



S3E REVERSE for Solvers

Open Call text #1

For start-ups, scale-ups and SMEs from Southern European and Associate Countries

v.1

7 March 2023



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Document revision history

Version	Date	Description of change
v.1.	07/03/2023	1 st version of the Open Call for Solvers of the S3E Reverse Program





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1 Introduction

S3E – Southern European Entrepreneurship Engine is a project, funded by the European Commission, focused on accelerating **deep tech projects, start-ups, and SMEs** that aim at providing solutions towards a more sustainable society and economy in line with the Sustainable Development Goals (SDG)¹.

The S3E program is built around **three tracks** of carefully designed services tailored to support researchers, research teams, start-ups, scale-ups and SMEs in advancing their technologies, products, processes, or services towards the market. Participants in each track will be selected through open calls.

The aim of **S3E Reverse** is to create a **deep tech brokerage program** that will connect corporates and public organisations (hereinafter referred to as **Challenge Organisations**) that face certain challenges related to the SDGs, with start-ups, scale-ups and SMEs (hereinafter referred to as **Solvers**) that can address these challenges through their products, services, and solutions.

The overall goal is to create new collaborations between Challenge Organisations with specific needs and the solvers that are able to address them.

We launched this track in November 2022 by inviting Challenge Organisations to submit challenges through our Open Call Mechanism. Through this Open Call we received 21 challenges from 19 organisations and we have selected 15.

These challenges were carefully evaluated and organised by S3E experts that will be published on our website (<https://south3e.eu/>) to invite mature start-ups, SMEs and scale-ups to submit specific proposals for addressing these challenges through Deep Tech solutions.

The **Open Call for Solvers** to address these challenges will stay open till May 15 but it will work on a first come-first served basis, so if our experts and technology brokers identify a good match between a challenge organisation and a solution provider they will start the brokerage, bringing together the 2 parties and establishing a collaboration.

This document provides detailed information regarding the S3E Reverse program and its **first Open Call for Solvers**, as well as a general overview of the S3E project.

¹ <https://sdgs.un.org/goals>



2 S3E Overview

The S3E – Southern European Entrepreneurship Engine project mission is to develop an engine of growth that will contribute to improve the connectedness and efficiency of the entrepreneurship ecosystems in southern European countries.

S3E consortium partners are:

- **HiSeedTech** - A not-for-profit association founded by private companies that came together with the purpose of enabling the creation of value from knowledge through technology entrepreneurship and open innovation.
- **EPLO Institute for Sustainable Development** – part of an international organization dedicated to mainstreaming the UN Sustainable Development Goals and the EU Green Deal, providing capacity building, policy work and educational programs.
- **IDI** (International Development Ireland) specialises in practical day-to-day implementation for Government agencies in economies which are growing and changing rapidly
- **Australo** Interinnov Marketing Lab SI - is a marketing agency specializing in growth hacking for research and innovation.

The S3E project is co-funded by the European Union's Horizon 2020 European innovation ecosystems under the grant agreement ID: 101072135 ([see here the Cordis fact sheet](#)).

S3E will focus on accelerating **deep tech projects, start-ups, and SMEs** that, by providing solutions towards a more sustainable society and economy, can impact social development and economic growth in these countries and contribute to the timely achievement of the United Nations Sustainable Development Goals (SDGs), in line with the EU Green Deal, the Recovery and Resilience Facility and the **Next Generation EU** fund.

S3E will provide skills to researchers and technology transfer officers in science-based entrepreneurship and technology commercialization, supporting growth stage start-ups in business development and in procuring investment, and providing technology brokerage for corporates and scale-up stage start-ups and SMEs.

The program is built around **three tracks** of bespoke services tailored to start-ups' varying levels of maturity (i.e., early, growth, and scaling stages):

- **S3E Start:** For research teams and technology transfer offices, S3E offers a hands-on training program to hone their commercial skills and secure early funding for development.
- **S3E Charge:** For growth start-ups, S3E provides mentoring and networking to develop an investment-ready business plan and facilitate access to non-dilutable and dilutable funding
- **S3E Reverse:** For scaling start-ups / SMEs, S3E will set up an Open Innovation ecosystem to broker, connect and match corporates and public organisations (Challenge Organisations) to more mature scaling start-ups through a challenge-solution duality.



Figure 1. S3E Tracks



3 S3E Reverse at a glance

3.1 Who is this program for?

S3E Reverse is designed to help **start-ups and SMEs** gain market traction through a pan-European brokerage program that will connect them with corporate and public organisations, with specific challenges and problems, which they can work together to solve.

The program started in November 2022 by inviting **Challenge Organisations** to unveil challenges they face, related to the SDGs that could be addressed through deep tech solutions.

The 1st call of our program focused on **challenges** related to any of the 17 **Sustainable Development Goals**:

1. **No Poverty (SDG 1)**: End poverty in all its forms everywhere.
2. **Zero Hunger (SDG 2)**: End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3. **Good Health and Well-Being (SDG 3)**: Ensure healthy lives and promote well-being for all at all ages.
4. **Quality Education (SDG 4)**: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. **Gender Equality (SDG 5)**: Achieve gender equality and empower all women and girls.
6. **Clean Water and Sanitation (SDG 6)**: Ensure availability and sustainable management of water and sanitation for all.
7. **Affordable and Clean Energy (SDG 7)**: Ensure access to affordable, reliable, sustainable, and modern energy for all.
8. **Decent Work and Economic Growth (SDG 8)**: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
9. **Industry Innovation and Infrastructure (SDG 9)**: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10. **Reduced Inequalities (SDG 10)**: Reduce inequality within and among countries.
11. **Sustainable Cities and Communities (SDG 11)**: Make cities and human settlements inclusive, safe, resilient, and sustainable
12. **Responsible consumption and production (SDG 12)**: Ensure sustainable consumption and production patterns
13. **Climate Action (SDG 13)**: Take urgent action to combat climate change and its impacts.
14. **Life below water (SDG 14)**: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.



15. **Life on land (SDG 15):** Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
16. **Peace, justice and strong Institutions (SDG 16):** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. **Partnership for the goals (SDG 17):** Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.

There have been **19 Challenge Organisations** who submitted **21 challenges** through our open call mechanism.

S3E partners in collaboration with experts (selected through an open Expression of Interest) have reviewed the submitted challenges and selected those with the highest degree of potential, impact, innovation, and feasibility. **The 15 selected challenges have been published on the S3E website (<https://south3e.eu/>) and can be found in detail in the Guidelines for Applicants (S3E REVERSE for Solvers).**

Challenges are organised under the following themes:

THEME	CHALLENGE
AGRIFOOD	<ul style="list-style-type: none"> ● Crop field management ● Increase transparency and accountability in the wine supply chain
ENERGY	<ul style="list-style-type: none"> ● Clean energy solutions for sustainable agriculture ● Thermal energy storage ● AI-driven Energy efficiency ● Energy Demand Forecasting
ENVIRONMENT & MOBILITY	<ul style="list-style-type: none"> ● Flood Risk prevention in Smart Cities ● Vehicle Fleet Management
SOCIETY	<ul style="list-style-type: none"> ● Prevention of harassment ● Data protection and privacy
ENGINEERING & TECH	<ul style="list-style-type: none"> ● Raw material and alloy upgrade ● Optimization of machine operation ● Digital transformation processes ● A single access portal for all third-party metaverses ● Mainstreaming Predictive Maintenance

The descriptions of the challenges can be found in the Guideline for Applicants (S3E REVERSE for Solvers).



3.2 How is the programme structured?

The present call is an **Open Call for Solvers** inviting them to submit their ideas, products, and solutions that can address **these specific challenges**. Our evaluators will select the most mature and appropriate start-ups to **match them with the Challenge Organisations**.

This open call comprises the second step of our **REVERSE Program**, where Solvers will address and suggest solutions to the challenges and/or problems that Challenge organisations face in their operations. By implementing these solutions, organisations will also be able to comply with the UN Sustainable Development Goals and improve their sustainability.

Once solvers start to respond to the call, our independent selected **deep tech brokers** will facilitate the matchmaking process between the “Challenge Organisations” and the “Solvers” of this second phase. The selected **Solvers** will benefit from a **customised innovation support program** designed specifically for them and they will receive tailored coaching and technology brokerage services.

The programme will operate on a ‘First come – First Served’ for the Solvers applicants. This means that when a match is identified, by the deep tech broker, the Challenge Organisation and the Solver can start working together immediately.



4 S3E Reverse Open Call #1 for Solvers

4.1 Eligibility Criteria for Solvers

Solvers are considered eligible for this Open Call if complying with **ALL** the following rules:

Any kind of start-up, scale-up, and SME can participate as long as it meets the following criteria:

- Is established in any country of the Southern European science-based innovation ecosystem and eligible for the Horizon Europe program including associated countries².
- Is capable of addressing a challenge that has been submitted as part of the conducted open call for Challenges and which is related to the 17 Sustainable Development Goals.
- Can justify the development and / or deployment of a Deep Tech solution.

4.2 Application Procedure

The **Solver** will be invited to submit a simple and quick application to present the proposed solution to any of the submitted challenges of the previous phase. The application will be submitted through the F6S platform and is available at:

<https://www.f6s.com/s3e-reverse-for-solvers/apply>

and it will consist of the following information elements:

- Solution to a selected challenge and a short description.
- Relevant experience in the particular technology domain/domains in need (Selection).
- Context of the application.
- Response to any initially posed technical key criteria, requirements, or constraints posed by the Challenge organisation.
- Benefits that the solution will bring to the organisation.
- Expression for the type of commercial or business nature for the provision of the solution to the challenge:
 - Custom technology solution provision to be negotiated with the Challenge organisation
 - Collaboration as part of co-financed action under HE or other programmes (RIA, PPI, PCP, etc.)
 - Technology licensing

² For the scope of S3E, Southern European countries include the following European countries: Bulgaria, Croatia, Greece, Italy, Malta, Portugal, Cyprus, Romania, Slovenia and Spain. And the following Associated countries: Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, Kosovo and Turkey.



- Joint new venture
- Other (to be refined during the technology brokerage process)
- Relevant SDG if other than the originally selected one by the Challenge organisation (Selection).

4.3 Restrictions

Solvers may apply for more than one Challenge in the same Open Call, with different applications, and may also apply again in future Calls.

It is also possible that 2 Solvers submit a very similar solution to a challenge. In this case the Technology Broker may suggest working with both of them (in full confidentiality) to combine the solutions to a challenge in the best possible way and to make the most effective use of available resources.

4.4 Selection Process

The Solvers are going to be selected by an independent committee of experts based on the following criteria:

Category	Criterion	Weight
Challenge response	Degree of Innovation and novelty of the proposed solution to a challenge	20%
	Feasibility (Technical, time, budget)	20%
	ESG (Environmental / Social / Governance) Impact	20%
	Relevance to EU priorities	10%
Company	Reliability & Technical Capacity of Organisation	15%
	Robustness of the Organisation	15%

The Selection Committee will be composed of two independent experts (Deep Tech Brokers) and a member of the S3E consortium. Each member will evaluate the Solutions to the challenges individually based on the above criteria. The final ranking will be decided at a consensus meeting of the committee. An independent technology broker from our pool of experts will be assigned to each Challenge organisation and will facilitate all further collaboration. The evaluation will operate on a 'First come – First Served' for the Solvers applicants so when a match is identified the Challenge Organisations and the Solvers can start working together immediately.

In case a selected submitted solution to a challenge requires further elaboration or justification, the appointed tech broker will contact the Solver to improve the description of the Solutions before the publication.



The matching between challenge organisations and solvers will be kept confidential and only anonymised and generalised results will be announced. All Solver Organisations will be notified regardless of the result of the selection process.

4.5 Timeline of the 1st Open Call for Solvers

The Open Call for Solvers will be launched on the **14th of March 2023 at 12.00 pm CET**

The call will stay open till **15 May 2023 at 17:00 pm CET.**

As already mentioned, the matching process between the challenge organisations and solution providers will be on a first come – first serve basis, so the faster you submit your proposal the more chances you have to be selected for a suitable match.

The solution proposals from scale-ups and SMEs will be evaluated by independent experts and the selected companies will be invited for an interview by our deep tech technology brokers.

Following the final selection interview the technology brokers will work with the selected scale-ups and SMEs to match the submitted challenges with the proposed solutions.

4.6 Application Platform

The F6S platform will be the entry point for all challenges submissions to S3E Open Calls, which is directly linked to the S3E website (<https://south3e.eu/apply-now>). Submissions received by any other channel after the deadline will be automatically discarded.

Interested start-ups, scale-ups and SMEs can apply via:

<https://www.f6s.com/s3e-reverse-for-solvers/apply>





5 The benefits of participating in S3E Reverse

5.1 Why a brokerage program?

Both the private and the public sector are facing countless challenges that could be addressed through deep tech. On the other hand, there are so many teams, entrepreneurs, and start-ups that although they have worked and developed wonderful innovative solutions, they cannot find their way to the market, or they fail to focus on the actual problems because simply they are not able to identify them. There is a clear gap in communication and collaboration between organisations that must respond to specific challenges and those companies that could help address them.

S3E Reverse has a two-fold objective. First to collect challenges from corporates and public organisations and secondly to invite innovative solvers to contribute with Deep Tech based solutions to address those challenges. The aim of our brokerage program is to bridge this gap and match the challenge organisations with the most appropriate solvers that can provide solutions and address these challenges.

The brokerage program is a highly customised program that will be designed specifically for each case.

5.2 What's in it for the Solvers?

Solvers will apply to **S3E REVERSE** Open Call to present a Solution to a submitted challenge. They will help the Challenge organisation meet the needs of a suggested problem in need for a deep tech approach and which impacts the attainment of at least one of the SDGs.

The selected Solvers will work with our **DeepTech Brokers** to better define their Solution to a challenge and develop a solid technical roadmap that will devise the path towards a viable solution.

Through the technology brokerage process both the Challenge and the Solver organisations will be able to match a problem with a potential solution by means of a collaborative and co-creation approach.

Such collaborations may lead to, among others, the direct procurement of innovative solutions, the creation of a new joint venture, the establishment of a research collaboration, or some other type of collaboration that will be explored, defined and agreed by both sides during the technology brokerage phase.

Moreover, our program will help organisations to team up with innovative scale-ups to partner in a common proposal under Horizon Europe calls for Pre-Commercial Procurement (PCP) or Public Procurement for Innovative Solutions (PPIs) or other opportunities that may improve the capacity of both.



5.3 How else can Solvers benefit?

In addition to the technology brokerage, solvers will be able to benefit from a portfolio of appropriate services which will be customised to their specific case by their tech broker:

- **Innovation Readiness Assessment:** a Self-assessment of the solver that will help the company identify weak points or any weak points or problems in their growth. Our Technology brokers can then suggest specific actions that can help the solver improve.
- **Training in public procurement**, including Pre-Commercial Procurement and Public Procurement for Innovative solutions (PPIs) that will help scale-ups access bigger projects and clients.
- **Webinars**, access to the webinars of Tracks 1 & 2, on diverse topics pertinent to the development of the relevant skills (e.g., intellectual property, financials, business development, venture funding.). Note: a total of six webinars (one hours long) will be held.
- **Networking** with industry leaders and showcase opportunities at the S3E Open day and in collaboration with other programmes and initiatives.

Participation in the above will be optional for the selected Solvers. Our technology broker will suggest a customised support programme but it is up to the Solvers to decide what service they would like to use.





General Information

5.4 Means of submission

The F6S platform will be the entry point for all proposals' submission to S3E Open Calls, which is directly linked from S3E' website: <https://south3e.eu>. Submissions received by any other channel and after the open call duration will be automatically discarded.

5.5 Language

English is the official language for S3E Open Calls. Submissions done in any other language will not be eligible and, thus, will not be evaluated. English is also the only official language during the whole execution of the S3E REVERSE Program.

5.6 Data protection

The proposals are confidential, and each person involved in the program will sign and non-disclosure agreement, namely the reviewers of the proposals.

To process and evaluate applications, S3E will need to collect Data. S3E partners will act as Data Controllers of data submitted through the F6S platform for these purposes. The F6S platform's system design and operational procedures ensure that data is managed in compliance with The General Data Protection Regulation (EU) 2016/679 (GDPR). Each applicant will accept the F6S terms to ensure coverage.

Please refer to <https://www.f6s.com/privacy-policy> to check F6S platform data privacy policy and security measures and to <https://south3e.eu/privacy-policy/> to get informed about the S3E Privacy Policy.





6 Information and support

For the application form and detailed guidance for applicants, please download the files available at the <https://south3e.eu> website.

The S3E consortium has in place a helpdesk available for all participants and accessible from our website.

More info at <https://south3e.eu/apply-now/>.

Open call #1 for Solvers support material:

- **S3E Reverse Open Call Text for Solvers #1**, this document.
- **S3E Reverse for Solvers: Guidelines for Applicants**, detailed information regarding the S3E Reverse program application process for scale-up stage start-ups and SMEs.

