



CENIEH

Centro Nacional de Investigación
en Evolución Humana

ANNUAL ACTIONS AND PROJECTS PLAN

Financial year 2026

CONTENTS

I. Background	1
II. Objectives and actions.....	2
III. Summary table of the principal investments planned for fiscal year 2025.....	17
IV. Summary table of objectives and indicators.....	18

I. Background.

The year 2025 has been a particularly significant year for the CENIEH, coinciding with the start of the execution of the new Strategic Plan 2025–2028 and the receipt of a highly positive evaluation by the Advisory Committee on Singular Infrastructures (CAIS). This evaluation has led to the revalidation of the CENIEH in the Map of Unique Scientific and Technical Infrastructures (ICTs), constituting an explicit recognition of both the high degree of compliance with the previous strategic plan (2021–2024) and the solidity of the planning, management and institutional development model consolidated during that period.

Likewise, the CAIS report very positively values the new Strategic Plan 2025–2028, which it recognizes as ambitious, coherent and well aligned with the mission and uniqueness of the CENIEH and the strategic orientation towards the reinforcement of scientific excellence, infrastructure and social impact. In this context, 2025 has launched a new strategic cycle—a year marked by both hard work and significant achievements. These efforts have set the CENIEH on the right course to tackle and accomplish the key scientific and technological goals outlined for 2028.

In terms of scientific excellence and competitive recruitment, the CENIEH has comfortably met its annual objectives. The center published more than a hundred prestigious scientific publications, of which about 70% are open access, underpinning our institution's commitment to open and accessible science. Equally noteworthy is the growing concurrence and success in competitive calls, especially in international programs. This is demonstrated by the strengthening of the CENIEH role in international consortia, including the Centre of Excellence for Transforming the Study of Human Evolution funded by the Australian Research Council, as well as the leadership of a new excavation and research project in the area of Lake Turkana (Africa), supported by the Turkana Basin Institute.

In the area of infrastructure, decisive progress was consolidated in 2025. Highlights include the equipment of the new Paleoproteomics laboratory and the activation of strategic collaborations to boost its activity. New analytical protocols have also been implemented that expand services of the ICTs, including the establishment of the Sr isotope analysis ($^{87}\text{Sr}/^{86}\text{Sr}$) proposed in the Strategic Plan. The excellence and high demand of the infrastructure are evident in the opening rate of around 30% in competitive mode, as well as in a level of requests that, in most cases, exceeds the maximum capacity of the laboratories.

The increase and diversification of the Center's reference collections advances through a synergistic and coordinated activity between the Experimental Archaeology and Taphonomy laboratories, the Collections, Conservation and Restoration Area, and the 3D Mapping and Analysis laboratory. These initiatives allow the creation of valuable resources available to the

scientific community and, increasingly, in a digital format that facilitates interoperability and sustainability while contributing to the protection of heritage.

In communication and dissemination, the CENIEH reinforced its social knowledge transfer in 2025, with special attention to the expansion of inclusive formats, such as easy-to-read materials in the signage of our infrastructure and the involvement of staff in the provision of didactic resources adapted to diverse audiences. These activities are carried out under the institutional conviction that scientific knowledge reaches its full meaning when it is shared and built in dialogue with society.

Finally, it is worth highlighting the impetus given to the development of the Action Plan linked to the HR Excellence in Research seal and the renewal of the ISO 9001:2015 certification, consolidating an institutional framework aimed at continuous improvement.

The Annual Actions and Projects Plan 2026 sets out the CENIEH's priorities and lines of action for the current year, forming part of the broader rollout of the Strategic Plan 2025–2028, which it continues to implement at an operational level. In this context, the objectives and actions in this document have been formulated in a manner consistent with the Strategic Plan. To facilitate traceability between both planning instruments, each objective in the Annual Plan will indicate the corresponding reference to the Strategic Objectives (SO), Objectives (O), Strategies (S) and Actions (A) of the Strategic Plan under which it falls.

II. Objectives and actions.

In 2026, the CENIEH will focus its efforts on consolidating the progress made in previous years and on deepening key lines of action related to scientific excellence, strengthening its unique infrastructures and expanding its services and analytical capabilities. This strategic orientation translates into actions aimed at both the progressive specialization of the laboratories and their opening to the scientific community in a competitive manner, reinforcing the role of the Center as a leading research infrastructure.

Running across all areas, the 2026 Annual Plan incorporates measures aimed at promoting open science practices, improving internal processes, and fostering a working environment grounded in quality, transparency, and professional development. Additionally, actions aimed at the social outreach and institutional visibility of the CENIEH are strengthened, including leadership in the organization of international scientific events and the development of knowledge transfer and dissemination activities targeting diverse audiences.

S.O.1. Promote excellence in scientific and technical production.

This annual objective directly aligns with S.O.1 of the Strategic Plan, which establishes the generation of excellent scientific knowledge, research leadership, and the production of high-impact results as the central pillars of the CENIEH. It also includes the development of new protocols and analyses that, while allowing the expansion of the CENIEH in new areas of R+D+I, enrich the offer of infrastructure services.

O.1. Enhance research leadership and quality.

O.1.1. Promote participation in competitive calls for funds and human resources (S.O.1, O.1, S.1, A.1).

The Strategic Plan envisages, by the end of the 2025–2028 period, an average of approximately 20 competitive applications for financial and human resources, proportional to the size of the workforce and the capacity to absorb co-financing. However, this volume is subject to year-on-year variations depending on the validity and duration of awarded projects, given that a researcher with an active project will not reapply to a call until the previous one has concluded. 2025 was an especially successful year in terms of applying for and obtaining multi-year funding, including national large-scale projects, like the calls for the AEI/MCIU National Plan, and the Juan de la Cierva and Ramón y Cajal contracting grants, as well as international projects. The latter include initiatives such as the Centre of Excellence for Transforming Human Origins, funded by the Australian Research Council, as well as projects associated with the excavation of the Turkana deposits that underline the Center's contribution to global advances in its field of research.

On this basis, the objective is to submit at least 15 competitive applications, 3 of them to international calls, in order to sustain active participation in attracting external financing and strengthen the international projection of CENIEH.

- Indicator: Participation in at least 15 requests for resources in competitive calls, five of them international (Yes/No)

- Verifier: Document issued and validated by the Project Department certifying participation in national/international competitive resource calls in 2026.

O.1.2. Promote publication in SCI/SSCI and equivalent open access journals (S.O.1, O.1, S.2, A.2).

At the start of the new Strategic Plan, and taking as a reference the 2025 performance, the CENIEH aims to consolidate and strengthen a high level of impact scientific production, while maintaining a clear vocation for open access. This is in line with the principles of the

DORA Declaration (Declaration on Research Assessment of San Francisco) and the open science policies promoted nationally and internationally.

The scientific production recorded in 2025, with more than a hundred publications and a prominent presence in journals of recognized international prestige, constitutes the starting point for this objective. On this basis, in 2026, and in alignment with the targets set out in the Strategic Plan, the CENIEH aims to maintain a four-year moving average of publications above 92 articles, as well as ensuring that the four-year moving average of the open access percentage reaches at least 60%. This objective will consolidate the visibility, accessibility and international projection of the research produced at the CENIEH.

- Indicator: Four-year moving average of more than 92 articles, with an open access percentage above 60% (Yes/No).

- Verifier: Document validated by the Director listing the publications and the percentage of these that are in open access.

O.1.3. Promote leadership and participation in prestigious paleontological and archaeological excavations (S.O.1., O.1, S.3, A.3).

The archaeological and paleontological excavation activity constitutes one of the structural elements that define the scientific model of the CENIEH, placing the center in a unique position within the R+D+I system. The direct involvement in this type of interventions allows not only to generate frontier knowledge, but also to ensure scientific autonomy in access to key materials for the study of human origin and evolution.

From this perspective, excavation leadership is not conceived only as a field activity, but as the starting point of complete research chains, which integrate competitive projects, laboratory analysis and impact scientific production. The active participation of CENIEH research staff in landmark excavations, both nationally and internationally, also reinforces the visibility of the center and its ability to articulate long-term interdisciplinary projects. The value of this activity lies not so much in the absolute number of excavations carried out as in the scientific relevance of the associated projects, the degree of responsibility assumed by the center's staff and the quality of the results obtained. However, the number of active excavations and field interventions is used as an operational monitoring indicator, which allows the intensity and continuity of this line of action to be monitored.

In this framework, the four-year moving average for the period 2022-2025 is 25 excavations and field interventions (25 in 2022, 26 in 2023, 28 in 2024 and 21 in 2025). By 2026, the objective is to consolidate this participation and continue to strengthen the leadership of the CENIEH in excavations that are strategic for the scientific development of the center.

- *Indicator: Maintenance of the four-year moving average (25) of excavations and field interventions (Yes/No).*

- *Verifier: Document validated by the Director with the list of excavations and field interventions during the year 2026.*

O.2. Expand and diversify the R+D+I areas of the CENIEH.

O.2.1. Promote the development of a line of Molecular Paleobiology (S.O.1, O.2., S.4., A.4).

In continuity with the launch of the Paleoproteomics and Ancient DNA Laboratory, the 2026 exercise is proposed as a stage aimed at the consolidation and progressive specialization of this strategic infrastructure for CENIEH. The objective of this action is the acquisition of a MALDI-TOFMS (Matrix-Assisted Laser Desorption/Ionization – Time of Flight Mass Spectrometry) system that allows the analysis of ZooMS (Zooarchaeology by Mass Spectrometry) in its entirety in our infrastructure. The incorporation of this specialized equipment will allow an analytical process of high scientific value to be completed internally, reinforcing the technical autonomy of the Center, reducing dependence on external infrastructures and optimizing response times.

This advance is part of a natural evolution of the laboratory and responds to a strategic commitment to position CENIEH as a national and international reference in the development and application of paleoproteomic techniques. The actions planned for 2026, include the preparation of the technical and administrative specifications and the launch of the tender procedure for their acquisition, installation and commissioning.

- *Indicator: Award to the supplier of the purchase of a Maldi-TOF MS (Yes/No).*

- *Verifier: Agreement to award the purchase of a MALDI-TOFMS for the Paleoproteomics Laboratory of the CENIEH.*

O.2.2. Promote the development of new isotopic applications for dating, paleodiet, and paleomobility and provenance studies (S.O.1., O.2, S.6, A.6).

O.2.2.1. Implementation of U-Pb dating in dissolution at the CENIEH (S.O.1., O.2, S.6, A.6).

During 2026, the implementation of the U–Pb dating methodology in solution is planned for the CENIEH's Uranium Series laboratory, as a strategic step towards expanding its chronological capabilities over a four-year period. Beyond the consolidated capabilities of the U–Th system, the incorporation of the U–Pb system will extend the temporal range of dating,

enabling the study of carbonates, speleothems and other archaeological and geological materials at chronologies exceeding 500 ka. This methodology is especially relevant for materials that have limitations or uncertainties in U–Th, such as those with low uranium content, diagenetic alterations or open systems, thereby expanding the spectrum of contexts datable by the laboratory.

The implementation of U–Pb in solution also constitutes a fundamental enabling step for the future development of in situ applications, by laying the necessary methodological foundations for the progressive integration of techniques such as laser ablation coupled with MC-ICP-MS. This approach will allow us to move towards analyses with higher spatial resolution, less sample destruction and a better correlation between isotopic, chronological and contextual information, especially relevant in paleoenvironmental and paleoanthropological studies.

- *Indicator: Implementation of the U-Pb dating method in dissolution at the CENIEH (Yes/No).*

- *Verifier: Accreditation documentation (procedure, technical instruction, etc., as appropriate) for the operational implementation of the U-Pb dating method in dissolution at the CENIEH's Uranium-Series laboratory).*

0.2.2.2. Development of Pb isotope analysis (S.O.1., O.2, s.6, A.6).

While isotope analysis to resolve chronological issues is widespread, more and more teams are asking questions related to the provenance of archaeological and geological materials, as well as paleomobility, paleodiet, and paleoclimate. So, it's necessary to expand the analytical capabilities of the CENIEH Uranium-Series Laboratory, moving towards the implementation of new geochemical applications in situ, in line with objective O.3. of the CENIEH Strategic Plan 2025-2028.

The implementation of Pb isotope analysis is supported by a workflow analogous to that already established for Sr isotopes in 2025, which facilitates an efficient and progressive implementation. The evaluations carried out in recent years on the clean laboratory blanks and the instruments have shown very low levels of Pb, confirming the technical feasibility of this analytical line. With this advance, the CENIEH will be able to offer new applications, open up new lines of research and respond to the growing need of the scientific community to have tools with greater spatial resolution for the study of the findings, movements, demographics and mobility of prehistoric human and faunal communities.

- *Indicator: Implementation of the Pb isotope analysis in the CENIEH's Uranium-Series laboratory (Yes/No).*

- Verifier: Accreditation documentation (procedure, technical instruction, etc., as appropriate) for the operational implementation of Pb isotope analysis at the CENIEH's Uranium-Series laboratory.

S.O.2. Reinforce the uniqueness of the infrastructure.

At present, the CENIEH has established itself as a leading center in the geological and chronological analysis of very diverse sedimentary and temporal contexts, providing answers to interdisciplinary questions about the origins of human beings. This capacity is based on constant updating and improvement of its infrastructures, methods and protocols.

It is also essential to focus on bolstering those activities and services that reinforce the center's distinctive character and identity. These include the expansion and diversification of its archaeological and palaeontological collections, along with the mechanisms that ensure their accessibility to the scientific community.

Furthermore, the transversal laboratories are consolidating their role as the main catalysts for collaborations with the industrial and business sectors, fostering technology transfer as a mechanism that transforms scientific results into tools, procedures and solutions to real-world demands. In 2026, actions will be developed to strengthen and boost the relationship of the CENIEH with business and industrial partners.

O.3. Maintain ESR laboratory capabilities

O.3.1. Replace one of the X-band spectrometers (S.O.2., O.5, E.9, A.9).

During the 2025 financial year, the tender procedure for the acquisition of a tabletop X-band spectrometer was initiated and processed, with all administrative actions incumbent upon the Center having been completed. Consistent with this planning, the objective for the 2026 exercise is the installation, validation and operational commissioning of this equipment in the ESR laboratory. The addition of this spectrometer will strengthen the laboratory's analytical capacity, ensuring continuity of service in the event of any issues with the main equipment. It will also improve performance in specific applications, particularly in the dating of teeth. This aligns with the quality standards required of this facility, which is in high demand among the Quaternary scientific community.

The actions planned for 2026 include the reception of the equipment, its installation by the supplier, the technical verification of its correct operation, the initial calibration, the basic training of the personnel involved and its integration into the operational procedures of the laboratory.

- *Indicator: Installation and operational commissioning of the new tabletop X-band spectrometer in the ESR laboratory (Yes/No).*

- *Verifier: Accreditation documentation (procedure, technical instruction, etc., as appropriate) for the installation and operational start-up of the new tabletop X-band spectrometer at the ESR laboratory.*

O.4. Improve and enhance the capacities of the Collections, Conservation and Restoration Area.

O.4.1. Increase the Experimental Collection of Traceology (ECT) (S.O.2., O.8, E.12, A.12).

In 2024, the digitization of the specimens that make up the Tafotheque (TAPHO) began in an initiative that synergistically articulates the activity of the Experimental Archaeology and Taphonomy laboratories and the Digital Mapping and 3D Analysis laboratory. In 2026, the Laboratory of Experimental Archaeology and Taphonomy aims to drive the growth and consolidation of the ECT collection, a strategic asset for the systematic documentation and interpretation of traces on archaeological materials. These traces reflect the specific activities for which the materials were used. In this context, the ECT collection is directly linked to the development of the TAPHO collection, given that the incorporation of new samples depends on the skinning and processing of new animal specimens.

With the methodological bases for the skeletonization and degreasing of specimens being established in 2025, 2026 will be fundamental for the dynamization of the ECT with the inclusion of new specimens.

- *Indicator: Inclusion of new specimens in the ECT (Yes/No)*

- *Verifier: Document issued and validated by the Collections Department listing the new samples added to the ECT in 2026.*

O.4.2. Increase the LITHO Library (S.O.2., O.8, E.12, A.12).

By 2026, the Laboratory of Experimental Archaeology and Taphonomy aims to increase and diversify the LITHO collection, reinforcing its territorial representativeness and its usefulness as a reference collection for technological studies and studies of lithic origin. There are two ways in which new samples are added to the LITHO collection: donations and systematic surveys. In 2025, there was a remarkable growth in the collection, with the entry of 399 samples, from both internal and external donations and systematic surveys financed by competitive projects and by the CENIEH itself. This high volume highlights the collection's potential for growth and the need to strategically structure and plan its expansion. In this context, by 2026 the sample of the Center's collection of raw materials is expected to be increased, with proper geographical referencing.

- *Indicator: Inclusion of new specimens in the LITHO (Yes/No)*

- *Verifier: Document issued and validated by the Collections Department listing the new samples added to the ECT in 2026.*

Objective O.4.3. Physical conditioning in the Armoured Room of the lithic pieces of greater scientific value (S.O.2, O.8, E.12).

In 2026, the CENIEH aims to prepare and progressively incorporate lithic pieces of exceptional scientific value into the Vault Room, thereby extending the scope of this space beyond the preservation of unique human and faunal bone remains. The Vault Room currently preserves the entire human fossil collection deposited in the CENIEH, composed of approximately 500 remains, and is in the process of storing the fauna collection of greatest scientific value. At the same time, the CENIEH safeguards more than 40,000 lithic pieces from the various sites in the Sierra de Atapuerca, which are currently catalogued and organized in containers in Collection Room 2, enabling their consultation and study by the scientific community.

However, within this set there are lithic pieces of unique cultural and scientific relevance that, due to their exceptional nature, require enhanced conservation and safety conditions, equivalent to those applied to human remains and unique faunal specimens. Until now, the Vaulted Room had mainly been used for depositing bone materials; however, the addition of a new researcher in Experimental Archaeology and Taphonomy allows us to systematically address the selection, documentation and transfer of lithic pieces to this maximum-security space.

With this objective, the CENIEH will continue to advance in the comprehensive protection of its most sensitive scientific heritage, ensuring the long-term preservation of the most emblematic lithic pieces against any eventuality while also strengthening the management and safeguarding standards of the center's reference collections.

- *Indicator: Transfer and conditioning of a set of lithic pieces selected for their scientific value to the Vaulted Room (Yes/No).*

- *Verifier: Report issued and validated by the Conservation and Restoration Area confirming the effective transfer and conditioning of the selection of parts to the Vault Room (Yes/No).*

Objective O.4.4. Commissioning of the portable high-resolution 3D microscope (S.O.2., O.8, A.14).

During the 2025 fiscal year, the procurement process for the portable high-resolution 3D microscope was launched, as part of efforts to strengthen the CENIEH's analytical capabilities and to meet the increasing sophistication and demands of the Center's research projects. This equipment is particularly useful for collecting data and expanding high-resolution three-

dimensional databases from collections that cannot be moved, both in national and international institutions. It is also a valuable resource for documenting experimental processes within the fields of Experimental Archaeology and Taphonomy. Following the acquisition of this microscope, the objective for 2026 is to bring it into full operation, ensure its effective integration into the scientific and technical workflows of the Center.

- *Indicator: Commissioning of the portable high-resolution 3D microscope (Yes/No).*

- *Verifier: Accreditation documentation (procedure, technical instruction, guide, etc., as appropriate) for the commissioning of the portable high-resolution 3D microscope.*

O.5 Promote the opening of the essential laboratories to competitive access.

The recent CAIS report recognized the CENIEH with a total of eight facilities rated as Outstanding. Among them is the new Paleoproteomics and Ancient DNA Laboratory, which must, by the end of the 2025–2028 four-year period, meet the conditions applicable to all facilities granted this designation. Among these conditions is the requirement to offer competitive access to at least 20% of each facility's operational capacity.

O.5.1. Launch at least one competitive access call for the Luminescence Laboratory (S.O.2., O.12, S.18, A.19).

This laboratory has reached the maximum capacity for use, as a result of the combination of competitive and non-competitive demand, which shows the high level of interest it arouses among the scientific and technological community. Its activity is not limited to dating ancient periods. It has gradually expanded to include more recent prehistoric chronologies, thereby broadening its user base—especially in the field of archaeology—and promoting its application to the study of human constructions and anthropic contexts.

- *Indicator: Launch at least one competitive call for the Luminescence Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).*

- *Verifier: Report issued and validated by the Support Management Area certifying the number of competitive calls launched in the laboratory and the % of opening offered in 2026.*

O.5.2. Launch at least one competitive access call for the ESR Laboratory (S.O.2., O.12, S.18, A.19).

During 2025, the laboratory carried out intense and wide-ranging scientific activity in the fields of geochronology and paleoenvironmental reconstruction. It played a prominent role in international studies on Quaternary chronology, landscape evolution, and human and faunal

occupations in Africa, Europe, Asia, and Oceania. This versatility of application across diverse contexts and chronologies makes it an essential and highly sought-after facility.

- *Indicator: Launch at least one competitive call for the ESR Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).*

- *Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.*

O.5.3. Launch at least one competitive access call for the Archeomagnetism Laboratory (S.O.2., O.12, S.18, A.19).

CENIEH's Archeomagnetism laboratory offers specialized techniques for the magnetic characterization of archaeological and geological materials, essential for the chronological and paleoenvironmental contextualization of sites. Consistent with the transversal nature of this facility and with the opening criteria established for the unique infrastructures, the objective for the 2026 financial year is to advance its operational standardization through the launch of a competitive access call.

- *Indicator: Launch at least one competitive call for the Archeomagnetism Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).*

- *Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.*

O.5.4. Launch at least one competitive access call for the Computerized Axial Microtomography Laboratory (S.O.2., O.12, S.18, A.19).

This laboratory has been offered in competitive-access mode since 2019 and hosts users and projects of very diverse nature and profiles, in keeping with its distinctly cross-disciplinary character. It is also one of the most in-demand facilities, with growing use in the private sector—particularly for material characterization and quality analysis—which highlights its effective transfer to the socioeconomic sphere.

- *Indicator: Launch at least one competitive call for the ESR Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).*

- *Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.*

O.5.5. Launch at least one competitive access call for the Uranium Series Laboratory (S.O.2., O.12, S.18, A.19).

CENIEH's Uranium-Series Laboratory is in a process of progressive expansion of its portfolio of services and isotopic techniques, incorporating new analytical applications that expand its capacity to address chronological, provenance and paleoenvironmental reconstruction studies in archaeological and geological contexts. This growth reinforces the strategic nature and scientific projection of the facility within the infrastructure of the Center.

Consistent with this evolution and the opening criteria established for unique infrastructures, the objective for the 2026 financial year is to maintain and strengthen its services to the research community through the launch of a competitive access call.

-Indicator: Launch at least one competitive call for the Uranium-Series Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).

- Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.

O.5.6. Launch at least one competitive access call for the Conservation and Restoration Laboratory (S.O.2., O.12, S.18, A.19).

This laboratory began offering competitive access in 2022 and provides a wide range of services, with a flagship focus on the conservation and restoration of archaeopaleontological collections, primarily composed of bone and lithic materials. This facility is progressively receiving increasing demand for work on other types of materials, such as metals. This trend has strengthened especially since the introduction in 2025 of the surface-cleaning laser, a methodological innovation applied to the restoration and preservation of particularly delicate materials. This addition has made it possible to diversify the types of materials that can be treated, broaden the user profile, and extend the laboratory's applications to more recent archaeological periods. It has thus reinforced its cross-disciplinary nature and its ability to respond to new scientific and heritage-related demands.

-Indicator: Launch at least one competitive call for the Conservation and Restoration Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).

- Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.

O.5.7. Launch at least one competitive access call for the Cosmogenic Nuclide Dating Laboratory (S.O.2., O.12, S.18, A.19).

This laboratory covers a wide range of isotopic systems, spanning from absolute dating to the study of landscape evolution. These are fields of growing scientific and social interest, given their potential contribution to the critical analysis of the relationship between humans and their environment. Open to competitive access since 2023, this infrastructure adds to its portfolio of relevant methodological innovations, such as the direct dating of stone tools. All of these services are available to the national and international user community.

- *Indicator: Launch at least one competitive call for the Cosmogenic Nuclide Dating Laboratory (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).*

- *Verifier: Report drafted by the Support Management Area certifying the number of competitive calls launched in the laboratory and the percentage of access offered in 2026.*

O.6. Promote the diversification of the CENIEH through its involvement in infrastructure networks and collaborations with the private, industrial and heritage sectors.

O.6.1. Promote the participation of CENIEH in the Spanish E-RIHS node (S.O.2, O.12, S.19, A.20).

As part of Spain's incorporation into E-RIHS ERIC (European Research Infrastructure for Heritage Science – European Research Infrastructure Consortium) and with the aim of strengthening the CENIEH's presence in European heritage science networks, the Center will, during 2026, promote its active participation in the Spanish E-RIHS node. This will consolidate CENIEH's role as a leading infrastructure, expanding and diversifying its user community through mechanisms for access, coordination and the provision of services aligned with European standards. To this end, the CENIEH will formalize its framework of participation in E-RIHS.es through accession to the corresponding agreement.

- *Indicator: Formalize the participation of CENIEH in the Spanish E-RIHS node (Yes/No).*

-*Verifier: Signed document formalizing the participation of CENIEH in the Spanish E-RIHS node.*

O.6.2. Promote collaboration with agents in the business and industrial field (S.O.2, O.12, s.19, A.20).

In keeping with the CENIEH's nature as a unique and open infrastructure, efforts in 2026 will focus on strengthening ties with partners in the business and industrial sectors. The goal is to broaden and diversify the user community and to promote the two-way transfer of knowledge. The importance of reinforcing this type of interaction was included as an opportunity for improvement in the evaluation report of the CAIS to the CENIEH. This objective highlights the need to establish stable channels of communication that make it possible to identify collaboration opportunities and to present the Center's capabilities and services—those with potential for applied value—in an accessible way.

To this end, actions will be promoted aimed at facilitating contact and collaboration with entities in the sector (e.g., technical conferences, sectoral meetings, demonstration sessions, formal work meetings, pilots and collaboration initiatives), with the aim of generating concrete opportunities for interaction and joint development.

-Indicator: Implementation of at least two actions that promote contact with entities in the business or industrial sector (Yes/No).

- Verifier: Verification document (program, minutes, contract, agreement, etc., as appropriate) for implementing at least two relationship and/or collaboration actions with entities in the business or industrial field.

S.O.3. Increase the social impact and visibility of the CENIEH's activity.

With this action, the CENIEH reinforces its role as an active agent in the closest environment using science as an instrument of social inclusion, territorial cohesion and human development, and consolidating a line of work aligned with the principles of social sustainability and institutional responsibility (S.O.3, O.14, S.21 and S.22).

O.7. Promote participation in training and teaching programs

O.7.1. Promote the incorporation of training into the CENIEH (S.O.3., O.13, S.20, A.21 and A.22).

The CAIS report highlights the need to strengthen the participation of CENIEH in the training of scientific and technical personnel, as a key element for the sustainability and future projection of the center. The integration of the CENIEH into academic training will be achieved through collaboration with educational institutions, particularly with universities with which it maintains established ties, such as the University of Burgos.

In this context, the objective for 2026 is to strengthen the Center's training activity by promoting the incorporation of trainees and encouraging the CENIEH's participation in educational and specialized training programs. To this end, the recruitment of predoctoral funding will be actively promoted, as well as the addition of predoctoral staff through thesis contracts, training stays or internship programs, within the framework of agreements and institutional collaborations.

- Indicator: Formalize the addition of at least 5 people (Yes/No).

- *Indicator: Document issued and validated by the HR area certifying the number of additions of a training nature during 2026 (doctoral students, Master's students, internships...).*

O.8. Promote science with and for society

O.8.1. Develop outreach and training activities for disadvantaged groups (S.O.3., O.14, S.21, A.25; S.22, A.26).

This initiative is part of the social vocation of CENIEH and its commitment to accessible, inclusive and transformative science, aimed at expanding the scope of scientific communication activities towards groups traditionally far from the cultural and training circuits.

In this context, and in line with the Strategic Plan regarding the adaptation of outreach calendar events for disadvantaged groups (S.O.3. O.14, S.21, A.25) and with the aim of enhancing collaboration with the immediate local environment (S.22, A.26), the CENIEH plans to implement a specific line of collaboration with the Burgos penitentiary center by 2026. The collaboration will take shape through specific training workshops focused on tasks related to the Center's scientific and heritage activities, such as material sorting. When possible, it will also include the organization of visits to excavation sites or scientific spaces, conceived as tools for direct engagement with the territory, science, and shared heritage. These training and inclusive science outreach activities are expected to contribute to the processes of training, empowerment, social integration and reintegration of persons deprived of liberty.

- *Indicator: Start collaboration with the Burgos penitentiary center and hold at least one training and/or informative activity during 2026 (Yes/No).*

- *Verifier: Verification document (program, minutes, report) for implementing a formal collaboration with the prison and implementing at least one specific training and/or dissemination activity during 2026.*

O.9. Promote the international projection of the CENIEH's activity.

O.9.1. Promote the leadership of the CENIEH in holding international scientific events (S.O.3., O.15, S.24, A.28).

In line with the CENIEH's Strategic Plan, and with the aim of strengthening the Center's institutional profile as an active agent in knowledge transfer and in the scientific and cultural revitalization of the region, the year 2026 will be marked by the CENIEH's leadership in organizing the international conference ESHE 2026 (European Society for the Study of Human Evolution) in the city of Burgos.

The organization of ESHE 2026 represents a milestone of special significance for the CENIEH, both for its scientific impact and for its social, cultural, and economic dimensions, as it will bring together in Burgos the international community of leading experts in the study of human evolution. This event offers a unique opportunity to make the Center's scientific activity visible and strengthen its international positioning.

The CENIEH's leadership in ESHE 2026 involves the overall coordination of the event, including the scientific organization, program development, and the pursuit of sponsorships and institutional support. It also entails coordination with local, regional, and national entities for the organization of complementary activities, scientific visits, and outreach initiatives. These actions will be developed in line with Burgos' projection strategies within the framework of its candidacy for European Capital of Culture 2031.

-Indicator: Coordination of the CENIEH of the celebration of ESHE in Burgos and effective celebration of the congress.

- Verifier: Final report issued and validated by the Communication Area that documents the holding of the congress and the local organization/management led by the CENIEH (Yes/No).

S.O.4. Foster an optimal framework for professional development, productivity and sustainability.

The CENIEH seeks to implement policies that promote equality and transparency, ensuring the protection of both individuals and the information handled in the course of its activities.

O.10. Implement the Action Plan for the HR Excellence in Research Award

Building on the progress made during the previous year in activating the Working Groups and initiating the Action Plan, the objective for 2026 is to advance in the effective implementation of structural measures aimed at improving professional development, the quality of evaluation processes, and the coherence of the CENIEH's human resources policies, in line with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers.

The actions planned for this exercise are directly based on the proposals made by the Working Groups and focus on the implementation of key instruments of the Action Plan.

O.10.1. Implementation of the CENIEH Mentoring Plan (S.O.4., O.16, S.25, A.29).

Within the framework of the HR Excellence in Research Award Action Plan and based on the proposals developed by the Working Groups, the CENIEH aims in 2026 to approve and

implement the Mentoring Plan as a structural tool to support the integration, guidance, and professional development of research and technical staff.

The implementation of the Mentoring Plan will strengthen the transmission of knowledge, promote career planning and contribute to a more inclusive and transparent working environment.

- *Indicator: Approval and operational implementation of the CENIEH Mentoring Plan (Yes/No).*

-*Indicator: Documentation accrediting the approval of the Mentoring Plan and communication to the staff (e.g. agreement/resolution and internal communication, as appropriate).*

O.10.2. Review of the personnel evaluation process (S.O.4., O.16, S.25, A.29)

With the aim of continuing to improve human resources policies, and in line with the HR Excellence in Research Award Action Plan, a review of the staff evaluation process will be undertaken in 2026. This review will take into account both the proposals made by the Working Groups and the concerns and requests expressed by CENIEH staff regarding the process.

To this end, a specific working group will be set up to analyze the current model, identify possible areas for improvement and, where appropriate, prepare a proposal for modification.

- *Indicator: Review and analysis of possible improvements to the CENIEH staff evaluation process (Yes/No).*

- *Verifier: Final report of the review and proposals signed and validated by the Director and the working group.*

O.11. Ensure compliance with information protection policies within the framework of the National Security Scheme (NSS)

A.11.1. Recertification in the National Security Scheme (NSS) (SO.4., O.16, S.26, A.30)

It is the objective of the Center to maintain and reinforce an adequate level of information security through recertification in the National Security Scheme (NSS) with a basic category, guaranteeing continuous compliance with the principles and requirements established in current regulations. This recertification ensures the confidentiality, integrity, availability, authenticity and traceability of the information and services managed by the Center, as well as demonstrating the institutional commitment to the continuous improvement of the security and protection of the information systems against possible risks and threats.

- *Indicator: Obtaining the NSS recertification (Yes/No).*

-*Verifier: NSS recertification document (Yes/No).*

A.11.2. Preparation and approval of the Data Management Plan (SO.4., O.16, S.26, A.30)

The development and approval of a Data Management Plan will establish a clear and structured framework for the management of data produced in CENIEH research projects. This need was specifically raised as a need for improvement in the CAIS REPORT. This plan will define how data is organized, documented, stored and preserved. It will ensure efficient and safe management, in accordance with technical, legal and ethical requirements. It will also facilitate the reuse of information and the verification of scientific results. Finally, it will contribute to the long-term preservation of data, regulatory compliance and the principles of open science.

- *Indicator: Preparation and approval of a PGD for the CENIEH (Yes/No).*

- *Verifier: PGD document approved by Management (Yes/No).*

III. Summary table of the principal investments planned for 2026.

Project	Related objective	Estimated cost	Strategic Plan Investment Code
Acquisition of tabletop X-band spectrometer *	S.O.2., O.3.1	€92,000	ICTS-SR-02
Acquisition of Maldi-TOF MS for the Paleoproteomics Laboratory	S.O.1, O.2.1	€450,000	ICTS-PP-02
Acquisition of high-resolution portable microscope*	S.O.2., O.4.4.	€140,640	ICTS-AE-01
Renewal of the Uninterruptible Power Supply System		€100,000	ICTS-02

*The project was started in the previous year but the expense will be charged in the current year.

IV. Summary table of objectives and indicators

Strategic objective (S.O.)	Objective	Strategic Plan Reference	Indicator	Verifier	Weight (%)
S.O.1. Promote excellence in scientific and technical production (40%)	O.1.1. Promote participation in competitive calls for funds and human resources	S.O.1, O.1, S.1, A.1	Participation in at least 15 requests for resources in competitive calls, five of them international (Yes/No)	Document issued and validated by the Project Area that certifies participation in competitive applications in 2026, including its national/international nature.	10
	O.1.2. Promote publication in SCI/SSCI and equivalent open access journals	S.O.1, O.1, S.2, A.2	Four-year moving average of more than 92 articles, with an open access percentage above 60% (Yes/No).	Document validated by the Director that lists the publications considered for the four-year moving average and the percentage of publications in open access.	10
	O.1.3. Promote leadership and participation in prestigious paleontological and archaeological excavations	S.O.1, O.1, S.3, A.3	Maintenance of the four-year moving average (2022–2025: 25) of excavations and field interventions in which the CENIEH participates (Yes/No).	Document validated by the Director with the list of excavations and field interventions in which the CENIEH participates in 2026.	5
	O.2.1. Promote the development of a line of Molecular Paleobiology	S.O.1, O.2, S.4, A.4	Award of the purchase contract for a MALDI-TOF MS to a supplier (Yes/No).	Agreement/decision to award the purchase contract for a MALDI-TOFMS for the CENIEH's Paleoproteomics Laboratory.	5
	O.2.2.1. Promote the development of new isotopic applications: Implementation of U-Pb dating in solution	S.O.1, O.2, s.6, A.6	Implementation of the U-Pb dating method in dissolution at the CENIEH (Yes/No).	Documentation accrediting the operational implementation (e.g., procedure/technical instruction/registration, as appropriate) of the U–Pb method in solution in the Uranium Series laboratory.	5
	O.2.2.2. Promote the development of new isotopic applications: Development of Pb isotope analysis	S.O.1, O.2, s.6, A.6	- Indicator: Implementation of the Pb isotope analysis in the CENIEH's Uranium-Series laboratory (Yes/No).	Documentation accrediting the operational implementation (e.g., procedure/technical instruction/registration, as appropriate) of the analysis of Pb isotopes in the Uranium Series laboratory.	5
	S.O.2. Strengthen the	O.3.1. Replace one of the X-band spectrometers	S.O.2, O.5, E.9, A.9	Installation and operational commissioning of the new	Documentation accrediting the installation and operational commissioning of the equipment (e.g., minutes/certificate of

distinctiveness of the infrastructure (38%).			tabletop X-band spectrometer in the ESR laboratory (Yes/No).	installation and initial verification/calibration, as appropriate).	
	O.4.1. Increase the Experimental Collection of Traceology (ECT)	S.O.2, O.8, E.12, A.12	Inclusion of new specimens in the ECT (Yes/No).	Document issued and validated by the Collections Department that lists the new samples added to the ECT in 2026.	2
	O.4.2. Increase the litho Library	S.O.2, O.8, E.12, A.12	Inclusion of new specimens in the LITHO (Yes/No).	Document issued and validated by the Collections Department that lists the new samples added to the LITHO in 2026.	2
	O.4.3. Physical conditioning of the lithic pieces of highest scientific value in the Vault Room	S.O.2, O.8, S.12	Transfer and conditioning of a set of lithic pieces selected for their scientific value to the Vaulted Room (Yes/No).	Report issued and validated by the Conservation and Restoration Area that confirms the transfer and conditioning of the selected set in the Vault Room.	3
	O.4.4. Commissioning of the portable high-resolution 3D microscope	S.O.2, O.8, A.14	Commissioning of the portable high-resolution 3D microscope (Yes/No).	Accreditation documentation (e.g., procedure/technical instruction/guide/registration, as appropriate) for the operational commissioning of the microscope.	2
	O.5.1. Launch at least one competitive access call for the Luminescence Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.5.2. Launch at least one competitive access call for the Luminescence Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.5.3. Launch at least one competitive access call for the Archaeomagnetism Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.5.4. Launch at least one competitive access call for the Micro-Computed Tomography Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3

			maximum capacity (Yes/No).		
	O.5.5. Launch at least one competitive access call for the Uranium-Series Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.5.6. Launch at least one competitive access call for the Conservation and Restoration Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.5.7. Launch at least one competitive access call for the Cosmogenic Nuclides Laboratory	S.O.2, O.12, S.18, A.19	Launch at least one competitive call (Yes/No) and open at least 20% of its calculated maximum capacity (Yes/No).	Report issued and validated by the Support Management Area certifying the number of competitive calls and the % of opening offered in 2026.	3
	O.6.1. Promote the participation of CENIEH in the Spanish E-RIHS node	S.O.2, O.12, s.19, A.20	Formalize the participation of CENIEH in the Spanish E-RIHS node (Yes/No).	Signed document formalizing the participation of CENIEH in the Spanish E-RIHS node.	2
	O.6.2. Promote collaboration with agents in the business and industrial field	S.O.2, O.12, s.19, A.20	Implementation of at least two actions that promote contact with entities in the business or industrial sector (Yes/No).	Documentation to verify the actions taken (e.g., program/minutes/report/contract/agreement, as appropriate).	2
S.O.3. Increase the social impact and visibility of the CENIEH's activity (13%)	O.7.1. Promote the addition of training into the CENIEH	S.O.3, O.13, S.20, A.21 and A.22	Formalize the addition of at least 5 people in training (Yes/No).	Document issued and validated by the HR Area that certifies the number of training additions made in 2026 (doctoral students, master's students, internships, etc.).	4
	O.8.1. Develop outreach and training activities for disadvantaged groups	S.O.3, O.14, S.21, A.25; S.22, A.26	Start collaboration with the Burgos penitentiary center and hold at least one training and/or informative activity during 2026 (Yes/No).	Document to verify the collaboration and the activity carried out (e.g., program/minutes/report, as appropriate).	2

	O.9.1. Promote the leadership of the CENIEH in holding international scientific events: ESHE 2026 in Burgos	S.O.3, O.15, S.24, A.28	Coordination by the CENIEH of the ESHE 2026 meeting in Burgos and effective holding of the conference (Yes/No).	Final report issued and validated by the Communication Department that documents the holding of the congress, the institutional coordination and the main organizational milestones led by the CENIEH.	7
S.O.4. Foster an optimal framework for professional development, productivity and sustainability (9%)	O.10.1. Implementation of the CENIEH Mentoring Plan	S.O.4, O.16, S.25, A.29	- Indicator: Approval and operational implementation of the CENIEH Mentoring Plan (Yes/No).	Documentation accrediting the approval of the Mentoring Plan and communication to the staff (e.g. agreement/resolution and internal communication, as appropriate).	2
	O.10.2. Review of the personnel evaluation process	S.O.4, O.16, S.25, A.29	Review and analysis of possible improvements to the CENIEH staff evaluation procedure (Yes/No).	Final report of the review and proposals signed and validated by the Director and the working group.	2
	O.11.1. Recertification in the National Security Scheme (NSS)	S.O.4, O.16, S.26, A.30	Obtaining recertification in the National Security Scheme (NSS) (Yes/No).	NSS recertification document/certificate.	3
	O.11.2. Preparation and approval of the Data Management Plan (DMP)	S.O.4, O.16, S.26, A.30	Preparation and approval of a PGD for the CENIEH (Yes/No).	PGD document approved by Management.	2