSC RIs Cluster services, therefore it will not be possible to complete the process, or rather the application submission.

Recipients of the data

Personal data are processed, exclusively for the purposes as mentioned above, by authorised personnel of the CNR and H2IOSC project, who will act as "Data processing agent/Person authorised for data processing purposes". The data will not be processed for commercial or marketing purposes or transferred to third parties or non-EU countries. They will be kept for the time necessary (not less than five years) to achieve the purposes for which they were collected and follow the principles set out in Article 5 of the GDPR. No profiling of the personal data provided is carried out.

Data subject rights

In your capacity as data subject, you have the right to ask the Joint Data Controllers at any time to exercise your rights under Article 15 et seq. of the GDPR. Notably, you have the right to:

- obtain confirmation of whether your personal data exist;
- obtain information about the purposes of processing, the categories of personal data, the recipients or groups of recipients to whom the personal data have been or will be disclosed and, where possible, the retention period;
- obtain the rectification and erasure of your personal data;
- obtain limitation of processing;
- object to the processing of your personal data at any time.
- Data subjects will also have the right to withdraw their consent at any time without affecting the lawfulness of the processing based on the consent given prior to any such withdrawal.
- If a data subject decides to withdraw from the event/seminar/webinar selected, his/her data will be deleted and, therefore, will no longer be used.
- In order to exercise these rights, data subjects may apply:
- as to the CNR-National Research Council of Italy, e-mail: rpd@cnr.it
- as to the Access Coordination and Management Unit of H2IOSC, email address: tna.h2iosc@h2iosc.cnr.it
- Data subject also have the right to lodge a complaint with the Personal Data Protection Authority.

We thank you for your time reading this policy statement.

www.h2iosc.cnr.it

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H2IOSC
Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

RESEARCH DATA POLICY

January 2025

www.h2iosc.cnr.it

H2IOSC Research Data Policy

The H2IOSC Trans-national access (TNA) and National access (NA) Research Data Policy is designed for TNA/NA Users/User teams and describes the principles for using, sharing, and exploiting data and data products generated during H2IOSC TNA/NA activities.

Personal data

The handling of personal data collected within TNA/NA activities is addressed in the H2IOSC TNA/NA Calls - Information on processing of personal data, accepted at the time of presentation of the proposal.

Research data

H2IOSC is committed to adhering to the FAIR principles for scientific data, thereby ensuring that data produced within TNA/NA activities is Findable, Accessible, Interoperable, and Reusable. Therefore, all data produced under H2IOSC TNA/NA activities must be appropriately maintained, archived, and made openly available for (re-)use, if feasible for the research activity.

Disclaims on data upload

It is the sole responsibility of the User/User team to ensure to have the rights and licenses needed to upload any content for the scope of the TNA/NA activity, including for copyright protection and personal data protection. H2IOSC disclaims all responsibility and liability for all the contents uploaded by the User/User team for the scope of the TNA/NA activity, including infringements of copyright and/or privacy rights.

Data sharing

The policy of redistribution of the data resulting from the TNA/NA activities depends on the policy of each service, described in the List of Services of the specific call, available at H2IOSC website. In general, the User/User team is responsible for the data redistribution policy and is encouraged to share the data produced during the TNA/NA activities under an open licence and, possibly, to deposit said data on the repositories

made available by the Cluster for each service, if any. Acceptance of the policy will be required in the Access Agreement upon acceptance of the access proposal.

Publication

Users are required to acknowledge the H2IOSC project in any publication resulting from the TNA/NA activities with the standard statement:

"*This publication results from work carried out under TNA/NA under the support of H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud funded by the European Union – NextGenerationEU – NRRP M4C2 - Project code IR0000029 - CUP B63C22000730005"*.

January 2025

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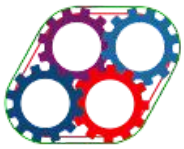

H2IOSC

Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

Application Form

Fourth Call

www.h2iosc.cnr.it

H2IOSC TNA/NA Fourth Call Application Form

Opening Call: June 16, 2025
Closing Call: July 6, 2025 - **EXTENDED TO JULY16**
Helpdesk contact: tna.h2iosc@h2iosc.cnr.it

* Obbligatoria

A. Applicant Information

SINGLE APPLICANT or TEAM APPLICATION (All correspondence concerning this proposal will be sent to the Team Leader)

1. Name and Surname *

   *in case of **team application**, please state the Name and Surname of the **Team Leader***

2. E-mail *

   *in case of **team application**, please state the Name and Surname of the **Team Leader***

3. Home Institution name *

4. Home Institution country and address *

5. Role *

   *in case of **team application**, please state the Name and Surname of the **Team Leader***

6. Names, Surnames and Roles of other applicants, if any

   *only in case of **team application**, please state, for each other member of the team, Name, Surname and Role. If any applicant is a member of another Institution, please state also the Name and Country of the Institution*

7. Academic background - Research interests – scientific experience – future perspectives (max 800 characters incl. spaces) *

   *in case of **team application**, please reference the group as a whole*

   Immetti al massimo 800 caratteri

B. Activity/Project Information and Selection of Services

Description of the Activity/Project for which the selected H2IOSC services are requested

8. Activity/Project Name *

9. Activity/Project brief description (max 1000 characters incl. spaces) *

10. Activity/Project Objectives and innovation (max 500 characters incl. spaces) *

Please describe the objectives, originality and innovation of the activity/project and its potential for scientific development

11. Activity/Project impact (max 500 characters incl. spaces) *

Please describe the potential interest of the research community, the expected results and the dissemination strategy

Immetti al massimo 500 caratteri

12. Selection of services *

*Please use the checkboxes to select the services requested for the TNA call. Refer to the **List of Services:*** https://www.h2iosc.cnr.it/wp-content/uploads/2025/01/H2IOSC-List-of-Services_jan-25_01.pdf

- ◯ PILOT: Interlumo
- ◯ PILOT: ArchaeoHub - Open Digital Archaeology Hub
- ◯ PILOT: LLOD - Linked Open Data for Linguistic Resources
- ◯ PILOT: Digital Philology HUB
- ◯ E-RIHS .it: ATON
- ◯ E-RIHS .it: SENNSE
- ◯ E-RIHS .it: Painting Collection Hub
- ◯ E-RIHS .it: X-ART
- ◯ CLARIN-IT: EpiLexO Editor
- ◯ CLARIN-IT: eScriptorium
- ◯ CLARIN-IT: SKOSMOS
- ◯ DARIAH-IT: MFE
- ◯ DARIAH-IT: AEON

13. Interlumo stages *

Select the stage(s) you want to access (link). Please note access to Visual/Immersive Analytics tool (Merkhet) involves loading of assets - 3D models, panoramic 360 content - within ATON framework

- ◯ Kapto (data tracking and recording)
- ◯ Kapto (data tracking and recording) + Procezo (filtering and processing of raw data)
- ◯ Kapto (data tracking and recording) + Procezo (filtering and processing of raw data) + Merkhet (Visual/Immersive Analytics Web3D

14. ArchaeoHub access Typology *

Select the typology of access

- ◯ Consultation
- ◯ Consultation and Data integration (data exposed and shared)

15. Data Typology for Integration *

Select the type of data to be integrated/exposed

- ◯ Images with metadata
- ◯ Bibliographic data with metadata
- ◯ Both

16. Data Repository Accessibility *

Indicate whether the data are already exposed in an open repository and its type of access (e.g. REST API JSON, OAI-PMH, other)

17. Metadata Standardisation *

Are the metadata structured according to a recognized standard (e.g. Dublin Core, Data Cite, others)?

18. Metadata Licensing *

Are the metadata published under an Open Access license?

- ◯ Yes
- ◯ No
- ◯ Not specified

19. Type of service required for SENNSE *

Select which type of service is more suitable to your needs

- ◯ Full level: Hardware (sensors) is supplied by the providers. Access includes the hardware installation and the customisation of the software platform by the providers.
- ◯ Intermediate level: Hardware (sensors) is supplied by the providers. Access requires expert users to install the hardware. The providers assist with remote technical-scientific support and remote customisation of software platform.

20. Description of the site to monitor (max 800 character incl. spaces) *

Describe the site where to deploy the sensors, with particular reference to: installation type (indoor or outdoor), overall size of the area, existence of barriers that may prevent a wireless connection (e.g. walls, security doors, multiple floors)

Immetti al massimo 800 caratteri

21. Equipment at the site to monitor *

Indicate the facilities/appliances present at the site to monitor (you can select more than one option; it is important to select all of the options that apply to the site)

- [ ] Internet connection
- [ ] Electrical connections in the proximity of the points to be monitored
- [ ] monitoring of the site by staff (public access site)
- [ ] monitoring of the site by cameras (public access site)

22. Public or private site *

Indicate whether the site to monitor is public or private

- ◯ Public
- ◯ Private

23. Dimension of the site and distance between sensor nodes *

Indicate the total square metres of the site to be monitored and the maximum distance between two sensor nodes

24. Number of areas (spaces) to be monitored *

25. Parameters to be monitored *

Indicate the type of required sensors, depending on the parameters to monitor (e.g., temperature, humidity, etc.)

26. Is there technical/informatics staff at the site to be monitored? *

- ◯ Yes
- ◯ No

27. Built-in tools or available features for ATON

Select which features you want to use based on the following available tools (for more info, see the list of services):

- ☐ Interactive semantic annotations
- ☐ Measurement tools
- ☐ XR Presentation (AR, MR, VR) through WebXR, with support for 3DoF or 6DoF immersive devices
- ☐ Orbit and First-person navigation, device-orientation
- ☐ Viewpoints and node-based locomotion (points of interest)
- ☐ Spatial interfaces components
- ☐ Navigation of single or interconnected panoramic content
- ☐ Injection and automatic extraction of copyright / metadata (XMP) in 3D models
- ☐ Advanced lighting setups
- ☐ Hosting of custom web-apps through plug&play architecture (app

28. File formats for ATON *

Please indicate the type and number of assets already available (Multiresolution 3D models, panoramic 360 content, NURBS models, mesh models, point clouds, etc.)

29. Relevance of the service (max 1000 characters incl. spaces) *

Please describe the relevance of the selected service for the project/activity

Immetti al massimo 1000 caratteri

C. Compliance with the H2IOSC TNA/NA Policy

30. By completing this Application form, the Applicant or Team Leader agrees with the terms and conditions for Trans-national and National Access TNA/NA **Research Data Policy**: https://www.h2iosc.cnr.it/wp-content/uploads/2025/01/TNA_NA_Data-Policy_jan-25_01.pdf *

31. I have read and I hereby accept the terms and conditions of the H2IOSC TNA/NA Calls - **Information on processing of personal data**: https://www.h2iosc.cnr.it/wp-content/uploads/2024/10/Info_Personal-data_TNA-NA-Calls.pdf *

- ◯ Yes

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H2IOSC
Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

ACCESS AGREEMENT

Template

H2IOSC Access Agreement

In the framework of H2IOSC project (project number B63C22000730005), the **[Name and address of the Institute Provider for the service]**, hereinafter referred to as the TNA/NA Provider, provides transnational access (TNA) / national access (NA) to the digital services listed below to the undersigned:

[User/User Team Leader] [USER INSTITUTIONAL AFFILIATION ADDRESS & COUNTRY]

hereinafter referred to as the User/User team.

By signing this Access Agreement, the User/User team gains access to the below mentioned services for conducting their TNA/NA project/activity in accordance with all the obligations and conditions specified in this Agreement, as defined below.

TNA/NA details

The User/User team was granted access to conduct TNA/NA activities using the following service:

[Name of the service]

The TNA/NA activities will be carried out with the **techno-scientific assistance of:** [Name of the person in charge of the assistance].

The **techno-scientific assistance** will be arranged directly with the contact person after the Agreement is signed. The **techno-scientific assistance will** take place **for a maximum of 1 month.**

Personal data

The handling of personal data collected within TNA/NA activities is addressed in the H2IOSC TNA/NA Privacy Policy, accepted at the time of presentation of the proposal.

Data management

The User/User team must comply with the H2IOSC TNA/NA Research Data Policy, which is complementary to the H2IOSC TNA/NA Guidelines.

Data sharing

[Data sharing policy of the specific service]

Research Ethics

The User/User team agrees to observe best practices regarding research ethics, as defined by the "Guidelines for the Research Integrity" produced by the CNR, approved on 10 June 2015 and updated in 2019. The fundamental principles for the integrity of research are: dignity, responsibility, fairness, rectitude and diligence to which other principles are connected, such as those of scientific freedom, the reputation of individuals and loyalty towards others and towards institutions, honesty and objectivity in the conduct of research, independence of judgment, reciprocity and cooperation with others in carrying out one's tasks, impartiality and efficiency in the use of resources, as well as social responsibility.

Disclaims on data upload

It is the sole responsibility of the User/User team to ensure to have the rights and licenses needed to upload any content, including for copyright protection and personal data protection. The TNA/NA Provider disclaims all responsibility and liability for all the contents uploaded by the User/User team for the scope of the TNA activity, including infringements of copyright and/or privacy rights.

Availability of services

H2IOSC disclaims all responsibility and liability for the availability, timeliness, security or reliability of the services, software or other content provided through the H2IOSC Services. H2IOSC reserves the right to modify, suspend, or discontinue the services or access to the services without any notice at any time and without any liability to the User/User team.

H2IOSC will not be liable to the User/User team or any third party for any loss of profits, use, goodwill, or data, or for any incidental, indirect, special, consequential or exemplary damages, however arising.

Liability

The User/User team is obliged to compensate for any damage and/or loss suffered by the TNA/NA Provider and third parties due to any wilful and malicious act or gross negligence on the part of the User/User team.

The TNA/NA Provider will not be held liable for any damage and/or loss suffered by the User/User team or a third party resulting from the actions or omissions of the User/User team – unless such liability directly arises from a provision of mandatory law.

Confidentiality

Both the User/User team and TNA/NA Provider are obliged to keep confidential any and all information with regard to which confidentiality follows from the nature of the information, as well as with regard to which the User/User team and TNA/NA Provider have been informed that this information is confidential and also with regard to which the User/User team and TNA/NA Provider can reasonably know or assume that confidentiality is required. This obligation extends even after the termination of this Access Agreement.

User compliance with H2IOSC rules and regulations

The User/User team agrees to comply with the H2IOSC TNA/NA Research Data Policy and TNA/NA General principles as outlined in the latest version of the H2IOSC TNA/NA Guidelines.

The User/User team agrees to provide feedback on the TNA/NA experience by completing the user feedback questionnaire provided by the management team.

_____
User/User Team Leader

_____
Access Provider

www.h2iosc.cnr.it

H2IOSC Project - Humanities and cultural Heritage Italian Open Science Cloud
funded by the European Union – Next Generation EU – NRRP M4C2
Project code IR0000029 - CUP B63C22000730005.

ANNEX 8 - Feasibility check template

Application ID	Feasibility	Comment	Instructions
			Each proposal received will be named with an Application ID and sent as a PDF file to the provider. Within the Excel file, each service has its TAB and each row corresponds to an application indicated by the specific ID. The service provider must specify whether the proposal is feasible by selecting yes or no in the 'Feasibility' column. It is highly recommended to comment on the Feasibility and the techno-scientific quality of the proposal to facilitate the evaluation process by the EAB.

ANNEX 9 - EAB Evaluation matrix template

Instruction

This document is designed to support evaluators in providing a **scientific evaluation of H2IOSC TNA/NA proposals**.
Proposals arrived received an **Application ID** (column A). The ones that passed the feasibility check by service providers are divided thematically, depending on the Research Infrastructure service requested, and assigned to the evaluators. Each proposal will be evaluated by at least two evaluators.
In the "**EVALUATION MATRIX**" tab, **each row represents a proposal, identified by its ID** (column A), **the service requested** (column B) **and the comments of the service provider** (column C), if any. The evaluators should evaluate each proposal against each evaluation criterion with a **score from 1 to 10**. The overall score is the weighted average of the results for each criterion, where scientific excellence and impact have a weight of 4 each and clarity has a weight of 2. Comments (column K) can be added for each proposal, if relevant.
The evaluation **criteria** are described as follows:
1.**Scientific excellence and innovativeness of the proposal** (column D): clarity of the project/activity's objectives, originality, soundness of the proposed methodology (1 to 10);
2.**Impact of the proposal** (column F): broader scientific, social, environmental effects and benefits to the economy, society, culture, public policy; dissemination strategy, if any (1 to 10);
3.**Clarity of the proposal text** (column H) (1 to 10).

Evaluation matrix template

Application ID	Service	provider comments	Evaluation						Overall score	Final comments
			1 – Excellence innovativeness (1 to 10)	weight	2 – Impact (1 to 10)	weight	3 – Clarity (1 to 10)	weight		

Each row represents a proposal, identified by its ID, the service requested and the comments of the service provide, if any.
Please **evaluate each proposal against the criteria** of excellence and innovativeness, impact, clarity. The overall score is the weighted average of the scores for each criteria.
You can add comments, if relevant.

Finanziato dall'Unione europea NextGenerationEU

Ministero dell'Università e della Ricerca

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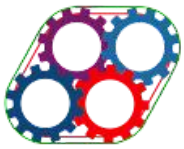


H2IOSC

Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

User Feedback QUESTIONNAIRE

First Call

www.h2iosc.cnr.it

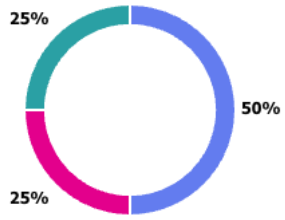
Panoramica delle risposte

Attivo

Risposte	Tempo medio	Durata
12	15.09	251 Giorni

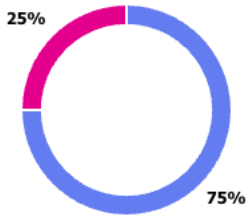
1. What service did you use?

E-RIHS .it: ATON	6
CLARIN-IT: EpiLexO Editor	3
CLARIN-IT: eScriptorium	3
DARIAH-IT: RAISE	0
DARIAH-IT: TIGRO	0



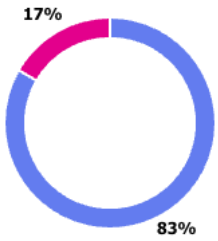
2. How would you rate the quality of the service used?

Excellent	9
Good	3
Fair	0
Poor	0



3. Was the service adequately aligned with the needs of your project?

Yes, competely	10
Partially	2
No	0

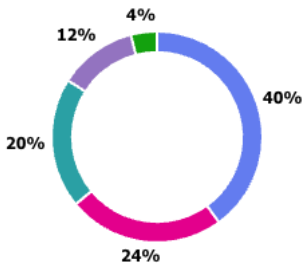


4. Were the tools or resources provided easy to use?

Very easy	6
Somewhat easy	6
Difficult	0
Very difficult	0

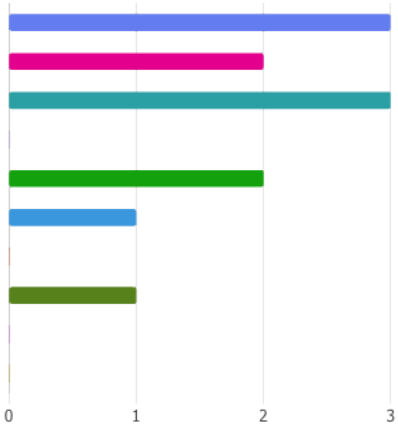
5. How has the service provided by the H2IOSC Cluster created or can it create added value to the research you are conducting?

Enabled access to advanced and reliable digital tools/resources provided by research infrastructures	10
Improved the quality or efficiency of our research processes and data with the help of H2IOSC...	6
Facilitated collaboration with other researchers who belong to research infrastructures	5
Supported the development of innovative research methodologies adopting the FAIR principles	3
Altro	1



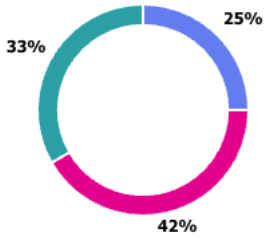
6. What additional functionalities or features of the service would you be interested in, if available in the future?

Enhanced data visualization tools	3
Expanded and customised datasets or resources (e.g. custom corpora)	2
More advanced analytical tools	3
Customization of features (e.g. specific 3D scenes)	0
Training sessions or tutorials for optimal use of the service	2
Customized support tailored to specific project needs	1
Extended storage	0
Extended allocated computation time	1
Real-time collaboration	0
Altro	0



7. For these additional functionalities or features, would you be willing to contribute to cover the costs incurred by H2IOSC?

Yes	3
Possibly, depending on the available financial resources	5
No	4



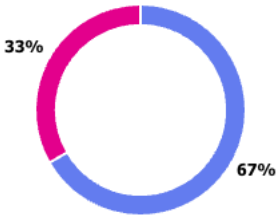
8. Do you have any comments or suggestions to improve the service?

3
Risposte

Risposte più recenti
...

9. How would you rate the technical-scientific support provided during your access?

Excellent	8
Good	4
Fair	0
Poor	0



10. Was the support timely and effective?

Always	7
Most of the time	5
Occasionally	0
Rarely	0

11. Did the support staff demonstrate sufficient expertise and understanding of your needs?

Yes, competely	11
Partially	1
No	0

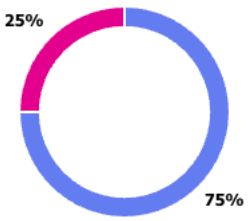
12. Do you have any comments or suggestions to improve the technical-scientific assistance?

2
Risposte

Risposte più recenti
...

13. How would you rate the quality of helpdesk support?

Excellent	9
Good	3
Fair	0
Poor	0



14. Was the Helpdesk support timely and effective?

Yes, always	11
Sometimes	1
No	0

15. Do you have any comments or suggestions to improve the Helpdesk service?

1
Risposte

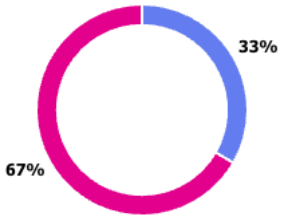
Risposte più recenti
...

16. How clear and accessible was the information provided about the application process by the documentation and the H2IOSC web channels (e.g. Guidelines, List of Services)?

Very clear	5
Clear	7
Somewhat unclear	0
Very unclear	0

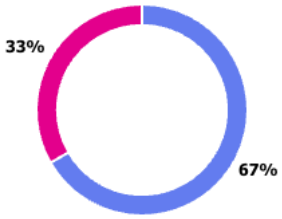
17. How easy was it to find the required documentation and guidelines?

Very easy	4
Easy	8
Difficult	0
Very difficult	0



18. Was the timeline for the application process communicated effectively?

Yes, competely	8
Partially	4
No	0



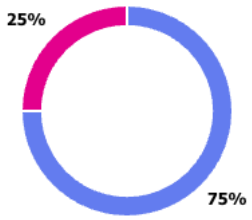
19. Do you have any comments or suggestions to improve the organization or communication of the application process?

0
Risposte

0 risposte inviate

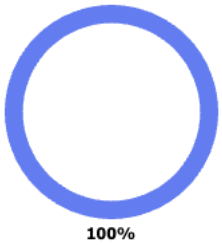
20. How satisfied are you with your overall experience in the H2IOSC TNA/NA program?

Very satisfied	9
Satisfied	3
Neither satisfied nor dissatisfied	0
Dissatisfied	0



21. Would you recommend the H2IOSC TNA/NA program to others?

Yes	12
No	0



22. Do you have any additional feedback or suggestions for improvement?

1
Risposte

Risposte più recenti

. . .

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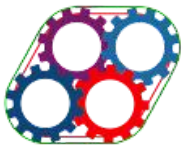


H2IOSC

Humanities and cultural Heritage Italian Open Science Cloud

Trans-National and National Access to the H2IOSC RIs Cluster Services

User Feedback QUESTIONNAIRE

Second Call

www.h2iosc.cnr.it

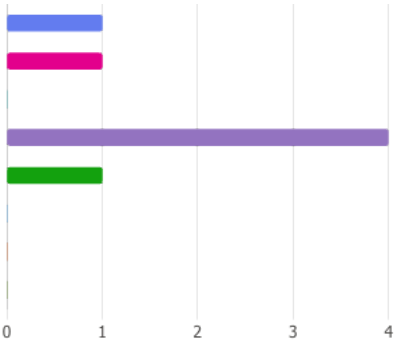
Panoramica delle risposte

Attivo

Risposte	Tempo medio	Durata
7	10.01	134 Giorni

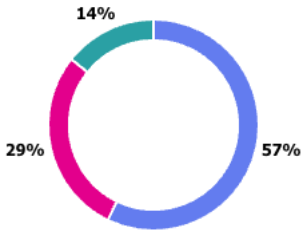
1. What service did you use?

E-RIHS .it: ATON	1
E-RIHS .it: Kapto	1
CLARIN-IT: EpiLexO Editor	0
CLARIN-IT: eScriptorium	4
CALRIN-IT: SKOSMOS	1
DARIAH-IT: RAISE	0
DARIAH-IT: TIGRO	0
DARIA-IT: MFE - MetaFAIR Ecosystem	0



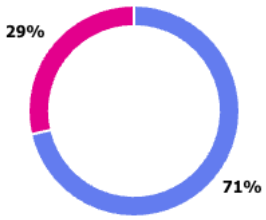
2. How would you rate the quality of the service used?

Excellent	4
Good	2
Fair	1
Poor	0



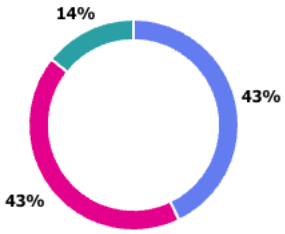
3. Was the service adequately aligned with the needs of your project?

Yes, competely	5
Partially	2
No	0



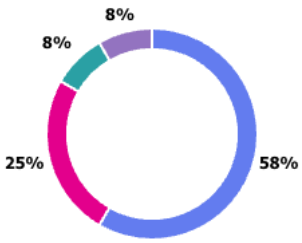
4. Were the tools or resources provided easy to use?

Very easy	3
Somewhat easy	3
Difficult	1
Very difficult	0



5. How has the service provided by the H2IOSC Cluster created or can it create added value to the research you are conducting?

Enabled access to advanced and reliable digital tools/resources provided by research infrastructures	7
Improved the quality or efficiency of our research processes and data with the help of H2IOSC...	3
Facilitated collaboration with other researchers who belong to research infrastructures	1
Supported the development of innovative research methodologies adopting the FAIR principles	1
Altro	0

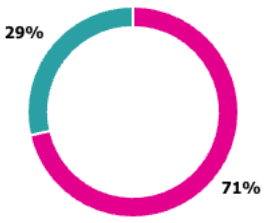


6. What additional functionalities or features of the service would you be interested in, if available in the future?

Enhanced data visualization tools	2
Expanded and customised datasets or resources (e.g. custom corpora)	1
More advanced analytical tools	0
Customization of features (e.g. specific 3D scenes)	0
Training sessions or tutorials for optimal use of the service	1
Customized support tailored to specific project needs	1
Extended storage	0
Extended allocated computation time	1
Real-time collaboration	0
Altro	1

7. For these additional functionalities or features, would you be willing to contribute to cover the costs incurred by H2IOSC?

Yes	0
Possibly, depending on the available financial resources	5
No	2



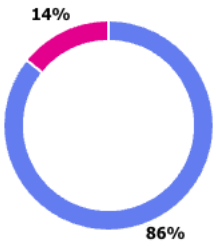
8. Do you have any comments or suggestions to improve the service?

1
Risposte

Risposte più recenti
"Part of the service used went into a loop without giving any feedback (perhaps d... "

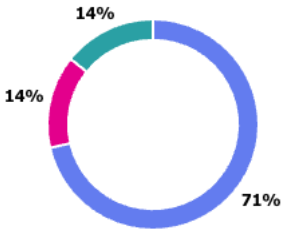
9. How would you rate the technical-scientific support provided during your access?

Excellent	6
Good	1
Fair	0
Poor	0



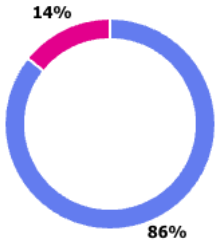
10. Was the support timely and effective?

Always	5
Most of the time	1
Occasionally	1
Rarely	0



11. Did the support staff demonstrate sufficient expertise and understanding of your needs?

Yes, competely	6
Partially	1
No	0



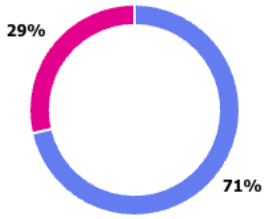
12. Do you have any comments or suggestions to improve the technical-scientific assistance?

0
Risposte

0 risposte inviate

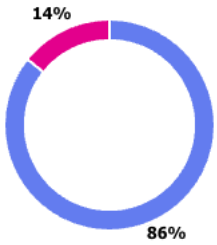
13. How would you rate the quality of helpdesk support?

Excellent	5
Good	2
Fair	0
Poor	0



14. Was the Helpdesk support timely and effective?

Yes, always	6
Sometimes	1
No	0



15. Do you have any comments or suggestions to improve the Helpdesk service?

0
Risposte

0 risposte inviate

16. How clear and accessible was the information provided about the application process by the documentation and the H2IOSC web channels (e.g. Guidelines, List of Services)?

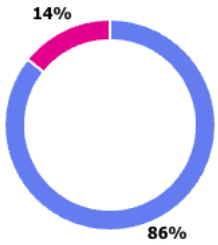
Very clear	4
Clear	3
Somewhat unclear	0
Very unclear	0

17. How easy was it to find the required documentation and guidelines?

Very easy	3
Easy	4
Difficult	0
Very difficult	0

18. Was the timeline for the application process communicated effectively?

Yes, competely	6
Partially	1
No	0



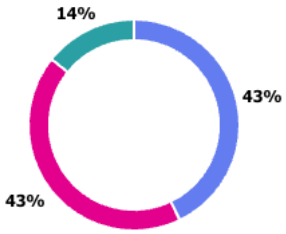
19. Do you have any comments or suggestions to improve the organization or communication of the application process?

0
Risposte

0 risposte inviate

20. How satisfied are you with your overall experience in the H2IOSC TNA/NA program?

Very satisfied	3
Satisfied	3
Neither satisfied nor dissatisfied	1
Dissatisfied	0



21. Would you recommend the H2IOSC TNA/NA program to others?

22. Do you have any additional feedback or suggestions for improvement?

0
Risposte

0 risposte inviate

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