Ref. Ares(2024)4689976 - 29/06/2024

SIRENE
SOCIAL INNOVATION RESPONSIVE ENVIRONMENTS NETWORK

D2.1: Report on the Ecosystems and Experts Hub pathway

HORIZON-EIE-2022-CONNECT-01-02

Integration of social innovation actors in innovation ecosystems

Co-funded by the European Union

The contents of this publication are the sole responsibility of the SIRENE Consortium and do not necessarily reflect the opinion of the European Union

DOCUMENT INFORMATION

Deliverable number:	D2.1
Deliverable title:	Report on the Ecosystems and Experts Hub pathway
Deliverable version:	V1.0
Deliverable Security Class:	PU
Editor(s):	Federica Porcu (ECHA), Dimitris Georgoulis (ECHA)
Contributor(s):	All partners
Reviewer(s):	Francesca Masiero, Adele de Stefani (ISRAA)
Due Date:	30th June 2024
Delivery date:	28th June 2024
Project name:	SIRENE: Social Innovation Responsive Environments NEtwork

DOCUMENT HISTORY

Version	Date	Author(s)/Partner	Main changes
0.1	26/04/24	Federica Porcu (ECHA)	Table of Contents
0.2	06/05/24	Dimitris Gergoulis (ECHA)	Content update
0.3	20/05/24	Federica Porcu (ECHA) Dimitris Georgoulis (ECHA)	First draft
0.4	07.06/24	All partners	Overall revision
0.5	14/06/24	Federica Porcu (ECHA) Dimitris Georgoulis (ECHA)	Final draft version for peer review
0.6	24/06/2024	Adele De Stefani (ISRAA) Francesca Masiero (ISRAA)	Peer-review
0.7	24/06/2024	Dimitris Georgoulis (ECHA)	Final version for submission
1.0	27/06/2024	Miriam Cabrita (SHINE) Carina Dantas (SHINE)	Final review by the project coordinator

Co-funded by the European Union

Disclaimer

This deliverable is subject to final acceptance by the European Commission. The content and results of the publication herein are the sole responsibility of the publishers, it reflects only the contributors' view and it does not necessarily represent the views expressed by the European Commission or its services, neither the European Commission is responsible for any use that may be made of the information it contains.

While the information contained in the documents is believed to be accurate, the contributor(s) or any other participant in the SIRENE consortium make no warranty of any kind regarding this material including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Neither the SIRENE Consortium nor any of its members, their officers, employees, or agents shall be responsible or liable in negligence or otherwise however in respect of any inaccuracy or omission herein.

Without derogating from the generality of the foregoing, neither the SIRENE Consortium nor any of its members, their officers, employees, or agents shall be liable for any direct or indirect or consequential loss or damage caused by or arising from any information advice or inaccuracy or omission herein.

Copyright message

© SIRENE Consortium, 2022-2024. This deliverable and its content are the property of the SIRENE Consortium. This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both. Reproduction is authorised provided the source is acknowledged. The content of all or parts of these documents can be used and distributed provided that the SIRENE project and the document are properly referenced.

Co-funded by the European Union

EXECUTIVE SUMMARY

The SIRENE project aims to support the growth of social innovation ecosystems delivering eco-friendly and sustainable community-based services for SHAFE (Smart Healthy Age-Friendly Environments) implementation in Europe, by providing a workable framework for investment and the broad adoption of high-quality smart living solutions, combining the housing sector and ICT infrastructure.

The *D2.1 Report on the Ecosystems and the Expert Hub pathway* documents the creation and set-up of ecosystems within the SIRENE project between Months 1 and 20. This report aims not only to provide updates for the period of M1-M20 but also to display the overall progress and connections to other Work Packages (WPs) and Tasks.

This document also provides an overview of the main outreach activities that are related to the ecosystems and the Expert Hub, which will be further detailed in the corresponding deliverables, such as liaison with other initiatives and support measures towards stakeholders, among others.

In addition to covering past activities, D2.1 offers insight into the activities planned for the upcoming period, as well as the partners in charge.

Co-funded by the European Union

TABLE OF CONTENTS

EXECUTIVE SUMMARY **4**

LIST OF FIGURES **7**

LIST OF TABLES **8**

SYMBOLS, ABBREVIATIONS AND ACRONYMS **9**

1 INTRODUCTION **10**

1.1 BACKGROUND AND AIM 10
1.2 STRUCTURE OF THE DELIVERABLE 10
1.3 METHODOLOGY 10
1.4 SYNERGIES WITH OTHER TASKS AND DELIVERABLES 11

2 SOCIAL INNOVATION ECOSYSTEMS **14**

3 SET-UP OF THE ECOSYSTEMS **15**

3.1 THE SIRENE EXPERT HUB 15
3.2 EXPERT HUB MEETINGS 17
3.2.1 1st Expert Hub Meeting *17*
3.2.2 2nd Expert Hub Meeting *18*
3.2.3 3rd Expert Hub meeting *19*
3.2.4 4th Expert Hub meeting *20*
3.2.5 5th Expert Hub meeting *20*
3.2.6 6th Expert Hub meeting *21*
3.2.7 7th Expert Hub meeting *22*
3.2.8 8th Expert Hub meeting *22*

4 EXPERT NEEDS IDENTIFICATION **23**

4.1 METHODOLOGY 23
4.2 NEEDS ASSESSMENT SURVEY 24
4.2.1 Ecosystems Engagement Results *24*

5 SUPPORT MEASURES FOR ECOSYSTEMS **31**

5.1 INFORMATION AND AWARENESS 31
5.1.1 Science cafes *31*
5.1.2 Video pills *32*
5.1.3 Info packages *33*
5.2 CAPACITY BUILDING AND LEARNING EXCHANGE 33
5.2.1 Level 1 - Expert workshops *33*
5.2.2 Level 2 - Group workshops *33*
5.2.3 Level 3 - One-to-one meetings *34*
5.2.4 Indicative timeline of Capacity Building webinars *34*
5.3 MONITOR INVESTMENTS BASED ON THE SOCIAL INNOVATION FRAMEWORK 35
5.4 EXPLOITATION PLAN FOR THE SOCIAL INNOVATION FRAMEWORK 35

6 SUSTAINABILITY **36**

6.1 THE SIRENE EXPERT HUB 36
6.2 KNOWLEDGE BASED COMMUNITIES (KBCS) ..... **ERROR! BOOKMARK NOT DEFINED.**

7 NEXT STEPS **37**

8 CONCLUSIONS **38**

Co-funded by the European Union

9 REFERENCES 39

10 ANNEXES 40

10.1 ANNEX 1. LIST OF EXPERTS AND ECOSYSTEMS 40

Co-funded by the European Union

LIST OF FIGURES

FIGURE 1 - ECHALLIANCE ECOSYSTEMS. 14
FIGURE 3 - VISUAL USED FOR THE DISSEMINATION OF THE SURVEY. 24
FIGURE 4 - GEOGRAPHIC DISTRIBUTION OF THE RESPONDERS. 24
FIGURE 5 - ECOSYSTEM ACTIVITIES SCALE. 25
FIGURE 6 - AREAS IN WHICH THE ECOSYSTEMS CONTRIBUTE TO SOCIAL INNOVATION. 25
FIGURE 7 - TYPE OF ORGANIZATIONS INVOLVED IN THE ECOSYSTEMS. 26
FIGURE 8 - TYPE OF STAKEHOLDERS, TARGETED GROUPS OR PUBLIC: WHO DOES YOUR ECOSYSTEM AIM AT? 26
FIGURE 9 - ORGANIZATION OF LOCAL OR REGIONAL ECOSYSTEM MEETINGS. 27
FIGURE 10 - MAIN ACTIVITIES OF THE ECOSYSTEMS. 27
FIGURE 11 - HOW THE EXPERTS PRACTICALLY CONTRIBUTE TO THEIR ECOSYSTEMS. 28
FIGURE 12 - ASPECTS THAT SHOULD BE IMPROVED. 28
FIGURE 13 - ASPECTS TO FOCUS ON, FOR THE FUTURE DEVELOPMENT OF ECOSYSTEMS. 29
FIGURE 14 - SUGGESTED SUPPORT MEASURES BY SIRENE PROJECT. 29
FIGURE 15 - MATRIX OF EXPERTS – EXPERTS ENGAGEMENT SURVEY. 30
FIGURE 16 - EXPERTS' NEEDS IDENTIFIED IN THE SURVEY REPORTED IN SECTION 4. 31

Co-funded by the European Union

LIST OF TABLES

TABLE 1 - LIST OF ABBREVIATIONS....9
TABLE 2 - LIST OF RELEVANT SIRENE DELIVERABLES RELEVANT TO THE WORK IN THIS REPORT. 12
TABLE 3: EXPERTS' GEOGRAPHICAL DISTRIBUTION 15
TABLE 5 - 1ST EXPERT HUB MEETING KEY INFORMATION. 17
TABLE 6 - 2ND EXPERT HUB MEETING KEY INFORMATION. 18
TABLE 7 - 3RD EXPERT HUB MEETING KEY INFORMATION....19
TABLE 8 - 4TH EXPERT HUB MEETING KEY INFORMATION....20
TABLE 9 - 5TH EXPERT HUB MEETING KEY INFORMATION....20
TABLE 10 - 6TH EXPERT HUB MEETING KEY INFORMATION....21
TABLE 11 - CATEGORIZATION OF EXPERTS PER SCENARIO....23
TABLE 12 - LIST OF SCIENCE CAFES....31
TABLE 13 - LIST OF CAPACITY BUILDING WEBINARS....34

Co-funded by the European Union

SYMBOLS, ABBREVIATIONS AND ACRONYMS

Table 1 - List of abbreviations.

D	Deliverable
DoA	Description of Action
EU	European Union
KBC	Knowledge Based Communities
R&I	Research and Innovation
SHAFE	Smart Healthy Age-Friendly Environments
SIRENE	Social Innovation Responsive Environments Network
SI	Social Innovation
SIF	Social Innovation Framework
T	Task
WP	Work-Package

Co-funded by the European Union

1 INTRODUCTION

1.1 Background and aim

The SIRENE project aims to support the growth of social innovation ecosystems delivering eco-friendly and sustainable community-based services for SHAFE (Smart Healthy Age-Friendly Environments) implementation in Europe, by providing a workable framework for investment and the broad adoption of high-quality smart living solutions, combining the housing sector and ICT infrastructure.

The *D2.1 - Report on the Ecosystems and Experts Hub pathway* describes the creation and set-up of the ecosystems within the SIRENE project, including the list of participating organisations and a summary of the activities they enrolled towards their maturity as networks.

1.2 Structure of the deliverable

This deliverable consists of the following sections:

- **Chapter 1:** The first chapter provides a brief introduction to the document.
- **Chapter 2:** This chapter describes the meaning of Social Innovation Ecosystems.
- **Chapter 3:** The third chapter introduces the methodology and approach used in setting up ecosystems within the SIRENE project.
- **Chapter 4:** This chapter describes the methodology used to gather information from the experts and identify their needs.
- **Chapter 5:** Chapter 5 details the support measures identified to support the ecosystems.
- **Chapter 6:** This chapter provides insight into sustainability.
- **Chapter 7**: The seventh chapter describes the next steps and activities that will be conducted to engage and support the ecosystems.
- **Chapter 8:** This chapter reflects on the conclusions of this document.
- **Appendix:** Presents the Ecosystems Engagement Survey as disseminated by the SIRENE partners.

1.3 Methodology

The SIRENE project brings together experts and ecosystems with stakeholders from all relevant areas for eco-friendly environments, including innovation actors, social entrepreneurs, citizens, caregivers and community leaders, which work as knowledge-based communities. The objective is to introduce change in these ecosystems by identifying, creating, representing and/or distributing data, information and/or knowledge in and via a community context on the pretext that more significant value will be created via a knowledge value chain.

These ecosystems, on one hand, guarantee a true co-creation multiverse process, but also assure the validation of the Social Innovation (SI) framework created during the project period, participating in the entire cycle in an iterative process.

Reaching the end of the project's life cycle, experts and ecosystems play a key role in the sustainability and exploitation of the SIRENE project outcomes. They can be change actors,

Co-funded by the European Union

representing the SIRENE SI framework and distributing data, information and knowledge created by the project, via a community context.

Following the recruitment of experts and the launch of the SIRENE Expert Hub, ECHAlliance and Tecnalia developed a needs assessment survey, to evaluate the needs of the Experts in relation to setting and maintaining ecosystems, their level of engagement with their local / regional ecosystems and ways to address these needs with targeted support measures.

The support measures towards stakeholders are being further developed within WP3, based on the assessment work performed under this task:

- Information and awareness activities (T3.1)
- Capacity building and learning exchange (T3.2)
- Monitoring investment based on the social innovation framework (T3.3)
- Exploitation plan for the social innovation framework (T3.4)

1.4 Synergies with other tasks and deliverables

Task 2.2 Selection and set-up of Ecosystems is a key activity of the SIRENE project, ensuring the co-creation and validation of the SI framework, while establishing ecosystems that will introduce change in the broader ecosystem of SHAFE environments.

It directly connects with the SIRENE SI Framework, as this is co-created with experts to build on social innovation methods combining an ecosystem approach with a quintuple-helix approach [1] – with citizens, policymakers, designers, builders, and the providers, sellers or managers of housing and smart living solutions whether with the private, public or third sector and acknowledging the environment as a relevant actor in the ecosystem. The SI framework is composed of 5 components:

- a manual for innovation actors on SI methods and concepts, especially focused on those that can be used to promote responsive, inclusive, eco-friendly environments.
- a capacity-building framework for social entrepreneurs especially focused on funding opportunities and securing investment.
- a hands-on toolkit of networking and learning exchange initiatives.
- a sustainability strategy that includes examples of SHAFE business models and practical ideas for SI investments on SHAFE.
- a blueprint of good practices and SI initiatives around SHAFE for benchmark and future twinnings.

The support measures towards stakeholders developed in WP3 are benefiting from the knowledge developed in T2.2, further aiming to:

- increase awareness of innovation actors regarding social innovation concepts.
- make social entrepreneurs aware of potential business opportunities around SHAFE.
- provide tools to seek funding and investments that are sustainable and ready for further exploitation.
- ensure that business actors have access to social innovation and entrepreneurial knowledge.

Co-funded by the European Union

Finally, this task also relates to the outreach, engagement and sustainability activities in WP4 aiming to:

- interface with the external world to promote the results and disseminate them to the broadest audience.
- maximise the innovation, social and economic impact of the project.
- maximise the exploitation of results by consortium members, including impact on relevant standards.
- engage with relevant stakeholders and initiatives to adopt and support the projects' outcomes.

Below a list of relevant deliverables to this work, to be submitted within the SIRENE project are presented:

Table 2 - List of relevant SIRENE deliverables relevant to the work in this report.

Deliverable	Description	Timeline
D1.3 (Social Innovation Framework)	This report aims to deliver the Social Innovation Framework, developed through the Experts' Hub and the ecosystems participation. A first draft of the SI framework has been circulated within the consortium at M12. From M13 till M18 a second draft will be developed to be further assessed and validated until M20 and then finalised by M22, submitted through D1.3.	Due M22 (August 2024)
D3.1 (Report on information and awareness measures, incl. the info packages)	Report on the activities developed through: 1. Science Cafes 2. Videopills 3. Info packages	Due M24 (October 2024)
D3.2 (Report on capacity building and learning exchange activities)	This deliverable reports on the short training webinars that occur within the TIE (ECHA and ISRAA), as well as in collaboration with the NET4 network, including also the Short-Term Scientific Missions, Virtual Mobility Grants and Training Schools developed within this scope.	Due M24 (October 2024)
D3.3 (Report on investment monitoring and stakeholders survey)	This report will highlight the business models and scaling-up strategies within the SIRENE ecosystem, also including the results of a structured survey on investments.	Due M24 (October 2024)
D4.5 (Report on liaising activities and growth of the International	This deliverable will report on all activities related to the cross-initiatives' engagement, concertation and liaison activities with other projects and	Due M24 (October 2024)

Co-funded by the European Union

Stakeholder Community)	pertinent initiatives to SIRENE and will include a Policy Brief to be further used.	
D4.6 (Video report of the SIRENE Roadshow)	This video will provide an engaging report on SIRENE's roadshow, including its several activities, stakeholders interviews and the final achievements displayed.	Due M24 (October 2024)

Co-funded by the European Union

2 Social Innovation Ecosystems

In housing, healthcare, and social care many silos still exist and this is the main driver why the SIRENE project proposes to use an **ecosystem** model to bring together the different relevant stakeholders. These ecosystems are modelled on those developed already by the COST Action NET4Age-Friendly [2] and by the ECHAlliance, partner in the SIRENE project.

Figure 1 - ECHAlliance Ecosystems.

An ecosystem is, within a geographical area (region or country), a permanent multi-stakeholder group committed to working together regularly, to implement innovative solutions targeting an improvement of the quality of health status and well-being of citizens, of the efficiency and the sustainability of the system and generating business activities growth and jobs creation. Since 2011, the ECHAlliance has developed, with the support of the European Commission, a methodology and approach on how to set up and manage ecosystems in more than 80 locations. These ecosystems follow a consistent set of principles:

- Geographic coherence (a city, a region, or a country).
- Multi-stakeholder representation: policy-makers, regulators, companies (large and start-ups/SMEs), universities and education inst., citizens/patients' representatives, public and private insurance, investors, and service providers.
- Permanent group with regular meetings (4 times a year at least).
- Commitment around a strategic and action plan.
- Governance through a working group gathering all categories of stakeholders.

Co-funded by the European Union

3 Set-up of the Ecosystems

The aim of the SIRENE project is to introduce change in the wider ecosystem of SHAFE environments, by identifying, creating, representing and distributing data, information and knowledge in and via a community context, creating this way a knowledge value chain around the SIRENE project.

Within the duration of the SIRENE project, these ecosystems foster an iterative co-creation process, ensuring the validation of the SI framework, while also participating in the entire cycle of the development of results.

As SIRENE progresses towards the end of the project's life cycle, these ecosystems play a key role in the sustainability and exploitation of the project outcomes.

3.1 The SIRENE Expert Hub

The SIRENE Expert Hub has been the basis for the set-up of ecosystems. The Expert Hub of SIRENE includes participants from diverse and complementary areas such as social entrepreneurs, innovation actors from research, academia and industry, policy-makers, leaders from projects in the fields of independent living and ageing well, experts from the Reference Framework on Age-Friendly Housing, experts from the building industry, experts in Universal Design, experts on older age, health and social care, professionals and representatives of older people, architects and engineers associations, environmental and climate change experts, as well as representatives of the local communities and housing cooperatives.

SIRENE Experts come from all over Europe, as per the below list:

Table 3: Experts' geographical distribution

Country	No. of Experts
Austria	1
Belgium	1
Bulgaria	1
Croatia	1
Cyprus	1
Czech Republic	1
Denmark	1
Estonia	1
Finland	3
France	1
Georgia	1
Germany	1
Greece	5
Hungary	4
Ireland	1
Italy	4
Latvia	2

Co-funded by the European Union

Lithuania	1
Luxembourg	1
North Macedonia	1
Malta	1
Norway	1
Poland	4
Portugal	6
Romania	2
Serbia	1
Slovakia	1
Slovenia	1
Spain	3
Sweden	1
The Netherlands	3
Total	**57**

The SIRENE project provides support measures towards the experts of the Hub, for the set-up, establishment, and expansion of their ecosystems, depending on their level of maturity. This includes support to organise stakeholder meetings, create local, regional, or national ecosystems, and guidance for experts to analyse their local and regional networks of stakeholders. Additionally, the project organises several meetings with local or regional ecosystems, such as the meeting with stakeholders in Treviso in early March 2023 or in Bilbao in 2024. Finally, we actively encourage the experts of the Expert Hub to consult with and involve local stakeholders in the decision-making processes of building the SIRENE framework.

The experts' roles and responsibilities are:

1. To take part in the Expert Hub of the project – that is to be registered and be involved in delivering feedback on at least two themes/webinars/discussions during the lifecycle of the project.
2. To represent a local ecosystem – that is to use their existing national or local networks or expand it and to guarantee feedback of the ecosystem on the social innovation framework and tools during the project.
3. To participate in local / national / international events where the SI Framework will be discussed.
4. To monitor and report on local, regional, and national investments into building stock of eco-friendly housing and movements from institutional care to home-based independent living.

The identified experts of SIRENE were clustered into the following sectors:

- ICT for independent living
- Social innovation, health and social sciences
- Urban transformation, housing, architecture and design
- Policy and funding
- Community intervention and care

Co-funded by the European Union

- Information technology

They represent the EU countries, and other countries in and outside Europe, such as Canada and the USA.

3.2 Expert Hub Meetings

Until the release of this deliverable (M20, June 2024), the SIRENE Expert Hub met in 7 out of the **8 online Expert Hub meetings** planned. These meetings were chaired by Matteo Zallio, M. Arch, Ph.D., and prepared by the SIRENE partners.

The Expert Hub meetings series has been planned based on the following co-creation process:

To adhere to the established project plan, the eight meetings map the WHYs and HOWs through the Abstraction ladder, while focusing on the stages of the social innovation framework. These tree analysis techniques are used during each Expert Hub meeting. After each Expert Hub meeting, the consortium processes the outcomes, by clustering and synthesising the feedback collected, as guiding principles to create practical solutions. The consortium then proceeds to identify between 2 to 3 practical solutions to inform the corresponding part of the social innovation framework by applying the “Round Robin method”. Each final solution is then presented to the experts for feedback, via the online SIRENE Hub. The experts' feedback is collected, a set of solutions is created, and the final report includes the methods, the data, the synthesised data and the prototyped solutions.

This process is repeated for each Expert Hub workshop, in a cyclical way to ensure everyone is included in the process and continues to iterate the solutions.

For more details on the Expert Hub meetings please refer to D1.3 Social Innovation framework (Deadline August 2024).

3.2.1 1st Expert Hub Meeting

Table 4 - 1st Expert Hub Meeting key information.

Date	24.02.2023
Number of participants	26
Link to the recording	https://sireneproject.eu/resources/

The first Expert Hub meeting took place on 24th February 2023. Twenty-seven experts participated in the meeting. The SIRENE project objectives, methods and schedule were presented by the consortium members. Matteo Zallio introduced the concept of responsive, age-friendly environments.

During the interactive session, experts were invited to use the collaborative board from Miro to delve into the concept of "problems" and explore strategies to address them. A problem was

Co-funded by the European Union

defined broadly, encompassing any situation requiring attention and resolution, with a particular focus on cognitive psychology's interpretation involving goal-oriented challenges. The method employed for problem analysis was abstraction laddering, a technique that helps break down a problem into subproblems by iteratively asking "why" and "how" [3]. The primary question posed was how to develop a capacity-building framework to foster eco-friendly, responsive environments.

Experts highlighted the importance of such environments for improving citizens' quality of life and enhancing their empowerment and representation. They emphasised the need to address the knowledge gap on ageing and age-friendly environments (AFE) by raising awareness among various stakeholders, including industries, policymakers, building owners, and the general public. To achieve this, they proposed actions like informed decision-making with stakeholder inclusivity, inclusive communication campaigns, training initiatives, and the development of sustainable and innovative solutions tested through pilot programs. Political support and the involvement of financial institutions were deemed crucial for driving investments and building trust in institutions, thus ensuring the successful implementation of the capacity-building framework.

The recording of the 1st Expert Hub meeting is publicly available here.

3.2.2 2nd Expert Hub Meeting

Table 5 - 2nd Expert Hub Meeting key information.

Date	28.04.2023
Number of participants	25
Link to the recording	https://www.youtube.com/watch?v=9rXvEVrGf3k

The 2nd Experts Hub meeting on 28th April 2023, convened virtually to discuss the structure of key project outputs and co-design strategies to enhance engagement from municipalities and the construction industry, aiming to future-proof the SI framework as a Living Lab. The session, led by Matteo Zallio, was divided into breakout rooms to address different focus areas. Breakout Room 1, led by Miriam Cabrita and Oscar Zanutto, examined the social innovation framework's five components and their target audiences, emphasising the need for continuous learning, cultural transformation, interdisciplinary collaboration, and practical tools to measure SI impact. They highlighted three levels for the capacity-building framework—individual, organisational, and policy-making—emphasising stakeholder interconnections and successful solutions. The toolkit was advised to be interactive and practical.

Breakout Room 2, led by Patricia Lucha and Dieuwertje van Boekel, discussed economic accessibility as a major issue, alongside educational gaps in digital literacy. They stressed the need for better stakeholder collaboration, privacy, and ethical considerations, and suggested that public policies should include age-friendly environments. Breakout Room 3 featured presentations on the Expert Hub online platform by Luís Dias and a cloud-based data repository by Olatz Nicolas to boost user-awareness and literacy. In the co-design session, experts suggested raising SHAFE awareness, involving citizens through petitions, and expanding SHAFE

Co-funded by the European Union

research. They highlighted the importance of multi-stakeholder partnerships, cross-sectoral regulations, and cultural change within the construction industry, advocating for toolkits and collaborative adoption of best practices.

The recording of the 2nd Expert Hub meeting is publicly available here.

3.2.3 3rd Expert Hub meeting

Table 6 - 3rd Expert Hub Meeting key information.

Date	16.06.2023
Number of participants	17
Link to the recording	https://www.youtube.com/watch?v=B2f29Ni7nmA

The 3rd Expert Hub meeting on 16th June 2023, focused on finance, funding, and financial sustainability within the context of Social Innovation Frameworks for SHAFE. Led by Matteo Zallio, the session involved co-design activities to generate ideas on achieving financial sustainability while ensuring project feasibility for both public and private entities. Experts emphasised the importance of assessing market demand, cost projections, risk evaluations, and impact measurements. Efficient resource allocation and capacity building were highlighted as critical, particularly in the private and non-profit sectors. Community involvement, encompassing citizens, stakeholders, and policymakers, was deemed essential for identifying priorities and ensuring sustainability. Effective communication strategies were also seen as vital to engage stakeholders and publicise achievements, motivating ongoing and future participation. Furthermore, establishing a supportive financial and legal framework with incentives such as subsidies and tax rebates was considered crucial for attracting private investment.

In deeper discussions led by ISRAA's Oscar Zanutto, experts prioritised capacity building, community involvement, and communication strategies. They identified the need for thorough preliminary assessments, ongoing evaluations, and interdisciplinary dialogue to tailor interventions to specific contexts. Barriers such as academic-centric approaches, stakeholder disengagement, and lack of regulations between public and private sectors were noted. Community engagement should involve local authorities and citizens from the start, using a bottom-up approach to address real needs and maintain interest. Effective communication involves local media, influencers, and tailored messaging for different targets, although it faces challenges like organisational filtering and ensuring evidence-based policymaking.

Current trends and challenges in Europe, including climate change, societal ageing, migration, digital divides, economic developments, and political uncertainties, were discussed in relation to the SI framework. Environmental concerns such as food and water security, bushfires, and raw material shortages were highlighted. The creation and maintenance of ecosystems were also examined, with experts defining ecosystems as multi-stakeholder initiatives working towards common goals. Flexibility, shared vision, and cooperation, even among competitors, were identified as key factors for sustaining such ecosystems.

Co-funded by the European Union

The recording of the 3rd Expert Hub meeting is publicly available here.

3.2.4 4th Expert Hub meeting

Table 7 - 4th Expert Hub Meeting key information.

Date	20.10.2023
Number of participants	15
Link to the recording	https://www.youtube.com/watch?v=H9EeQkneTlg

The 4th Expert Hub meeting on 20th October 2023, focused on social and environmental sustainability in SHAFE. Experts engaged in a co-design session led by Matteo Zallio, discussing how to ensure sustainability in these environments. Key points included the importance of balancing air quality and energy saving, retrofitting existing buildings, and creating frameworks for monitoring sustainability. Experts highlighted the need for community engagement, co-design approaches, and mapping existing needs before implementation. They also stressed the importance of user-friendly digital solutions, tailored guidance for older adults, and the significant impact of political attitudes on sustainability efforts.

In deeper discussions, led by ISRAA's Oscar Zanutto, experts shared their experiences and knowledge on enabling social and environmental sustainability. They emphasised the necessity of assessing the starting situation and goals, using tools like SWOT analysis. Education and awareness-raising across all age groups were considered crucial. Success factors included developing use-case scenarios and providing toolkits and technologies for idea exchange. However, achieving true sustainability remains a challenge, with barriers such as limited project time frames, mindset issues, inactivity, and lack of investment from authorities.

In breakout sessions, ECHAlliance presented findings from the ecosystems' engagement survey, highlighting the need for support in expanding ecosystems, engaging stakeholders, and enhancing communication and collaboration. Silvia Urra from Tecnalia discussed the setup of a dynamic, continuously updated repository for SHAFE initiatives. Nicola Contarin from ISRAA presented the Good Practices Blueprint, a component of the Social Innovation Framework, which consolidates best practices across various topics such as policy, social innovation, health, community intervention, and urban transformation. This blueprint aims to outline key features for success and identify existing gaps in SHAFE.

The recording of the 4th Expert Hub meeting is publicly available here.

3.2.5 5th Expert Hub meeting

Table 8 - 5th Expert Hub Meeting key information.

Date	26.01.2024
Number of participants	15

Co-funded by the European Union

Link to the recording	https://www.youtube.com/watch?v=N2Th2eEGPYg

The 5th Expert Hub meeting on 26th January 2024, focused on assessing social, economic, and environmental impacts. Experts contributed to a co-design session under Matteo Zallio's guidance, discussing effective assessment strategies. Key takeaways included the importance of stakeholder engagement, solid monitoring systems with KPIs, and using diverse evaluation methods. Emphasis was placed on community involvement, creating frameworks for monitoring sustainability, and tailoring assessments to the technology readiness level of solutions. Experts highlighted the Social Return on Investment (SROI) for social impacts, ROI for economic assessments, and real-time data for environmental impacts.

In breakout sessions, Dimitris Georgoulis from ECHA presented the Capacity Building Framework for social entrepreneurs and a Hands-on Toolkit for networking and learning exchange. Feedback included tailoring materials to different experience levels and incorporating sections on soft skills. Willeke van Staalduinen and Patricia Lucha from AFEdemy discussed sustainability planning, emphasising practical benefits of stakeholder engagement, event planning, and reaching policymakers with concise, impactful messages. The meeting concluded with Karmele Herranz Pascual from Tecnalia outlining a three-cycle validation plan for the Social Innovation Framework and related tools, involving experts' feedback via an online survey.

The recording of the 5th Expert Hub meeting is publicly available here.

3.2.6 6th Expert Hub meeting

Table 9 - 6th Expert Hub Meeting key information.

Date	22.03.2024
Number of participants	10
Link to the recording	https://www.youtube.com/watch?v=dG7q4-NE2GY

The 6th Expert Hub meeting took place on 22nd March 2024. The workshop began with a co-design session where participants discussed implementing responsive environments. This was followed by presentations on the Social Innovation Framework (SIF), an overview of the upcoming Roadshow and European Week, and an explanation of the SIF voting process. Under Matteo Zallio's guidance, the co-design session focused on integrating responsive environments into organisational routines, with experts providing feedback in areas such as cultural change, training, future-thinking approaches, process mapping, and identifying challenges and gaps.

Experts emphasised the need for cultural change within organisations to adopt SHAFE (Smart Healthy Age-Friendly Environments) principles, suggesting that these principles should be incorporated into organisational performance metrics. They highlighted the importance of training employees on SHAFE concepts and the potential impact on their roles. Future-thinking approaches were also discussed, including testing new solutions in real-life contexts and creating a multidimensional network of organisations. Process mapping was deemed essential

Co-funded by the European Union

for integrating responsive capabilities, and transparency was emphasised. Experts stressed the importance of assessing organisational resources and technological readiness and highlighted the need for funding opportunities and institutional recognition to support SHAFE initiatives.

Willeke van Staalduinen from AFE presented the SIF, aimed at raising awareness about social innovation, potential business opportunities, and creating stakeholder alliances. Adele De Stefani from ISRAA outlined the SIRENE Roadshow's actions and events, culminating in the final voting at the 7th Expert Hub Workshop on 14th June 2024, and announced the SIRENE European Week in Brussels in October 2024. The meeting concluded with Willeke van Staalduinen detailing the voting process, including how experts will contribute and the timeline for collecting amendments within the experts' ecosystems.

The recording of the 6th Expert Hub meeting is publicly available here.

3.2.7 7th Expert Hub meeting

Date	14.06.2024
Number of participants	14
Link to the recording	https://youtu.be/Ayv0vNgQCYA

The 7th Expert Hub meeting took place on the 14th of June 2024. The session was dedicated to voting on the Social Innovation Framework, which was unanimously approved. The voting followed the process of collection of amendments and declarations of support by ecosystems and relevant stakeholders undertaken by project partners and collaborating experts. It was also the occasion to present the results of the second online validation round on three of the components of the SIF (Sustainability Strategy, Hands on Toolkit, and Capacity-Building Framework). In addition, an overview of the National Events held by partners in their country to present the main results of the SIRENE project and the Social Innovation Framework was given, together with some updates on the SIRENE project final event.

3.2.8 8th Expert Hub meeting

The 8th Expert Hub meeting will be the final one and is scheduled for 25th October 2024. In this meeting, the SIRENE consortium will present to the experts and ecosystems the final version of the Social Innovation Framework, along with the whole package of knowledge, resources and tools created by the SIRENE project with the aim of fostering social innovation in SHAFE environments in Europe. In addition to this, the exploitation and uptakes of project's results will be also explored.

Co-funded by the European Union

4 Expert needs identification

Within the *WP2 - Activating the Co-creation Network*, and more specifically as part of *Task 2.2 – Selection and Set-up of Ecosystem*s, ECHAlliance developed a methodology for engaging experts from the Expert Hub and providing actionable recommendations to the consortium for maximising the benefits of their involvement.

In the following paragraphs, we will outline the step-by-step approach to ensure that the experts represent a national/local ecosystem and establish and maintain a productive relationship with the Expert Hub.

4.1 Methodology

In order to gather the best value from the Expert Hub, it has been important to categorise the types of experts based on their involvement in their ecosystem and the possible scenarios that may arise depending on their level of interest and resources available for contributing to the project. As a result, we have created a matrix which enables the consortium to categorise the experts effectively and tailor their approach accordingly. By utilising this matrix and filling it out, we have been able to set up specific actions that enable us to extract the best value from them. This approach ensures that our engagement with the Experts Hub is optimised, allowing us to leverage their knowledge and expertise to achieve the desired outcomes for the SIRENE project.

Table 10 - Categorization of experts per scenario.

Category of Expert **Possible Scenarios**	**Expert Champion** *(Champion in their Regions)*	**Expert Committed** *(Already engaged and somehow committed)*	**Isolated Expert** *(Might be isolated from the regional ecosystem)*
Scenario 1 *Expert committed and available for further involvement in the project.*			
Scenario 2 *Expert committed to the topic, but not necessarily to the project*			
Scenario 3 *Expert might not have interest, time and / or resources to participate*			

Co-funded by the European Union

4.2 Needs assessment survey

ECHAlliance and Tecnalia launched the **Ecosystems Engagement Survey** aimed at equipping the SIRENE consortium with a deeper understanding of experts' involvement in various ecosystems. It was officially launched on 9th June 2023 and published on the SIRENE platform and distributed to all experts via email. Furthermore, we promoted it extensively through the project's social media channels, two follow-up reminders were sent on 20th June and 25th July to encourage participation.

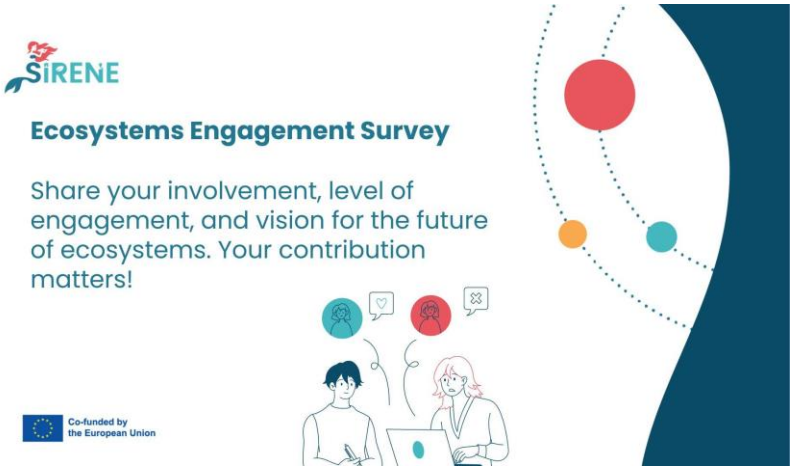

Figure 2 - Visual used for the dissemination of the survey.

We have received a total of **14 responses**. Below, we will provide further insights into the participating experts, offering additional details about their backgrounds and the specific types of responses they provided.

4.2.1 Ecosystems Engagement Results

Responses were contributed by members of the Expert Hub, representing 10 distinct countries. The findings illustrate that experts' ecosystems operate at various levels of activity, ranging from the European level down to the district level.

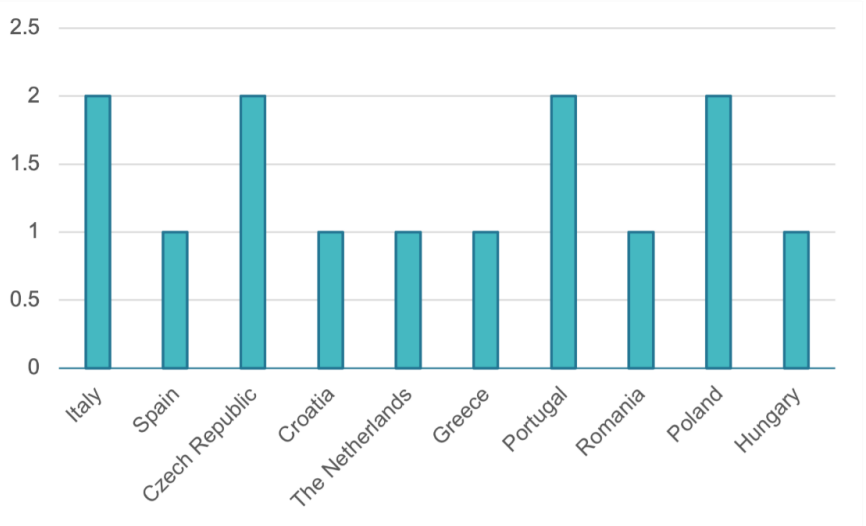

Figure 3 - Geographic distribution of the responders.

Co-funded by the European Union

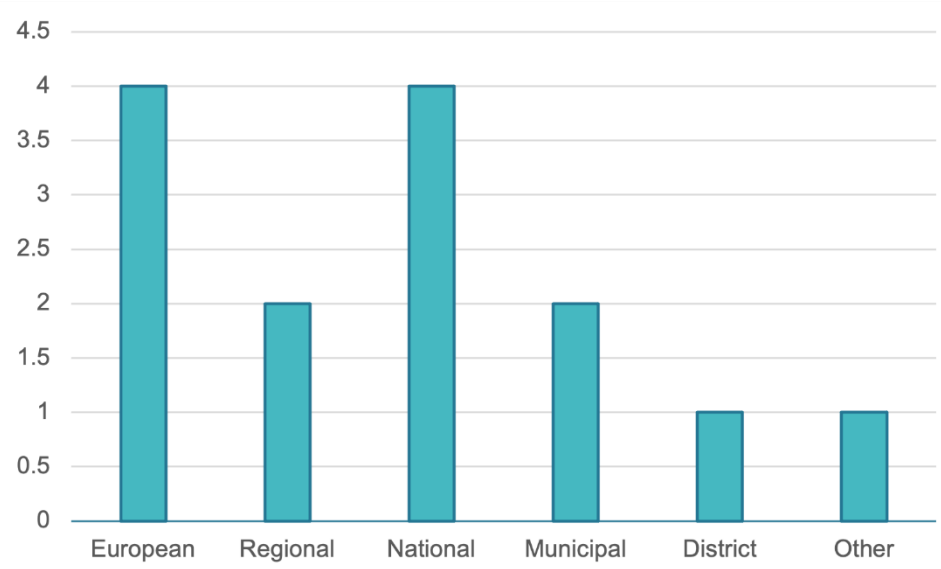

Figure 4 - Ecosystem activities scale.

Regarding the areas in which the experts' ecosystems are involved, Figure 6 shows that the largest portion is related to **social innovation, health, and social sciences** (33%), followed by **ICT for independent living** (18%), and **community intervention and care** (13%).

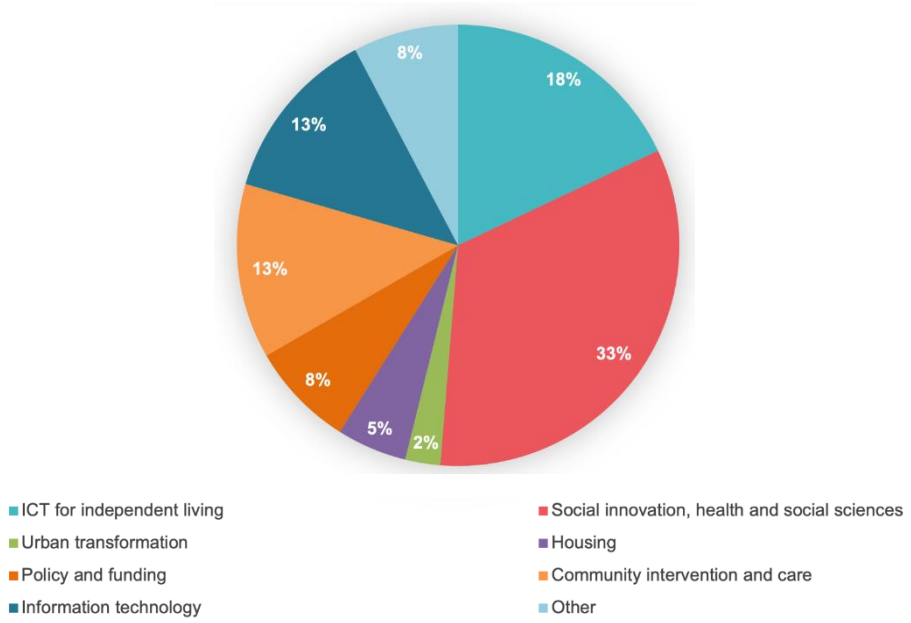

Figure 5 - Areas in which the ecosystems contribute to social innovation.

There are different types of organisations involved in these ecosystems, with **academia** (25%) and **health and care organisations** (19%) leading.

Co-funded by the European Union

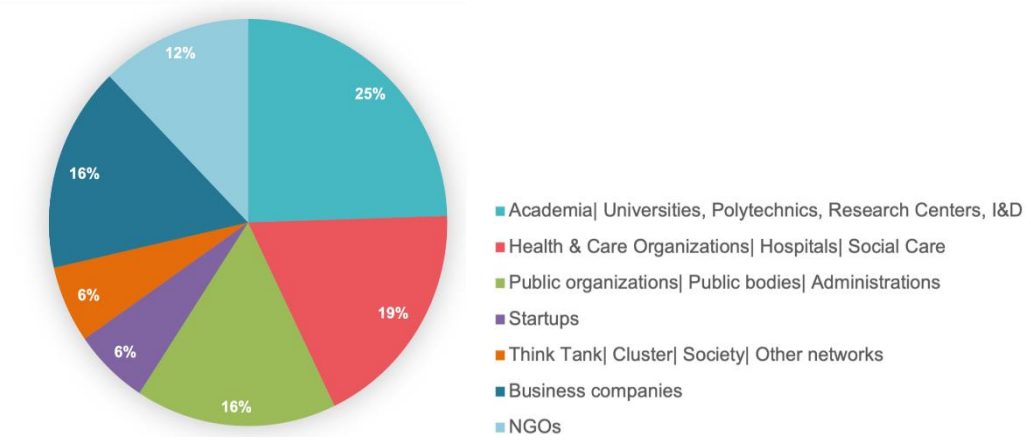

Figure 6 - Type of organizations involved in the ecosystems.

When it comes to audiences, these ecosystems target a wide range of stakeholders, including **older people** (17%), **industry** (16%), **businesses** (14%), and **students** (13%).

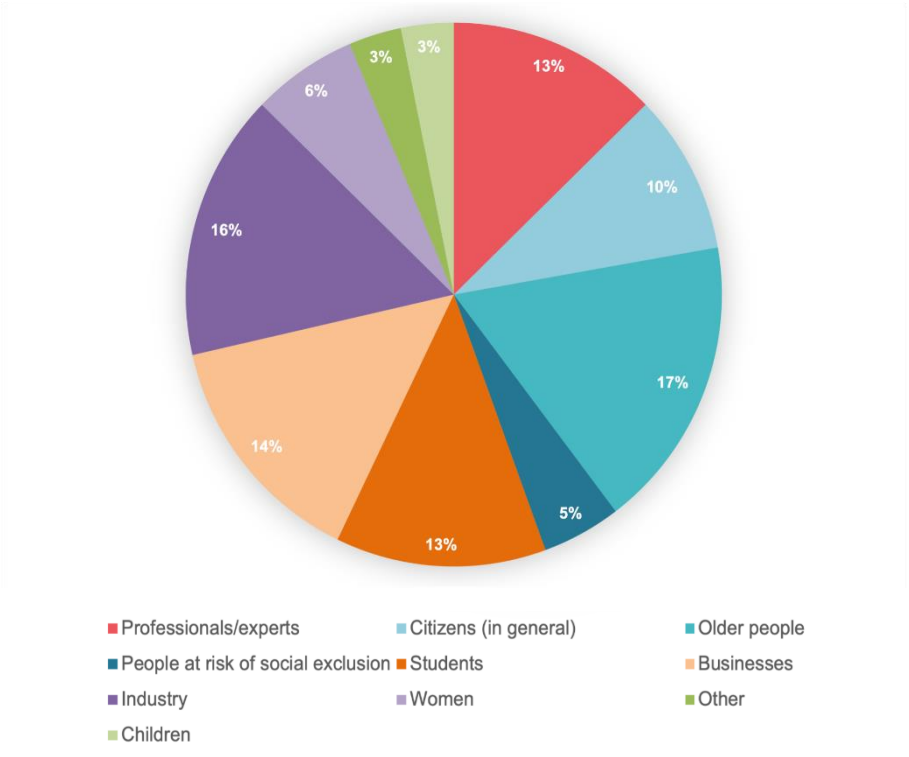

Figure 7 - Type of stakeholders, targeted groups or public: Who does your ecosystem aim at?

We asked the experts if the ecosystems they are involved in organise regular meetings, and the majority, 10 out of 14, answered **yes** (Figure 9).

Co-funded by the European Union

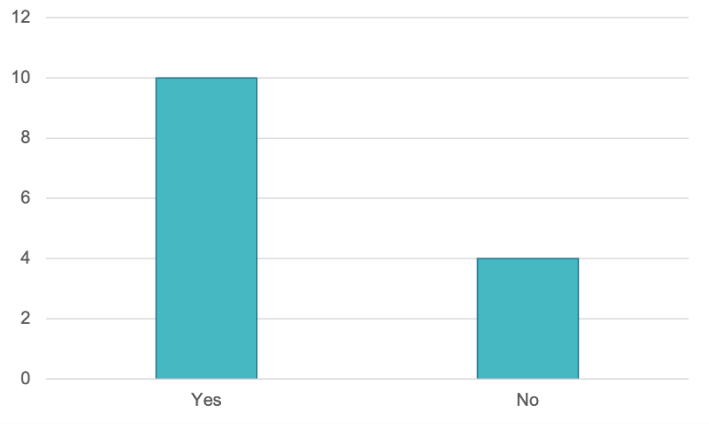

Figure 8 - Organization of local or regional ecosystem meetings.

The primary activities for these ecosystems are related to **knowledge sharing**, **R&D**, **networking**, **public policy consulting**, and **health and care services**.

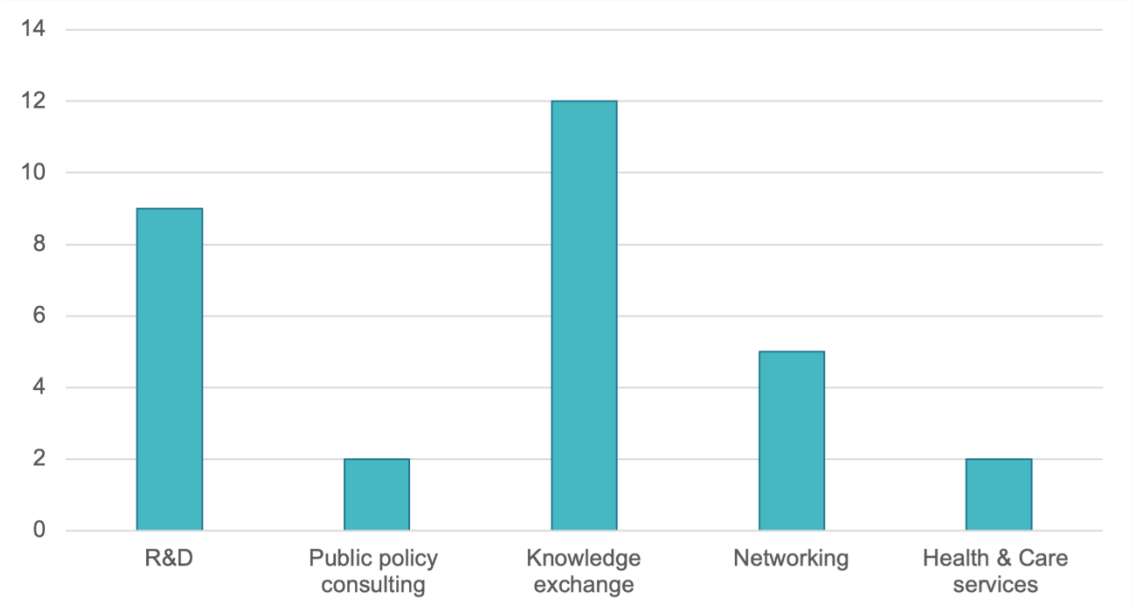

Figure 9 - Main activities of the ecosystems.

While the experts' contributions to the ecosystems are primarily related to **R&D**, as well as **practical activities** and **knowledge transfer**. These contributions are complemented by coordination, **communication & dissemination**, **networking**, and **planning and design** tasks (Figure 10).

It is important to note that most of the experts undertake more than one of these tasks simultaneously.

Co-funded by the European Union

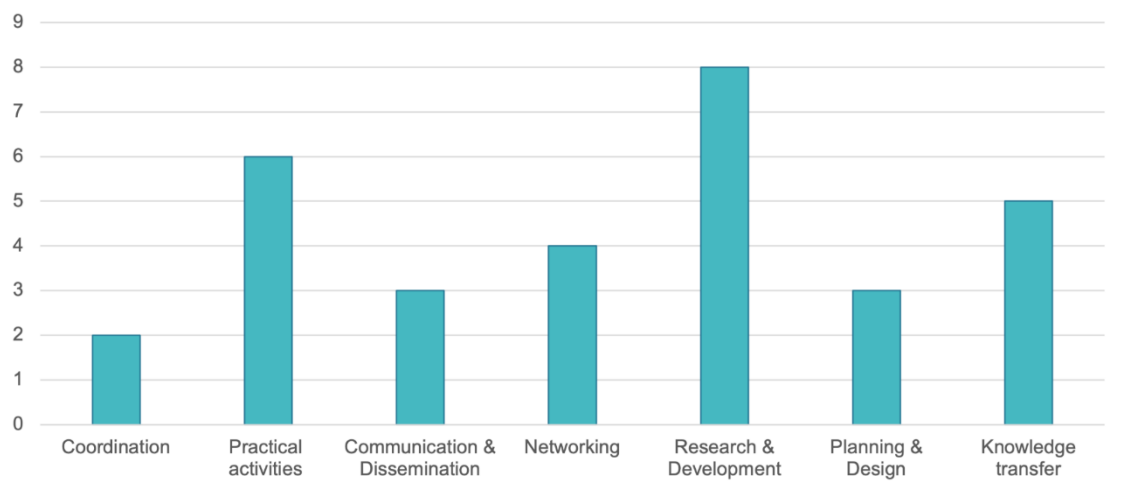

Figure 10 - How the experts practically contribute to their ecosystems.

Furthermore, we asked experts what aspects of their ecosystems they believe should be improved. Most of them mentioned the need for **better engagement with policymakers and industry**, as well as increased **financial and legal support**. Improved **communication among different stakeholders** and more effective impact assessment were also identified as needs.

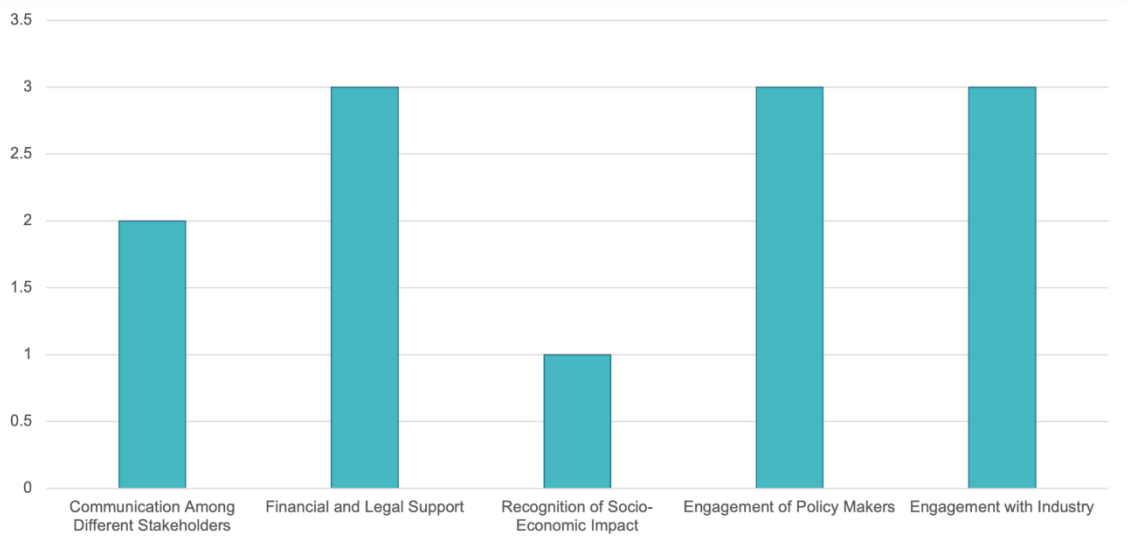

Figure 11 - Aspects that should be improved.

Moving forward, the key focus points for the future development of these ecosystems include facilitating the sharing of knowledge, coordinating collaborative research and development activities, encouraging the involvement of a broader range of stakeholders, and enhancing digital infrastructure to foster deeper collaboration among participants.

Co-funded by the European Union

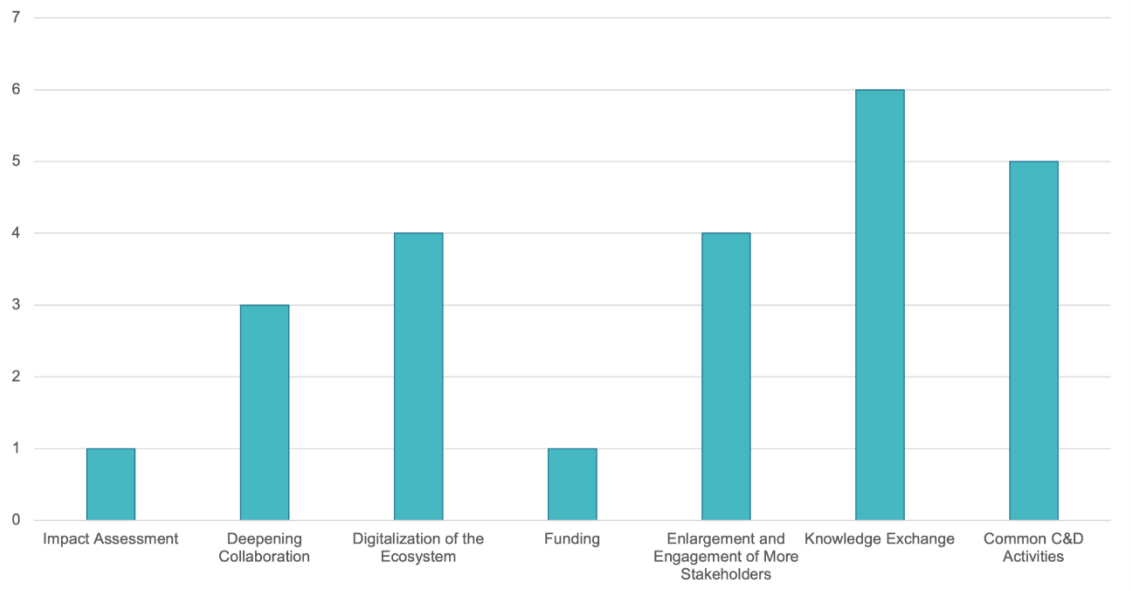

Figure 12 - Aspects to focus on, for the future development of ecosystems.

Experts suggest that SIRENE project could support them in the following ways:

- Networking and collaboration opportunities
- With access to funding
- Focusing on awareness and advocacy aspects
- Enhancing knowledge exchange.

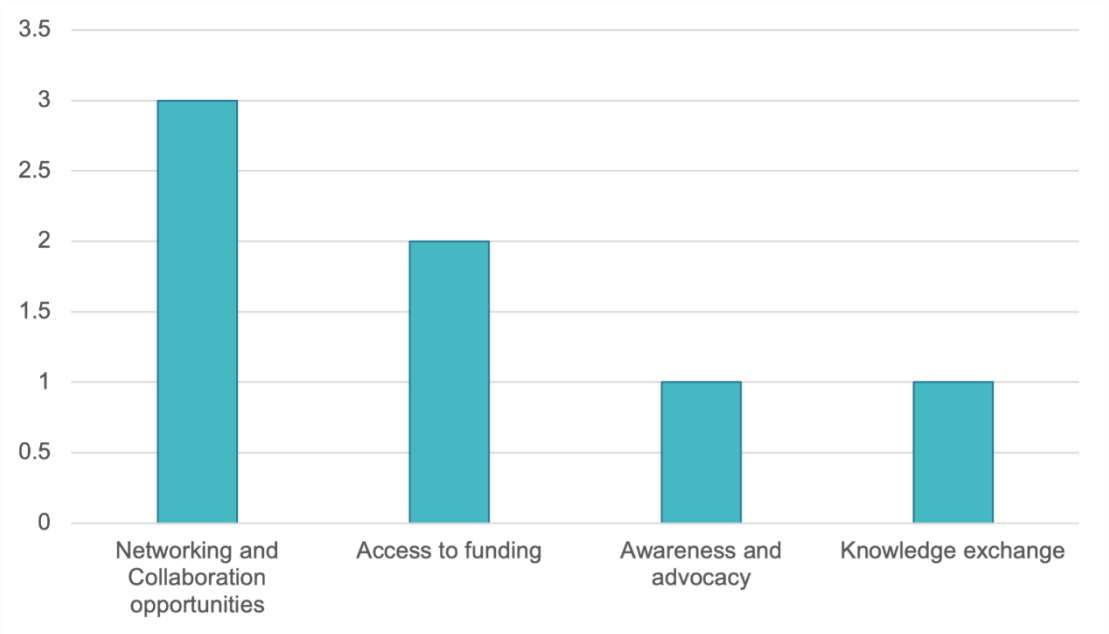

Figure 13 - Suggested support measures by SIRENE project.

Based on the results of the Ecosystems Engagement Survey, it emerged that the experts involved in the SIRENE Experts Hub can be categorised as either champions or as engaged and committed to their ecosystems (Figure 15). Both of these categories are available for further involvement in the SIRENE project. However, there are many isolated experts who could benefit from the support of the first two categories to become more engaged.

Co-funded by the European Union

Category of Expert Possible Scenarios	**Expert Champion** *(Champion in their Regions)*	**Expert Committed** *(Already engaged and somehow committed)*	**Isolated Expert** *(Might be isolated from the regional ecosystem)*
Scenario 1 *Expert committed and available for further involvement in the project.*			
Scenario 2 *Expert committed to the topic, but not necessarily to the project*			
Scenario 3 *Expert might not have interest, time and / or resources to participate*			

Figure 14 - Matrix of Experts – Experts Engagement Survey.

Co-funded by the European Union

5 Support measures for ecosystems

The SIRENE consortium, taking into consideration Experts' needs, as expressed through the needs assessment survey, planned and delivers a series of support measures towards set - up, establishment, and expansion of ecosystems with stakeholders from all relevant areas for eco-friendly environments, including innovation actors, social entrepreneurs, citizens, caregivers, and community leaders.

Our support measures address the following needs:

Figure 15 - Experts' needs identified in the survey reported in section 4.

To effectively address the different needs of Experts and Ecosystems, SIRENE project provides targeted support measures, within WP3 (Support measures towards stakeholders) activities.

5.1 Information and awareness

Information and awareness activities are part of T3.1 (Information and awareness). Within this task, different types of information are provided to stakeholders on social innovation aspects, especially focused on SHAFE, by building multilevel awareness across target audiences.

5.1.1 Science cafes

The SIRENE project, is organising 8 virtual science cafes led by Tecnalia, inviting multi-stakeholders from the ecosystems and the partners' networks to debate on SI and how to leverage it in practice.

Table 11 - List of Science cafes.

Nº	Date	Topic	Speaker
1	31st May 2023	What is Social Innovation?	Blanca Herrero de Egaña
2	28th November 2023	How is Social Innovation applied to SHAFE?	Elisa Pozo Menéndez
3	7th February 2024	Main challenges and related possible solutions for public administration bodies when it	Anthony Polychronakis

Co-funded by the European Union

		comes to the implementation of SHAFE	
4	16th May 2024	Training curriculum for a new profile of "age-friendly cities professional"	Angel Yagüe & Clara del Castillo
5	30th May 2024	Business-to-Government Model, Innovation Procurement	Danijel Pavlica
6	17th June 2024	The Age-Friendly Cities and Communities Questionnaire (AFCCQ)	Joost van Hoof
7	23rd July 2024	Health promoting environments	Marta Fernandez
8	September 2024	Teaser to the final event of the SIRENE project in October 2024	Tbc

5.1.2 Video pills

Video pills are short videos organised by SIRENE partners, with experts discussing SI themes, based on the feedback received through the Science cafes regarding themes that cause doubts or are not well known by stakeholders.

Table 12: List of video pills

No	Topic	Partner responsible	Speakers
1	Housing and urban transformation	TECNALIA	Heitor Garcia Lantarón
2	Community intervention	AFEdemy	Lucia Thielman
3	Policy and funding	SHINE 2EU	Gian Matteo Apuzzo Afonso Duarte Sandra Caldeira
4	Health and social care-What are responsive inclusive eco-friendly environments?	ISRAA	Matteo Zallio
5	ICT for independent living. Psychosocial needs of older people today	ECHALLIANCE	Joan Cornet Prat

Co-funded by the European Union

6	Information Technology	F6S	TBC

5.1.3 Info packages

SIRENE is also developing 3 info packages, with the support of the Expert Hub: one for citizens, one for innovation actors and one for investors, eliciting assets and the societal potential of SI.

5.2 Capacity building and learning exchange

Capacity building and learning exchange activities are part of *T3.2 Capacity building and learning exchange*. Twelve sessions are foreseen during the project that will be recorded and made available on SIRENE website.

The capacity building and learning exchange support is provided in 3 levels:

1. Expert workshops
2. Group workshops
3. One-to-One meetings

5.2.1 Level 1 - Expert workshops

Expert workshops target all ecosystems, on topics that are of mutual interest for all of them.

1. How can I build a SHAFE environment?
2. Introduction to Regional and Thematic Innovation Ecosystems
3. How to arrange a Twinning?
4. Thematic Innovation Ecosystems: TIE Housing and Health
5. Value-based model in healthcare
6. Collaboration and co-creation
7. Impact assessment and social innovation framework
8. Communicating common objectives and activities

5.2.2 Level 2 - Group workshops

Group workshops target ecosystems based on their level of advancement and activity, on topics that are aligned with their status.

1. Learning from the best: Establishing an ecosystem
2. Networking: Learning the basics for enlarging your ecosystem
3. Connecting social innovation with technical and business innovation
4. Ecosystem expansion and sustainability

Co-funded by the European Union

5.2.3 Level 3 - One-to-one meetings

One-to-one meetings offer the possibility for personalised consultation, in-depth analysis of needs and tailored solutions. Experts and ecosystems were called to express their interest in this service. Following the request for this service, a bilateral call is to be scheduled, to discuss the ecosystem's status and plans, and agree on the support needed. As a follow-up, practical recommendations and guidance will be provided by ECHAlliance.

5.2.4 Indicative timeline of Capacity Building webinars

Table 12 - List of Capacity Building webinars.

No	Topic	Partner responsible	Date / time frame	Comments
1	How can I build a SHAFE environment?	TECNALIA	05/12/2023	Delivered
2	Introduction to Regional and Thematic Innovation Ecosystems	ECHAlliance	11/01/2024	Delivered
3	Learning from the best: Establishing an ecosystem	ECHAlliance	20/02/2024	Delivered
4	Networking: learning the basics for enlarging your ecosystem	ECHAlliance	04/04/2024	Delivered
5	How to arrange a Twinning?	ECHAlliance	July 2024	Confirmation pending
6	Connecting social innovation with technical and business innovation	SHINE	30/05/2024	Delivered
7	Thematic Innovation Ecosystems: TIE Housing and Health	ECHA	July 2024	Confirmation pending
8	Ecosystem expansion and sustainability	ECHA	July 2024	Confirmation pending
9	Value-based model in healthcare	ISRAA	05/07/2024	Confirmed

Co-funded by the European Union

10	Collaboration and co-creation	ECHA	2nd Week of September	TBC
11	Impact assessment and social innovation framework	AFE	26/09/2024	Confirmed
12	Communicating common objectives and activities	ECHA	2nd Week of October	TBC

5.3 Monitor investments based on the social innovation framework

The production of business models and scaling-up strategies reports within T3.3 will provide a tangible result related to the first achievements with investment of the SIRENE action. After the v1 of the Social Innovation Framework is ready, experts (and ecosystems) will monitor possible investments in responsive, smart age-friendly housing and reduction of investments in residential care.

The survey serves to gain an overview of investment in different areas of responsive, smart age-friendly housing and reduction of investments in residential care. It aims to measure if investments have taken place or are expected in the future. It will be sent to at least 30 participants from various stakeholder groups.

5.4 Exploitation plan for the Social Innovation Framework

The Exploitation plan for the Social Innovation Framework is about how to develop a sustainability strategy for business actors to have access to social innovation and entrepreneurial knowledge and can successfully apply SHAFE initiatives and projects.

Co-funded by the European Union

6 Sustainability

6.1 The SIRENE Expert Hub

The SIRENE's Expert Hub counts with the participation of 57 experts from varied contexts, backgrounds and disciplines, including large-scale pilots and other projects in the fields of independent living and ageing well, experts from the Reference Framework on Age-Friendly Housing, experts from industry - environment, IT, experts from the building industry, experts in universal design, experts who are concerned with old age, care and care services, professionals and representatives of older people, architects and engineers associations as well as representatives of the local communities and housing cooperatives.

The diversity of origins, competencies, and backgrounds of the members of the Expert Hub guarantees that Europe is represented in the shape and content of the social innovation framework and enhances the chance of mutual collaborations and learning.

The online Hub is a community space for content and exchange, developed during the lifetime of the project and that will last beyond. It is the networking space on the website, and it currently includes the following features:

- A smart assistant on the homepage makes a standard guided tour through the platform to support onboarding, presenting main spaces and providing predefined Q&A for a better understanding of how the platform works, thus making it more user-friendly and engaging.
- Shared open spaces for experts to register, upload contents, and contact each other to exchange practical tips and materials, thus enabling peer-learning and exchange of good practices – and validation of the tools.

Reaching the end of the SIRENE project lifecycle, the SIRENE Hub will be upgraded with a formal interactive repository for the Social Innovation Framework and Toolkit and the Good Practices Blueprint as a virtual library, which allows filtering in multiple ways, namely by name, theme, type, area, language, etc. The Hub has been iteratively tested with experts and it is being fine-tuned as the project proceeds.

6.2 Ecosystems

During the last (8th) Expert Hub meeting, the SIRENE consortium will present to the experts all outputs (resources, tools, guidance) developed, along with the final version of the Social Innovation Framework and its components. This will take place in Brussels and online between 1-3 October 2024. Experts will have the opportunity to further use these outputs within their future activities and distribute them within their networks.

Co-funded by the European Union

7 Next steps

The Social Innovation Framework was unanimously approved on the 14th of June 2024. The 8th Expert Hub meeting will be the final one and in this meeting, the SIRENE consortium will present to the experts and ecosystems the final version of the Social Innovation Framework, along with the whole package of knowledge, resources and tools created by the SIRENE project with the aim of fostering social innovation in SHAFE in Europe.

In parallel, the Support Measures to Ecosystems are ongoing, with 8 more Capacity Building webinars planned until the end of the project (October 2024), science cafes and video pills. One-to-one support is available for all experts, and ECHAlliance will seek their engagement in this service through personalised communication. The Report on investment monitoring and stakeholders survey will be published in M24 (D3.3 - Report on investment monitoring and stakeholders survey) while the Exploitation plan for the Social Innovation Framework will be ready by M23 (September 2024).

Co-funded by the European Union

8 CONCLUSIONS

D2.1 - Report on the Ecosystems and Experts Hub pathway documents the creation and set-up of the ecosystems within SIRENE project, also including the list of participating organisations in each and a summary of the activities they enrolled towards their maturity as networks.

Within the duration of the SIRENE project, these ecosystems on one hand guarantee a true co-creation multiverse process and on the other hand assure the validation of the SI framework, participating in the entire cycle in an iterative process. Reaching the end of the project's life cycle, these ecosystems will play a key role in the sustainability and exploitation of the SIRENE project outcomes.

Co-funded by the European Union

9 REFERENCES

[1] E. G. Carayannis, T. D. Barth, and D. F. Campbell, "The Quintuple Helix innovation model: global warming as a challenge and driver for innovation," *J Innov Entrep*, vol. 1, no. 1, p. 2, 2012, Doi: 10.1186/2192-5372-1-2.

[2] COST Association, "CA19136 - International Interdisciplinary Network on Smart Healthy Age-friendly Environments (NET4AGE-FRIENDLY)," COST European Cooperation in Science & Technology. Accessed: Jun. 27, 2024. [Online]. Available: https://www.cost.eu/actions/CA19136

[3] M. B. Seabury, "Critical Thinking via the Abstraction Ladder," *The English Journal*, vol. 80, no. 2, pp. 44–49, 1991, Doi: 10.2307/818752.

Co-funded by the European Union

10 Annexes

10.1 Annex 1. List of Experts and Ecosystems

Name	Surname	Organization	Ecosystem	Area of expertise & background	Country
Ignacio	Pedrosa	CTIC	Asturias	ICT for independent living	Spain
Charalampos	Vassiliou	CGNET	Athens	ICT for independent living	Greece
Stefan	Danschutter	BBRI	Belgium	Urban transformation; housing; architecture and design.	Belgium
Luiza	Spiru	Ana Aslan foundation	Bucharest	Social innovation; health and social sciences	Romania
João	Apóstolo	Coimbra Nursing School	Coimbra	Social innovation Health and Social sciences	Portugal
Andrej	Grguric	Ericsson	Croatia	ICT for independent living	Croatia
Paris	Fokaides	Frederick University	Cyprus	Urban transformation Housing Architecture and Design	Cyprus
Lenka	Lhotska	Tech uni Prague	Czech Rep	ICT for independent living	Czech Republic
Damon	Berry	TU Dublin	Dublin	ICT for independent living	Ireland
Piret	Hirv	Tehnopol Science Par	Estonia	Social innovation Health and Social sciences	Estonia
Giorgos	Koumanakos	FRODIZO	Greece	Social innovation Health and Social sciences	Greece
Kai	Schnackenberg	Min Social Affairs	Hamburg	Policy and funding	Germany
Andrea	Ferenczi	AWCDH	Hungary	Community intervention and care	Hungary

Co-funded by the European Union

Katalin	Hajos	AWCDH	Hungary	Community intervention and care	Hungary
Regina	Pethő	Panon Business Network	Hungary	ICT for independent living	Hungary
Aurelija	Blazevicie ne	Uni Health Sciences	Kaunas	ICT for independent living	Lithuania
Arthur	Schreuder	4LifeSuppo rt Europe	Leiden	ICT for independent living	The Netherlan ds
Vesna	Dolnicar	Social Sciences	Ljubljana	Social innovation Health and Social sciences	Slovenia
Daniela	Patti	Eutropian	Austria	Urban transformation Housing Architecture and Design	Austria
Elisabeth	Bourkel	Hellef Doheem	Luxembour g	ICT for independent living	Luxembou rg
Olga	Bogolyub ova	University of Malta and University of Leiden	Malta (+the Netherland s)	Social innovation Health and Social sciences	Malta (The Netherlan ds)
Francisco	Melero	CETEM	Murcia	Urban transformation Housing Architecture and Design	Spain
Seyed Hossein	Chavoshi	Norwegian University of Life Sciences	Norway	ICT for independent living	Norway
Milica	Solarevic	Novi Sad uni	Novi Sad	ICT for independent living	Serbia
Elisio	Costa	Porto	Porto4Agei ng	Social innovation Health and Social sciences	Portugal
Adreea	Toma	Transylvani an Furniture Cluster	Romania	Policy and funding	Romania

Co-funded by the European Union

Ivan	Chorbev	Cyril university	Skopje	ICT for independent living	Makedonia
Sami	Perälä	Seinäjoki University of Applied Sciences	Southern Ostrobotnia	ICT for independent living	Finland
Marta	Fernandez	RMIT	Spain	Urban transformation Housing Architecture and Design	Spain
Liane	Colonna	Uni Stockholm	Stockholm	ICT for independent living	Sweden
Isabel	Van Serra	Pombal	TBD	Community intervention and care	Portugal
Joost	van Hoof	THUAS	The Hague	Urban transformation Housing Architecture and Design	The Netherlands
Agnieszka	Ciesla	Politechnika Warszawa	Warszaw	Urban transformation Housing Architecture and Design	Poland
Anto	Čartolovni	Catholic University of Croatia	Zagreb	ICT for independent living	Hungary
Miriam	Bellusova	Slovak Craft Industry Federation	Slovakia	Policy and funding	Slovakia
Katarina M.V.	Galic	X|ergy SusTech Powerhouse	Portugal	Information technology	Portugal
Gian Matteo	Apuzzo	WHO Europe		Community intervention and care	
Maddalena	Illario	Napoli University	Italy	Social innovation Health and Social sciences	Italy
Tiziana	Russo Spena	Napoli University	Italy	Urban transformation	Italy

Co-funded by the European Union

				Housing Architecture and Design	
Agnieszka	Labus	Silesian University of Technology Foundation "Laboratorium Architektury 60+" (LAB 60+)	Poland	Urban transformation Housing Architecture and Design	Poland
Pedro	Roseiro	TICE.PT	Portugal	Policy and funding	Portugal
Lela	Mirtskhualava	Javakhshvili Tbilisi State University San Diego State University St. Andrews Georgian University Northern Kentucky University	Georgia	Information technology	Georgia
Pietro	Dionisio	Medea	Italy	Policy and funding	Italy
Andrzej	Klimczuk	Collegium of Socio-Economics, SGH Warsaw School of Economics	Poland	Policy and funding	Poland
Edyta	Sadowska	Pedagogical University of Cracow	Poland	Urban transformation Housing Architecture and Design	Poland
Raul	Castano De la Rosa	Tampere University	Finland	Policy and funding	Finland

Co-funded by the European Union

Jodi	Sturge	DesignLab Faculty of Engineering Technology	The Nederlands	Social innovation Health and Social sciences	The Netherlands
Hara	Pylarinou	Co-founder of SYSTSERV SA	Greece	Social innovation Health and Social sciences	Greece
Aija	Lulle	University of Eastern Finland	Finland	Social innovation Health and Social sciences	Finland
José Carlos	Pinto da Costa	Universidade de Nova de Lisboa	Portugal	Social innovation Health and Social sciences	Portugal
Nicola	Sklavos	University of Patras, Hellas	Greece	ICT for independent living	Greece
Ivan	Kjær Lauridsen	Aarhus Municipality	Denmark	Policy and funding	Denmark
Kristine	Martinsone	Rīgas Stradiņa universitātes (RSU)	Latvia	Social innovation Health and Social sciences	Latvia
Elena	Bikou			Social innovation Health and Social sciences	
Ingūna	Griškeviča	Rīgas Stradiņa universitātes (**RSU**)	Latvia	Social innovation Health and Social sciences	Latvia
Alexandre	Chikalnov	University Sofia	Bulgaria	Information technology	Bulgaria

Co-funded by the European Union