iCOSHELLs

OPEN CALL: GUIDELINES FOR APPLICANTS

Submission Deadline: 04/02/2026

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1. Introduction

iCOSHELLs in a nutshell

The iCOSHELLs project is a Research and Innovation Action (RIA) funded by the Horizon Europe Programme from the European Commission and as part of the Mission Soil, which began in September 2024 and has a duration of 48 months.

The iCOSHELLs project supports the EU Mission 'A Soil Deal for Europe,' aiming to restore healthy soils by 2030. Specifically, iCOSHELLs focuses on three key objectives: reducing soil pollution and promoting restoration, improving soil structure and biodiversity, and increasing soil literacy among society.

To achieve these goals, iCOSHELLs leverages six Living Labs (LLs) located in the Basque Country, Bulgaria, Greece, Italy, Spain, and Sweden (see further details about each LL in the iCOSHELLs webpage). These Living Labs bring together diverse local stakeholders to co-design and test practical strategies for soil health improvement.

The project employs a systematic approach that strengthens stakeholder capacities, bridges scientific research with practical solutions, enhances understanding of soil indicators, and replicates effective recovery methods. Its ultimate purpose is to develop and validate scalable solutions that can be applied across Europe.

Overview of the Open Call (OC)

The main objective of the Open Call (OC) in iCOSHELLs is to engage and include new stakeholders in the Living Labs (LLs) and to include new innovations and solutions (referred to as prototypes, see definition in Section 3) to be tested by the LL. Successful applicants to the OC will become full actors of the LL and will participate in all further co-creation activities to validate their prototypes in real life settings of the particular LL leading to improve soil health within the iCOSHELLs project. These new stakeholders will be considered for the iCOSHELLs consortium as recipients of Financial Support to Third Parties (FSTP).

Each LL is looking for specific stakeholders and prototypes to be deployed in their LL. Thus, the OC will be divided into 6 sub-calls, one specific for each LL, and the applicants applying for each of the sub-calls should be aligned with the requirements of the specific LL sub-call (see Section 3).

This document provides the relevant information regarding the Open Call promoted under the iCOSHELLs - "INNOVATIVE CO-CREATION SOIL HEALTH LIVING LABs" project. It presents detailed information, rules, and procedures for participation in the iCOSHELLs OC. It addresses who is eligible to participate, how to submit a proposal and what information must be included, how the evaluation process is carried out, the implementation of awarded sub-projects, and additional responsibilities when participating in this OC.

What we offer

The OC will support applicants by providing up to 100% lump-sum funding of the eligible budget of each. For each LL, at least two applications will be selected. Thus, at least 2 stakeholders will be added to each LL. EUR 900.000 will be distributed among the beneficiaries. Each of the beneficiaries can receive a maximum amount of €75.000.

Selected applicants will be cooperating with the iCOSHELLs consortium, and they will be fully included in the co-creation process and the overall working process of iCOSHELLs. The selected beneficiaries will become full actors within their respective LLs and will benefit from the activities and knowledge shared by the project, building capacity and co-implement solutions in their experimental sites, while contributing to the project activities by providing data and participating in the LLs activities and initiatives.

Main advantages of participation in the iCOSHELLs OC:

- Financial Support – Fund your technology validation in iCOSHELLs' LL experimental sites, or stakeholder engagement activities.
- Access to LLs – Test your prototype in collaborative, open environments embedded in real-life conditions.
- Technical & Scientific Guidance – Work with experts in soil science, circular systems, land restoration, and monitoring.
- Policy Impact & Visibility – Be part of the EU's flagship efforts under the Mission Soil, gaining European recognition.
- Stronger Networks & Future Opportunities – Connect with mission-aligned actors for future projects and partnerships.

The iCOSHELLs OC provides Financial Support to Third Parties (FSTP) under Article 20.4 of the Horizon Europe Model Grant Agreement.
The sub-grants will follow the principles of transparency, equal treatment, and non-discrimination, ensuring sound financial management.

2. Timetable and deadlines

What?	When?
Call Opening:	04 December 2025
Deadline for submission:	04 February 2026 (14:00 pm CET)
Eligibility check (communication to those proposals which are considered not eligible):	11 February 2026
Evaluation period:	Mid-February 2026
Submission of letters communicating the evaluation results and informing who are the pre-selected applicants:	Mid-March 2026
Signature of Sub-Grant Agreements:	Beginning April 2026
Start of OC-funded testing:	April – May 2026
End of OC-funded testing[1]:	April – May 2028

[1] This date refers to the formal closure of the sub-granted testing activities and the submission of the final reports for evaluation. The Living Labs established under iCOSHELLs are expected to remain operational beyond this date as sustainable structures supporting future soil-health innovation and replication.

3. Eligibility criteria

All applicants will have to abide to all general requirements described in this section to be considered eligible for the iCOSHELLs OC. Please make sure to read this section carefully.

Definition of "Prototype" in iCOSHELLs

Within iCOSHELLs, all innovations and solutions tested in the Living Labs are referred to as prototypes. A prototype represents a co-created practice, technology, or process designed to address specific soil-health challenges under real-life conditions. Prototypes are tested, refined, and validated through field experimentation, participatory evaluation, and learning cycles. When a prototype demonstrates measurable improvements in soil health, soil literacy, or soil monitoring capacity, it is recognised as a solution.

To reflect the multidimensional nature of soil health, iCOSHELLs distinguishes three complementary categories of prototypes (**A, B or C**):

A. **Soil Intervention Prototypes** – direct actions applied to soils to improve structure, fertility, and ecosystem functions (e.g., soil amendments, irrigation strategies, cover crops, bio-based fertilisers, or drainage innovations).
B. **Soil Literacy Prototypes** – initiatives that indirectly enhance soil health by promoting awareness, behavioural change, and community participation, such as educational programmes, participatory monitoring, and citizen-engagement activities.
C. **Monitoring and Decision-Support Prototypes** – tools and methods for assessing soil condition and supporting management decisions, including sensors, remote-sensing platforms, digital dashboards, and decision-support systems.

Many prototypes integrate aspects of more than one category, for example, a monitoring system that also provides farmers with decision-making tools about irrigation (A+C), or a participatory restoration activity that serves as both a management practice and a literacy action (A+B). This integrated typology ensures that all Open Call projects fit within the broader iCOSHELLs innovation framework and contribute to its shared learning environment.

Each Living Lab has identified specific prototype areas reflecting its regional priorities and experimental focus. Applicants are therefore advised to consult the Living Lab descriptions below to ensure that their proposed prototype aligns with the objectives and testing needs of the relevant LL. Proposals introducing prototypes not explicitly listed for a given Living Lab are still welcome, provided they demonstrate strong potential to improve soil health and are clearly justified as innovative or complementary to the existing portfolio. However, such proposals may receive a lower evaluation score for alignment unless their novelty and expected impact are deemed particularly significant by the evaluators.

Eligible activities

To be considered for funding under the iCOSHELLs OC, submitted proposals must:

1) Clearly indicate the LL they intend to join, and
2) Be aligned with all eligibility requirements or criteria, including particulars defined by the selected LL.

Proposals for additional or innovative prototypes will be tested at experimental sites already managed by the corresponding LL.

Each LL will fund at least 2 projects that receive the highest evaluation scores. The selection will be based exclusively on the quality of the proposals, as reflected in the evaluation results (see further details of the evaluation process in the section Evaluation and award procedure5).

Detailed descriptions of each LL eligibility criteria can be found in the following subsections.

1. Sweden: SWEdish Soil Health Living Lab – SWE LL

Scope of the LL

The Swedish Soil Health Living Lab aims to improve soil structure, soil biodiversity, and reduce nutrient surpluses while enhancing real-time soil monitoring capacity to enable data-driven management decisions that directly improve soil health. The LL operates within mixed agricultural landscapes in central and southern Sweden and focuses on field-scale testing of practices and technologies that strengthen soil resilience and reduce nutrient losses.

Eligible projects

The Swedish Living Lab comprises of 14 established experimental sites that represent a variety of soil types and cropping systems across Sweden. All activities described in the proposals must be planned to be carried out in collaboration with existing experimental sites (i.e. farms). Where feasible and proportionate to the complexity and cost of the prototype, applicants are encouraged to expand testing on more farms to strengthen representativeness and knowledge exchange. The exact number of participating farms should be justified in the proposal, considering resource needs, site suitability, and expected variability in soil and management conditions. For resource-intensive prototypes, testing on fewer sites may be accepted if accompanied by a strong rationale and a plan for subsequent replication in future seasons.
All proposed activities must address at least one objective listed in the LL scope and include a plan for monitoring the effect of the prototype on soil-health (e.g., EC, pH, SOC, microbial indicators).

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in LL's Scope:

- **Category A:**
  - **Soil Amendments: Comparative Testing of Biochar or Gypsum to Lime**: Field-based evaluation of the effectiveness of biochar or gypsum as soil conditioners in comparison to traditional lime applications. The trials can assess impacts on soil structure, nutrient availability, pH regulation, and crop performance across different soil types.

- **Drainage System Innovations:** Field trials to explore redesigned subsurface and surface drainage systems, including controlled drainage and sensor-integrated solutions, to improve water management and reduce nutrient losses.
- **Biostimulants to Enhance Soil-Plant-Microbe Interactions:** Implementation of microbial inoculants, humic substances, and plant-derived extracts to evaluate their role in promoting beneficial microbial activity, nutrient uptake, and plant resilience under field conditions.
- **Soil-Disease Suppression Strategies:** Testing of crop or soil management practices aimed at enhancing disease-suppressive soil properties. Management practices of interest could include cover cropping, crop rotations, reduced tillage or use of organic amendments that are evaluated in comparison to conventional plant protection methods for their effects on soil diseases.
- **Replacement of Mineral Fertilizers with Organic or Bio-Based Alternatives:** Field trials to assess the feasibility of fully or partially replacing synthetic mineral fertilizers with animal manure, compost, digestate, and other bio-based nutrient sources. The focus will be on nutrient efficiency, crop yield, and long-term soil health.
- **Manure-P Reduction & Redistribution Strategies:** Field-based evaluation of management practices that reduce or suspend manure application on fields with high P class soils in livestock-dense areas. Tests may include replacing manure with mineral N and K fertilisers, implementing variable-rate "P-off / N-on" strategies, or redistributing manure to low-P crop farms. Implementing separation technologies to lower the P in the fractions returned to high P fields could also be tested. The focus is on maintaining yield and soil fertility while lowering field-level P surpluses and ideally improving regional nutrient balance.

- **Category C:**
  - **Digital Monitoring Tools for Real-Time assessment:** Deployment and testing of in-field sensors, remote-sensing platforms, and AI-assisted imaging tools to monitor soil moisture, temperature, nutrient status, and plant health, generating real-time data to support adaptive management decisions that improve soil health and resource-use efficiency. Costs related to sensor use must follow Horizon Europe actual-cost principles (no profit margin; depreciation or use-cost only).

2. Spain: SouthEastern Spain Soil Health Living Lab – GREENNOMED

Scope of the LL

The aim is to achieve one or more of the following objectives:

- To keep the agricultural activity but in a more sustainable way, using less inputs, thus contributing to improve soil health.
- To reduce soil salinity and sodicity.
- To minimise the negative incidence of pests.
- To increase soil carbon content and structure.
- To enhance soil fertility and biodiversity.
- Enrich the representativeness of stakeholders in our LL (e.g. by including NGO's)

Eligible projects

GREENOMED experimental sites are located close to coastal Mediterranean areas (El Ejido in Almería and Campo de Cartagena in Murcia) and characterised, in general, by relatively poor and degraded soils, where intensive agricultural practices take place (mainly horticulture and citrus culture).

All proposed activities must address at least one objective listed in the LL scope, including a plan for monitoring indicators to validate the prototype (e.g., EC, pH, SOC, microbial indicators).

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in LL's Scope:

Proposals focus on testing new prototypes, technologies, or management solutions at the existing LL experimental sites. Activities must be carried out in cooperation with the LL team, and the new prototype should be tested on at least two of the existing experimental sites. Each proposal must describe how the prototype or innovation directly addresses at least one of the LL's objectives listed in the scope, and must include a clear plan for testing, monitoring, and data collection for assessing the impact on soil-health.

Prototypes may include one or more of the following elements

- **Category A:**
  - **Selection of site-specific plant varieties:** Use of locally adapted or salt-tolerant varieties to enhance soil resilience and reduce input needs.
  - **Innovative/site-specific tillage:** Application of reduced or conservation tillage to improve soil structure, carbon content, and water retention.
  - **Phytoremediation techniques** (including the use of halophytes and salt-tolerant varieties): Use of specific plants to extract salts and pollutants, improving soil quality and fertility.
  - **Specific bio-inoculants for salt stress:** Application of beneficial microbes to increase plant tolerance, soil biodiversity, and nutrient cycling.
- **Category B**
  - **Digital platforms and/or outreach tools**, such as social media campaigns, focused on soil health or promoting products related to it.
  - **Interactive installations** that promote soil awareness in public spaces, including events as art exhibitions related to soil and its role in daily life.
  - **Locale scale community projects** (e.g., composting initiatives, social gardens) related to soil health with monitoring and co-creation activities.
  - **Educational pathways** that integrate soil literacy into school and university programs, designed to provide learning and experiences about soil health and mission soil objectives.
- **Category C**
  - **Implementation and testing of in-field sensors** to track different soil and plant parameters (e.g. soil moisture, temperature, nutrient levels, or plant health), remote sensing platforms, and proximal spectroscopy tools. These tools and technologies generate real-time data and comprehensive information to support soil health assessment and evaluation, optimizing resources efficiency. All costs associated with sensor usage must comply with Horizon Europe's actual-cost principles (no profit margin; only depreciation or usage costs).

3. Spain / France: Basque Soil Health Living Lab – Basque Living Lab

Scope of the LL

The Basque LL addresses the challenge of restoring and sustainably managing degraded urban and peri-urban soils in a protected environment. Its objectives are to:

- Address key soil degradation issues in public and community spaces by testing and implementing solutions to improve soil structure, tackle low organic carbon content in the soil, and strengthen soil biodiversity (including but not limited to, microbial diversity);
- Promote circular and nature-based solutions, such as local compost use and green-infrastructure development;
- Increase awareness and engagement in soil health through community participation, education, and citizen science; and
- Implement and evaluate soil restoration and management practices to enhance key soil functions with an impact on ecosystem services and community well-being in the urban–rural interface.

Eligible projects

The Basque Soil Health Living Lab is located within the Urdaibai Biosphere Reserve in the Basque Country, Spain—a landscape where cultural heritage, protected nature, and urban development converge. The LL is led by GAIA Innovation Cluster, with the collaboration of the Municipality of Forua, San Fidel School and Euskampus Foundation and local municipalities, in collaboration with environmental NGOs and community organisations.

Ten experimental sites (community gardens, parks, and reclaimed urban areas) are currently managed under this Living Lab. They serve as demonstration zones for testing and co-creating soil-restoration prototypes that combine environmental, technological, and social innovation.

The proposed activities must be implemented in cooperation with the existing Basque LL sites and the local partners leading site coordination. Proposals must address at least one of the LL objectives above and clearly explain how the proposed prototype contributes to improved soil health, biodiversity, or soil literacy within urban or peri-urban contexts.

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in LL's Scope:

- **Category A:**
  - Use of **bioherbicides or biocontrol agents** to support soil biodiversity and reduce dependence on synthetic chemical inputs, tested under realistic management conditions in parks and community gardens.
  - **Application of biochar or other organic soil amendments** to improve soil structure, increased carbon sequestration, and immobilise contaminants in previously degraded or compacted soils.
- **Category B:**
  - **Circular and community-driven approaches**.
- **Category C:**

- **Deployment of non-invasive and digital tools** to assess and monitor soil biodiversity and biological activity, supporting data-driven urban-soil restoration.

- Integrated or systemic prototypes that combine the above **Category A + C**, for example, biochar plus compost applications monitored through acoustic sensors, or **Category A + B**, such as bioherbicide testing coupled with citizen-science biodiversity assessments or citizen-led compost production and application, linking organic-waste management with local soil-improvement actions.

Proposals should describe how the prototype will be tested and monitored within the existing network of sites, including the indicators to be measured to evaluate the prototype, and how community engagement will be ensured. Projects that demonstrate replicability across multiple sites, strong integration between ecological and social innovation, or cross-border relevance within Spain and France may receive a higher evaluation score under the Relevance and Alignment criterion.

4. Greece: Greek Mine Soil Health Living Lab – GREEK LL

Scope of the LL

The Greek Mine Soil Health Living Lab focuses on the restoration and sustainable management of metal-contaminated soils in post-mining areas of Western Macedonia. Its main objectives are to reduce soil pollution, promote ecological restoration through improved soil health, and recover valuable elements such as nickel and chromium through phytoremediation and related circular-economy approaches.

The specific aim is to achieve the following objectives:

- To reduce soil pollution and enhance restoration, recovering and processing the nickel, chromium or other metals accumulated

Eligible projects

Proposals are encouraged to integrate combined remediation strategies, such as testing multiple plant species (hyperaccumulators and tolerant species), combining phytoremediation with phytostabilisation techniques to immobilize pollutants and prevent their spread, or using organic amendments (e.g. compost, biochar) to enhance pollutant uptake or stabilisation, improve soil structure and reduce erosion.

Proposals that demonstrate integrated or systemic approaches, by combining biological, chemical and physical remediation processes may receive a higher evaluation score under the Relevance and Alianment criterion.

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in LL's Scope:

- **Category A:**
  - **Development of innovative phytoremediation approaches** that advance both environmental restoration and material recovery. This may include the development or validation of new plant-based systems for the extraction and valorisation of metals (e.g., through biomass recovery or "phytomining") or the integration of bio-based amendments to enhance metal uptake and soil biological recovery.
- **Category C:**
  - **Development of innovative monitoring approaches** that use low-cost sensors for water and soil-quality indicators to assess the performance of the plants and the pollutant uptake. These systems

should simplify monitoring of phytoremediation performance across multiple sites, integrating sensor networks and digital data-management tools to generate consistent, replicable measurements of key environmental indicators. By reducing the cost and complexity of monitoring, such innovations can significantly support wider adoption, validation, and upscaling of phytoremediation solutions.

- Proposals demonstrating systemic integration, **Category A + C,** combining phytoremediation or alternative technologies with cost-effective monitoring and circular resource-recovery concepts will receive higher evaluation scores.

5. Italy: ITAlian Soil Health Living Lab – ITA LL

Scope of the LL

The Italian Soil Health Living Lab aims to advance soil and water management through digital and nature-based innovations across contrasting agricultural landscapes in northern Italy. The aim is to achieve one or more of the following objectives:

- To develop validated protocols for drone/robotics monitoring that can accurately track soil health changes and provide information for farmers to adapt management.
- Test of innovations/solutions that improve soil health and soil structure while reducing external inputs of chemicals and mineral fertilizers on the soil
- Improving soil health through innovative practices and precision technologies, such as optimised irrigation (i. e. facilitating sustainable water use in peri-urban soils which have limited access to conventional water distribution networks or irrigation channels; or optimizing water-soil management considering the dynamics of groundwater systems).
- To obtain real-time data for monitoring and active decision-making purposes.

Eligible projects

The sites in the Trentino-Alto Adige region feature vineyards, olive groves, chestnut groves, and apple orchards, managed under organic and conventional systems, located in an alpine microclimate, with key challenges focused on monitoring soil health using UAVs (drones) and robotic technologies.
The sites in the Franciacorta region are located within two rainfed vineyards with typical soils in the region and quite variable topography. The irrigation was introduced in these experimental sites to assess the effects on soil health; moreover, a monitoring and control system was adopted to optimally manage irrigation. On the other hands, the topographic conditions may cause difficulties in evaluating the soil water balance terms to support the irrigation scheduling.
The sites in the peri-urban areas of Milan feature experimental plots under agroforestry management, with typical soils of the Lombard plain. The sites are equipped with continuous monitoring systems for soil water content, temperature, and pore water pressure to assess the impact of agroforestry practices on soil water balance and overall soil health. Key challenges include understanding how tree-crop interactions affect soil hydrological dynamics and quantifying the benefits of agroforestry systems on soil functioning in urban-agricultural transition zones.

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in LL's Scope:

Proposals may test one or more of the following innovations or solutions, addressing one or more of the LL objectives listed in the Scope:

- **Category A:**
  - **Innovative agricultural strategies** designed to reduce external inputs of chemicals and conventional fertilizers and enhance soil health while promoting more sustainable farming practices.
  - **Phytoremediation** to restore polluted peri-urban agricultural soils.
- **Category B**
  - **Digital platforms and/or outreach tools,** such as social media campaigns, focused on soil health or promoting products related to it.
  - **Interactive installations** that promote soil awareness in public spaces, including events as art exhibitions related to soil and its role in daily life.
  - **Locale scale community projects** (e.g., composting initiatives, social gardens) related to soil health with monitoring and co-creation activities.
  - **Educational pathways** that integrate soil literacy into school and university programs, designed to provide learning and experiences about soil health and mission soil objectives.
- **Category C:**
  - **Development of UAV-based soil health monitoring systems** validated against ground-based indicators.
  - **Innovative sensors and monitor tools** for optimising irrigation and soil-water balance under different inter-row cover crops.
  - **Monitoring** soil water and other soil physical, chemical and biological parameters.

- Proposals integrating several of these approaches or demonstrating systemic interactions between **Category A + C**, such as digital monitoring, irrigation optimisation, and soil-improvement practices, or **Category A + B**, such as innovative agricultural strategies combined with soil literacy activities, may receive a higher evaluation score.

6. Bulgaria: BUlgarian Viticultural Soil Health Living Lab – BUV LL

Scope of the LL

The Bulgarian viticultural Living Lab focuses on improving soil health in vineyards that are prone to erosion and soil degradation due to bare-row management and intensive agrochemical use.

The aim is to achieve one or more of the following objectives:

- To reduce soil erosion due to introduced or restored vegetation in the vineyards,
- To capture carbon in soil (use metagenomic analyses to identify the microorganisms that creates the beneficial effect),
- To reduce pollution in soil caused by chemical herbicides and other pesticides, nitrates or heavy metals by stimulating vegetation above and below-ground in the soil horizon,
- To stimulate the activity of soil biota through improved biodiversity from grass-legume mixtures.

Eligible Projects

The proposed activities will focus on testing new prototypes, technologies, or management solutions at the existing LL experimental sites. Activities must be carried out in cooperation with the LL team, and the new prototype should be tested on at least two of the existing experimental sites. Each proposal must describe how the prototype or

innovation directly addresses at least one of the LL's objectives listed in the scope, and must include a clear plan for testing, monitoring, and data collection for assessing the impact on soil-health.

Test of at least one of the following prototypes to cover one or more of the objectives mentioned in Scope:

The BUV LL is putting focus on projects that provide testing, validation, and demonstration of systemic innovation solutions that integrate several interrelated and interdependent practices and technologies to improve vineyard soil health at the existing experimental sites. Applicants should design prototypes that combine complementary measures, demonstrating how these components interact to strengthen soil resilience and deliver multiple soil-health benefits. For example, soil-conserving tillage, adapted cover crops, precision irrigation, and biological crop-protection tools implemented together.

Ideally, prototypes will be designed to tackle more than one of the objectives listed in the scope. Each proposal should clearly explain how the integrated solution addresses these objectives in a synergistic way and outline a realistic monitoring plan to assess progress using soil-health indicators aligned with iCOSHELLs protocols. Proposals that explicitly demonstrate systemic integration across multiple solution areas and address several soil-health objectives simultaneously will receive a higher evaluation score.

Systemic prototypes may include one or more of the following integrated elements:

- **Category A:**
  - **Innovative/site-specific tillage machines** for soil conservation practices and precise soil cultivation
  - **Novel precision irrigation solutions** for all-season soil moisture combined with the tradition drip-irrigation and fertigation systems.
  - **New drought-resistant grass-legume mixtures and mulches** for soil cover adjusted to soil conservation tillage
  - **Use of bioherbicides, biofungicides and biopesticides** to support soil biodiversity and reduce chemical inputs
  - **Application of biochar** for improved soil structure, increased carbon sequestration and immobilisation of contaminants
- **Category C:**
  - **Development of UAV-based soil health monitoring** systems validated against ground-based indicators.
  - **Innovative sensors and monitor tools** for optimising irrigation and soil-water balance under different inter-row cover crops.
  - **Solution for automated precise fertigation** combined with NDVI images and AI-based fertigation decision support system.
- Proposals integrating several of these approaches or demonstrating systemic interactions between **Category A + C**, such as digital monitoring, irrigation optimisation, and soil-improvement practices, may receive a higher evaluation score.

Eligible costs

Funding provided through the iCOSHELLs Open Call follows Horizon Europe principles for actual, necessary, and reasonable costs. All costs must be directly linked to the approved activities, incurred during the implementation period.

Eligible costs may include the following cost categories for the implementation of the proposed testing or demonstration activities:

- **Personnel costs**: Time dedicated to the project, e.g. 200 hours at an average unit cost EUR 100/hour.
- **Subcontracting**: Project activities that cannot be carried out by the Open Call applicant must be allocated in this category. Subcontracting may cover only a limited part of the Project budget (maximum 30%). Please specify the subcontracted activity and justify its necessity.
- **Travel**: All beneficiaries are also required to budget for travel and participation in Living Lab meetings and co-creation workshops. The number and location of meetings will vary between Living Labs; applicants are encouraged to contact iCOSHELLs@zabala.es for specific guidance.
- **Equipment**: e.g. sensors, monitoring devices, irrigation systems, or similar items are eligible and must be declared as depreciation costs, calculated on the basis of the costs actually incurred and written off in accordance with international accounting standards and the beneficiary's usual accounting practices.
    - When the equipment is purchased specifically for the project and remains in use afterwards, only the depreciation corresponding to the testing period is eligible.
    - When the equipment is already owned by the applicant, only the justified cost-of-use during the activity period may be claimed.
- **Other goods, works and services**: When consumable components or materials (e.g. probes, reagents, plant material, small parts) are used up or cannot be recovered, their full purchase cost may be eligible.

Indirect or overhead costs are not eligible.

All costs must be clearly itemised in the proposed budget and consistent with the project's scope, scale, and duration. Costs unrelated to the approved work plan or include commercial profit will be considered ineligible and may lead to a reduction of the grant amount.

Eligible applicants

The call will be limited to single applicants, natural persons or legal entities, although it will be allowed to use part of the funding to subcontract specific activities.

Applicants, which are considered eligible under the Horizon Europe rules (residing in one of the eligible countries described in the Horizon Europe general annexes to the Work Programme)[2], include:

- Landowners or land managers (e.g. farmers)
- Academic or Research organisations.

[2] https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/list-3rd-country-participation_horizon-euratom_en.pdf

- Small and Medium-sized Enterprises (SMEs).
- Public administrations.
- Representatives of civil society (e.g. consumers, environmental NGOs).

Eligible applicants should have the capacity to conduct field testing. The following additional conditions apply to any eligible applicant:

- The applicant should not have been declared bankrupt or have initiated bankruptcy procedures.
- The entities applying should not have convictions for fraudulent behaviour, other financial irregularities, and unethical or illegal business practices.
- There should not be any conflict of interest with any of the iCOSHELLs beneficiaries, as detailed in Section "Conflict of Interest".
- No double funding is allowed.

All the above will be assessed based on the declarations completed in the Application Form. If any of the required conditions are not met, the proposal will be considered ineligible.

Multiple submissions

The iCOSHELLs OC is a competitive funding call. Multiple applications are possible under this call. In these cases, applicants need to submit one application form per project proposal.

Conflict of Interest

Entities that are Beneficiaries, Affiliated Entities or Associated Partners of the iCOSHELLs consortium are not eligible to be funded by this OC (legal entities or natural persons included in the project Contact list). Additionally, subcontracting to iCOSHELLs Beneficiaries, Affiliated Entities or Associated Partners is not allowed (legal entities or natural persons included in the project Contact list).

The iCOSHELLs consortium applies strict Horizon Europe standards to prevent, identify, and manage conflicts of interest (COI) throughout the Open Call process.

- **Evaluator independence:** All evaluators (internal and external) will sign a Declaration of Impartiality and Confidentiality confirming the absence of any personal, professional, or financial relationship with applicants that could compromise impartiality.
- **Applicant responsibility:** Applicants are not expected to know the identity of evaluators. Their obligation is limited to declaring any known or potential relationships with iCOSHELLs consortium members (Beneficiaries, Affiliated Entities or Associated Partners) that could create a COI during the proposal or implementation phases.
- **Separation of roles:** Coaches will be assigned only after the completion of the evaluation and approval of results, ensuring functional separation between evaluation and mentoring.

- **Consequences:** In accordance with Horizon Europe rules, any Financial Support to Third Parties (FSTP) awarded under conditions where a COI is found to exist will render the corresponding costs ineligible and may result in recovery of funds.

All parties must immediately inform the iCOSHELLs Open Call Coordinator if a potential COI situation arises at any stage. Appropriate mitigating measures will then be implemented.

4. Preparation and submission of proposals

Deadline

The deadline for submissions to the iCOSHELLs OC is February 04, 2026 (14:00 h CET). Only proposals submitted before the deadline will be accepted. After the call closure no additions or changes to received proposals will be taken into account.

It is strongly recommended that applicants do not wait until the last minute to submit their proposal. The failure to submit a proposal on time, for any reason, including network communications delays or working from multiple browsers or multiple browser windows, is not acceptable as an extenuating circumstance. The time of receipt of the application as recorded by the submission system will be definitive.

Submission system

The entry point for the submission of all proposals is the iCOSHELLs OC page, available at the project website: https://www.icoshells.eu/open-call/.

Any proposal submitted through other channels will be automatically rejected.

Language

English is the official language for the iCOSHELLs OC. Submissions done in any language other than English will not be eligible or evaluated. The use of Artificial Intelligence (AI) tools for translation purposes is allowed to avoid language barriers in the application process.

English is also the only official language during the whole execution of the iCOSHELLs project. This means any requested submission of deliverables to be presented to the European Commission will be done in English. Nevertheless, internal reports can be done in local language, and each LL will translate them into English to share with the consortium.

Documentation

The OC is supported by the documentation listed below, which can be found at the abovementioned iCOSHELLs OC site. Applicants are encouraged to read and download all relevant files before proceeding with their submission.

For proposals submission:

- Guidelines for Applicants, which provide an overview of the rules and procedures to participate in the OC, the evaluation process, and other general provisions.
- Application Form, an online application form with administrative questions to be completed in the Open Call webpage. It also includes some general questions for statistic purpose and tick boxes to be clicked by the third parties confirming they have read the conditions and agree with the conditions defined in this document.
- Proposal description: the applicant must complete the document and generate a PDF version to upload to the application form:

During the period in which the call is open, all questions received through the contact mailbox (iCOSHELLs@zabala.es) will be collected and compiled in a Frequently Asked Questions (FAQ) document to ensure transparency and equal access to information.

For awarded projects:

- Sub-grant agreement template, which provides a template of the subgrant agreement that the successful applicants will be requested to sign.
- Applicant Declaration of Honor, which declares that all conditions of the OC are accepted by OC beneficiaries.
- Legal Entity Declaration Form, which evaluates the status of the legal entities that the successful applicants will be requested to sign.
- Bank account information, which collects information about the bank account to which payments will be made and that the successful applicants will be requested to provide.

Application preparation

Applicants must carefully read all the OC documents for proposal submission (previous section) and follow all the guidelines when preparing their proposals. Failure to adhere to these instructions may result in ineligibility.

- Applicants are required to apply online and answer all mandatory questions (with no exception).
- Applicants must select the LL they are presenting the proposal.
- Applicants that do not accept the terms and conditions will not be eligible.
- Applicants that do not upload to the “Proposal description” in the corresponding field in the online application, will not be eligible.

5. Evaluation and award procedure

Proposals submitted to the iCOSHELLs OC are submitted in a single stage and evaluated in two steps:

- Eligibility filter: A filtering to discard non-eligible proposals will follow the short list. Eligibility criteria check will verify: the applicant's residence in an eligible country, the fit with the call approach and the use of official templates and to ensure that the Applicant is compliant with Horizon Europe funding eligibility criteria.
- Remote evaluation: Each eligible proposal will be evaluated by two (2) evaluators: one will be part of iCOSHELLs consortium, specific of the LL sub-call, to check the good fit and alignment with the project aim and vision; a second evaluator will be external to reinforce the fairness of the evaluation process. The evaluators will adhere to Horizon Europe standards regarding evaluation, conflict of interest and confidentiality and will sign a declaration certifying: (i) that they will perform a confidential, fair and equitable evaluation; (ii) their independence from affiliation; (iii) confidentiality and absence of conflict of interest (disqualifying or potential); (iv) that they will not discuss the proposals with others during the process; (v) strictly, that they will not get in contact with applicants; (vi) compliance with EC rules.

Please note that evaluators will not deduct points for minor language errors resulting from the use of translation tools. As long as the proposal is understandable and the content is clearly conveyed, small linguistic inaccuracies will not affect the evaluation score.

Evaluation criteria

All projects will be evaluated with the same criteria. Each proposal has 5 sections each of them scored from 0 to 5 (0=non-existent, 1=very poor, 2=limited, 3=fair, 4=good and 5=excellent). The minimum score for a positive evaluation of the received proposals is 3 per section. Therefore, the overall threshold, applying to the sum of the five individual scores will be 15. To determine the ranking, the score for "Budget" section will be given a weight of 1.5. Proposals that pass the individual threshold AND the overall threshold will be considered for funding, within the limits of the available call budget. Other proposals will be rejected.

Evaluation of Proposed Budgets

As part of the overall evaluation, each proposal's budget will be reviewed to ensure that requested costs are reasonable, justified, and proportionate to the planned activities and expected results. The assessment will focus on the following aspects:

- **Coherence with the work plan:** Budget allocations must correspond logically to the described activities (linked to prototype testing or monitoring needs), deliverables, and time frame. Costs should be distributed in line with the project's structure and scale.
- **Proportionality and cost-effectiveness:** The overall budget must reflect an efficient use of resources relative to the expected outputs and impact. Budgets that are substantially over- or under-resourced in relation to the proposed activities may receive a lower score. Profit margins on supplied goods or services are not eligible.
- **Completeness and clarity:** Budgets must be presented within eligible cost categories (defined in the Proposal description template) and justifications clearly explained.

Additional scoring rule:

The **breadth and integration of testing activities** will contribute positively to the "*Added value of the proposed prototype"* criterion. A higher score will be awarded to proposals that:

- Integrate **several complementary prototypes or techniques** within the same trial to address multiple soil-health challenges; or
- Clearly bridge **several objectives of the Living Lab scope** (e.g., combining nutrient-efficiency improvement with biodiversity enhancement or salinity reduction).

The increase in score will depend on the **scientific and technical quality** of the testing plan and its feasibility within available resources.

Tie-break procedure

If two or more proposals receive the same final total score after evaluation, the following tie-break rules will apply sequentially until the tie is resolved:

1. The proposal with the higher score under the "Budget" criterion will be ranked higher.
2. If still tied, the proposal with the higher score under the "Added value of the proposed prototype" criterion will be ranked higher.
3. If the tie persists, priority will be given to the proposal with the higher score under the "Team expertise" criterion.

These rules will be consistently applied across all Living Lab sub-calls.

Award procedure

Each evaluator will record his/her individual assessment of each proposal using an Individual Evaluation Report. The scores attributed by the 2 experts will be summed up. If significant divergences exist between evaluators, a consensus meeting will be needed. A final decision panel will be held with all the evaluators to approve the ranking list of proposals.

All proposals will receive an acceptance or rejection letter together with an anonymized version of the proposal's Evaluation Summary Report. Applicants will be informed about the result of their evaluation by email (see indicative date in section 2).

The list of selected and reserve projects will be submitted to the European Commission for final screening. iCOSHELLs will also publish the results without delay on the website and information channels of the iCOSHELLs project, including the names of each sub-grantee, their country and region, the maximum granted amount, a short description of the activities to be implemented and the date and duration of the sub-grant.

6. Sub-grant agreement preparation and signing

Selected applicants will sign a dedicated Sub-Grant Agreement (SGA) with the iCOSHELLs OC coordinator, ZABALA. The purpose of the SGA preparation is to fulfil the legal requirements between the iCOSHELLs consortium and each selected beneficiary of the Open Call.

Once a proposal has been selected for funding, the iCOSHELLs OC coordinator will contact the beneficiary to request the necessary documentation. This request will include clear deadlines for the submission of all required information.

The documentation to be submitted includes, but is not limited to:

- For natural persons: Identity documentation.
- For legal entities:
  - Proof of legal existence, such as an extract from the national company register, official journal, or equivalent document showing the organisation's name, legal address, and registration number.
  - Proof of VAT registration, if applicable (in cases where the VAT number is not included in the registration extract or equivalent document).

The SGA preparation process is expected to be completed within three (3) weeks from the date of the initial request. In justified cases, an additional one (1) week may be granted by the iCOSHELLs Project Coordinator.

If the beneficiary fails to submit the required documentation within the specified timeframe, the proposal will be automatically rejected, and the next proposal on the reserve list will be invited to initiate the contracting process.

7. Project implementation

Beneficiaries of the iCOSHELLs OC will be fully integrated into the activities of the LLs and the overall iCOSHELLs project. As such, they are expected to actively participate in the project's operations and contribute to its objectives.

Kick-off Meeting (KoM) and Onboarding

All selected beneficiaries will participate in a Kick-off Meeting (KoM) with iCOSHELLs partners (around April 2026). This session will introduce the iCOSHELL's expectations for each Third Party, working methodology, including the Key Performance Indicators (KPIs) that will guide each funded project monitoring.

Coaching and Monitoring

Each funded project will be assigned an internal coach from the iCOSHELLs consortium, typically the leader of the relevant LL. The coach will be responsible for:

- Defining a tailored set of individual KPIs to monitor the progress and impact of the project.
- Facilitating communication and providing support throughout the implementation of the OC activities.
- Conducting interim assessments at the end of each WP2 iteration.

Project meetings

OC Beneficiaries are required to actively participate in:

- All meetings and activities scheduled by their respective LL, as part of the collaborative implementation and monitoring process.
- Annual consortium meetings, at least in online format, to ensure alignment with the broader objectives of the iCOSHELLs project and to foster cross-project exchange and visibility.

Failure to attend these meetings without justified reason may be considered non-compliance with the OC´s programme obligations.

Progress Evaluation

Beneficiaries will be evaluated based on the KPIs and objectives defined during the onboarding phase. These evaluations will take place:

- At the end of iCOSHELLs' **second iteration** (mid-term review, around March 2027).
- At the end of iCOSHELLs' **third iteration** (final review, around March 2028).

Evaluations will be conducted by designated iCOSHELLs partners and will follow the same methodology applied to all solution-testing activities within the LL.

Reporting Requirements

Beneficiaries will be required to submit two (2) formal reports:

- A **Mid-Term Progress Report**, covering the implementation status, achievements, and any deviations from the initial plan (around May 2027).
- A **Final Report**, summarising the overall results, lessons learned, and impact of the activities (around May 2028).

A reporting template will be provided to ensure consistency. Reports must include both qualitative and quantitative information, and may also request supporting materials such as:

- Photos or visual documentation of activities.
- Action plans or implementation roadmaps.
- Evidence of stakeholder engagement or dissemination efforts.

Failure to submit the required reports or to demonstrate satisfactory progress may result in the suspension or termination of funding.

Payment schedule

Payments will be done in two (2) instalments:

- The attendance to the initial meeting (KoM) will be mandatory and the first payment will be linked to this and paid just after. This will be the 60% of the total grant amount.
- The final payment, representing up to 40% of the total grant amount, will be made upon successful completion of the second iteration and approval of the final evaluation.

8. Obligations of beneficiaries of OC

All projects funded under the iCOSHELLs Open Call will become active members of the iCOSHELLs Living Lab network and must follow the methodological, data, and collaboration standards established by the consortium.

The funds attached to the sub-grant agreement come directly from the funds of the European project iCOSHELLs and therefore remain the property of the EU until the payment of the balance, whose management rights have been transferred to the project partners in iCOSHELLs via European Commission GA no. 101157394. Therefore, the selected applicants are indirect beneficiaries of EC funding and must comply with obligations under Horizon Europe-specific requirements. The obligations that apply to the beneficiaries are described in the following sub-sections.

Conflict of Interest

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the project is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify the iCOSHELLs consortium without delay of any situation constituting or likely to lead to a conflict of interest and immediately take all the necessary steps to rectify this situation. The iCOSHELLs Coordinator would verify if the measures taken are appropriate and may require additional measures to be taken by a specific deadline. If the beneficiaries breach any of their obligations, the sub-grant agreement may be automatically terminated.

Data sharing, FAIR principles, and integration with the iCOSHELLs framework

All funded projects must generate, document, and share data following the FAIR principles (Findable, Accessible, Interoperable, and Reusable). Data and results must be compatible with the iCOSHELLs soil-indicator database and monitoring framework to allow joint analysis across Living Labs. Applicants must commit to using the standard metadata templates and to delivering measurement results and documentation to their LL coordinator according to the agreed schedule. Ownership of results remains with the beneficiaries, but non-exclusive rights for research and dissemination purposes must be granted to the iCOSHELLs consortium and the European Commission, as described in the sub-grant agreement.

All beneficiaries must ensure that results, data and publications arising from the funded activities are made available through open-access repositories in line with the Horizon Europe Open Science policy.

Publications must be deposited in trusted repositories, and underlying research data should follow FAIR and GDPR-compliant standards. The iCOSHELLs consortium will provide templates and support for data documentation and sharing through the SOILL Hub.

Data protection and confidentiality

All applicants must ensure that their proposals comply with the General Data Protection Regulation (GDPR) (EU) 2016/679. Any personal data collected, processed, or shared during the implementation of the funded activities must be handled lawfully, fairly, and transparently. Applicants are responsible for implementing appropriate technical and organizational measures to safeguard data subjects' rights and freedoms. In addition, selected applicants must align with the FAIR data principles (Findable, Accessible, Interoperable, Reusable), and ensure that any data or results generated through their activities are suitable for integration into the SOILL Hub (https://soill2030.eu/soillhub), in line with Mission Soil expectations and Horizon Europe requirements. Sub-grantees will retain full ownership of any intellectual property resulting from their funded work; however, they must grant the iCOSHELLs consortium and the European Commission a non-exclusive, royalty-free licence to use such results for research, policy development, and dissemination purposes, including through the SOILL Hub.

During the implementation of the project and for four (4) years after the end of the collaboration, the parties must keep confidential any data, documents, or other material (in any form) that is identified as confidential at sub-grant agreement signing time ('confidential information').

If any OC beneficiary requests it, the EC and the iCOSHELLs consortium may agree to keep selected information confidential for an additional period beyond the initial four (4) years. This will be explicitly stated in the sub-grant agreement.

If information has been identified as confidential during the project implementation or only verbally, it will be confidential only if this is accepted by the iCOSHELLs coordinator and confirmed in writing within fifteen (15) days of the verbal disclosure. Unless otherwise agreed between the parties, they may use confidential information only to implement the agreement.

The beneficiary may disclose confidential information to the iCOSHELLs consortium and to the selected reviewers, who will be bound by a specific Non-Disclosure Agreement.

Ethics Self-Assessment

Applicants must conduct a self-assessment (included in the Proposal description template) to identify any potential ethical issues related to their proposed activities. This includes, but is not limited to, research involving human participants, environmental impact, dual-use technologies, and the use of sensitive data. If ethical concerns are identified, applicants must describe how these will be addressed in compliance with EU and national regulations. Since iCOSHELLs is a project funded by Horizon Europe, please follow the official document provided by the EU and available here: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/how-to-complete-your-ethics-self-assessment_en.pdf

You are kindly requested to explain which ethics issues arise from your activities and provide relevant documents, such as environmental permits.

Communication, dissemination and visibility

The OC beneficiaries must promote the action and its results by providing targeted information to multiple audiences (including the media and the public) in a coherent and effective manner. Before engaging in a communication or dissemination activity expected to have a major media impact, the OC beneficiaries must inform the leader of its LL.

Communication activities of the OC beneficiaries related to their projects (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge the EU support by:

- Displaying the European flag (emblem).
- Displaying the iCOSHELLs logo.
- Including the following disclaimer (translated into local languages where appropriate):

> *"Funded by the European Union via the iCOSHELLs Open Call issued and executed under the iCOSHELLs project (Grant Agreement no. 101157394). Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them."*

Information obligations

Beneficiaries of the OC must provide, during the project implementation or four (4) years after, any information requested by the iCOSHELLs consortium and/or the granting authority (European Commission) in order to verify proper implementation of the action and compliance with the other obligations under the Sub-grant Agreement.

The information provided must be accurate, precise and complete and in the format requested, including electronic format.

Record-keeping

OC beneficiaries must, at least until four (4) years after the end of the project implementation, keep records and other supporting documents to prove the proper implementation of the project in line with the accepted standards in the respective field (if any). The beneficiaries must keep the original documents. Digital and digitalised documents are considered originals if they are authorised by the applicable national law. The granting authority may accept non-original documents if they offer a comparable level of assurance.

The records and supporting documents must be made available upon request or in the context of checks, reviews, audits or investigations done by the granting authority and/or other bodies (i.e. European Anti-Fraud Office OLAF; European Public Prosecutor's Office EPPO; European Court of Auditors ECA). If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement, the beneficiaries must keep these records and other supporting documentation until the end of these procedures.

9. Contact information

All questions regarding the iCOSHELLs OC must be submitted via the official contact email address: iCOSHELLs@zabala.es. This is the only channel through which applicants can receive official guidance and clarifications. The queries can be made in the local language, especially those related to the technical aspects of the projects to be submitted.

In addition, an informative webinar will be organized during the application period to present the objectives and requirements of the OC. During this session, participants will have the opportunity to ask questions and receive real-time answers from the iCOSHELLs team. This session will take place between the second and third week after the Call opens. The final date and registration details for the webinar will be published on the iCOSHELLs project website (https://www.iCOSHELLs.eu) and disseminated through the project's official communication channels, including social media.

To ensure transparency and equal access to information, all questions of general interest (whether received via email or raised during the webinar) and their corresponding answers will be compiled and published in a Frequently Asked Questions (FAQs) document. This document will be regularly updated and made available on the iCOSHELLs OC webpage.

Applicants are strongly encouraged to consult the FAQs before submitting their queries, as their question may already be addressed there.

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