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## Deliverable 5.1

### D5.1 Action Plans for SER in life sciences in Europe (EU-wide and specialised)

**Description:** The Action Plans provide a structured roadmap to support institutions in becoming socially engaged and in embedding Socially Engaged Research into their core activities.

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## List of Abbreviations

Abbreviation	Definition
ECR	Early Career Researcher
EU	European Union
HEI	Higher Education Institution
NGO	Non-governmental organisation
SER	Socially Engaged Research
SME	Small and medium-sized enterprises

# 1. Introduction

The BETTER Life Action Plan- SER in Life Sciences, developed within the framework of the BETTER Life project, provides a structured roadmap to support institutions in becoming socially engaged (SE) and in embedding Socially Engaged Research (SER) into their core activities. Grounded in relevant research evidence and shaped by tools and practices piloted across diverse European contexts, the plan offers actionable guidance for fostering a research culture that is responsive to societal needs and values inclusive stakeholder engagement.

## Key Challenge

Despite growing emphasis from European strategies and public demand for impactful science, many institutions still lack concrete frameworks, tools, and operational pathways to effectively support Socially Engaged Research.

## Main Goal

To provide a practical and replicable institutional framework for the promotion, implementation, and sustainability of SER, using validated tools, training modules, digital platforms, and engagement strategies developed through the BETTER Life project.

## Objectives

1. Raise awareness and understanding of SER among researchers, university staff, and decision-makers;
2. Integrate SER principles into institutional policies, strategies, and daily operations;
3. Build capacity of researchers and support staff through structured training and mentorship;
4. Foster sustainable collaborations with Quadruple Helix actors (academia, government, civil society, industry);
5. Establish monitoring and evaluation mechanisms to track progress and ensure continuous improvement.

This document outlines the concrete measures that should be implemented by any institution wishing to operationalize the above objectives and embed SER principles across institutional

structures. It is designed not only as a record of achievements but also as a practical implementation guide for academic leaders, researchers, and administrative units.

Each thematic area—awareness, integration, capacity building, collaboration and evaluation—is supported by a suite of validated tools, training formats, and engagement strategies developed within the BETTER Life project.

The document is organized into the following sections:

- **Overview of Achievements and Institutional Mapping:** Summarizes tools, practices, and implementation targets to date.
- **Strategic Actions by Outcome:** Groups tools and practices according to the five SER integration pillars.
- **Actions & Implementation:** Provides a detailed action matrix with timelines, responsible units, and tools.
- **Monitoring and Evaluation:** Brief outline of indicators, feedback mechanisms, and tracking tools for continuous improvement as part of the conclusion.
- **Institutional Commitment:** Describes leadership, budgeting, and governance structures necessary for sustainability.
- A **Table of Contents** is included to guide users through the structure.

This Action Plan is intended as a living document—one that can be revisited, adapted, and scaled as institutional capacity and context evolve.

## 2. Overview of Achievements and Institutional Mapping

As outlined in the introduction, this Action Plan aims to operationalize Socially Engaged Research through a structured, tool-based approach. To ensure transparency, accountability, and transferability, it is essential to begin with a clear overview of what has already been achieved within the framework of the BETTER Life project.

This section exists to bridge the strategic vision of SER with concrete institutional practices. It provides a snapshot of the methodologies, tools, and outcomes that have been piloted, adopted, or scaled so far. Its purpose is twofold:

- To serve as an internal benchmarking tool for BETTER Life partners,
- And as a replicable template for other institutions interested in adopting SER practices in a structured and evidence-based manner.

Achievements are organized according to the five core outcome areas of the BETTER Life framework:

1. Promoting awareness and understanding of SER
2. Integrating SER into institutional processes
3. Building capacity for SER
4. Fostering sustainable collaborations
5. Establishing monitoring and evaluation mechanisms

The accompanying table (Annex 2) outlines for each area:

- The methodologies and tools employed so far by BETTER Life partners' institutions,
- Implementation targets reached or in progress,
- The broader institutional impact envisioned.

This mapping provides a solid foundation for the implementation measures that follow and illustrates how BETTER Life is transforming partners institutions' research ecosystem to support a culture of meaningful, socially responsive science. (Annex 2).



## 3. Strategic Actions by Outcome

This section presents the key tools and approaches through which BETTER Life project is advancing the institutionalization of SER. Organized according to the five core outcome areas of the BETTER Life framework, it illustrates how specific instruments have been implemented to address concrete institutional goals.

Each outcome is supported by a set of tools piloted and adapted during the project. For each tool, the table summarizes:

- How it has been implemented;
- What impact it is expected to generate among researchers, students, and societal stakeholders.

The structure aims to provide a concise yet practical overview of how theoretical commitments to SER have been translated into action. It also highlights the versatility of BETTER Life tools and their potential for cross-sectoral and interdisciplinary application.

### 3.1 Promoting Awareness and Understanding of SER

Raising awareness about the societal relevance of research is a foundational step toward institutionalizing Socially Engaged Research. At most institutions, this should begin by equipping researchers, students, and staff with accessible entry points into the core values and principles of engagement.

The following tools have been used to foster reflection, experiential learning, and dialogue around SER. Through introductory formats, such as boardgame, mentorship programmes, and immersive events, institutions can start cultivating a culture where academic work is viewed in relation to community needs and broader societal impact.

Each tool presented in the table below plays a specific role in making SER more tangible, relatable, and visible, particularly among early-career researchers and interdisciplinary teams.

Tool	Implementation	Expected Impact
<b>Boardgame</b>	The game provides an engaging and experiential way to understand SER values. It is used in introductory training for students and staff in Life Sciences.	Increased awareness of community needs and the balance between academic and societal goals.
<b>Summer Schools</b>	SER principles are deeply explored through immersive learning. Students participate in role-playing and reflection activities.	Enhanced critical thinking and interdisciplinary collaboration skills.
<b>Mentorship Programmes</b>	Mentors help Early Career Researchers (ECRs) understand the purpose and process of engaging society in research.	ECRs develop better orientation in socially relevant research design.
<b>Think Tank Sessions</b>	These sessions raise institutional and individual awareness about SER value.	Foundations for internal SER-related policy initiatives are established.
<b>Academic Bridge</b>	Municipalities are directly involved in collaborative research planning.	Better connection between Educons and local community priorities.
<b>Visual Methodologies</b>	Visual tools are used to communicate the collective, co-constructed nature of research.	Researchers reflect on representation and audience diversity.

## 3.2 Integrating SER into Institutional Processes

Beyond raising awareness, the sustainable embedding of Socially Engaged Research requires its integration into the core structures, procedures, and routines of the institutions. This includes aligning engagement principles with policies on evaluation, promotion, research design, and strategic development.

SER can be incorporated into institutional life through a combination of reflection tools, training programs, policy dialogues, and structured partnerships. These interventions aim to establish SER not as an add-on, but as an expected and supported dimension of research practice.

The table below highlights how specific tools can be applied to mainstream SER within the institutions, ensuring that socially engaged approaches become embedded in strategic decision-making, academic evaluation, and cross-departmental collaboration.

Tool	Implementation	Expected Impact
<b>Bootcamps</b>	Training on how to embed SER into policies, evaluation, and curricula.	SER is integrated into university strategic documents.
<b>Boardgame</b>	Used in training to initiate discussion on institutional and societal priorities.	Common language and priorities identified across departments.
<b>Self-Reflection (BL-SER) Tool</b>	Enables researchers to evaluate their engagement levels and plan improvements.	SER becomes part of performance review and project planning.
<b>Mentorship Programmes</b>	Mentors support formal integration of SER into academic career paths.	Retention and empowerment of socially engaged faculty.
<b>Academic Bridge</b>	Facilitates long-term partnerships and integration of research in local development plans.	Institutional commitment to regional impact increases.

### 3.3 Capacity Building for SER

Developing the skills, confidence, and mindset needed for socially engaged research requires dedicated capacity-building efforts. Training formats should be designed to support researchers—particularly early-career researchers (ECRs)—in acquiring practical competencies related to communication, co-creation, stakeholder engagement, and participatory methodologies.

Through a combination of immersive formats such as summer schools, mentorship programmes, bootcamps, and design thinking toolkits, institutions are creating a supportive environment for building SER-related expertise.

The table below outlines the tools used to strengthen institutional and individual readiness for SER, with a focus on enabling researchers to work across disciplines, connect with non-academic actors, and generate meaningful societal outcomes through their research.

Tool	Implementation	Expected Impact
<b>Bootcamps</b>	Hands-on training in science communication and co-design.	Increased number of researchers with SER-relevant skills.
<b>Summer Schools</b>	Fieldwork and interactive exercises foster experiential learning.	Students become SER ambassadors.
<b>Mentorship Programmes</b>	Supports mentees in learning project design and community engagement.	Higher quality of community-based research proposals.
<b>Boardgame</b>	Players gain negotiation, resource balancing, and participatory planning experience.	Strengthened skills for real-world engagement.
<b>Self-Reflection Tool</b>	Identifies individual gaps and areas for SER growth.	Personal development pathways are created for researchers.
<b>Promote Your Research Toolkit</b>	ECRs learn how to communicate research impact to stakeholders.	Stronger visibility and uptake of academic research.
<b>Design Thinking</b>	Introduces empathy-driven approaches for public innovation.	Researchers gain tools for co-creation with end users.
<b>Shiny R &amp; Urban Perceptions Tools</b>	Used for data visualization and integrating citizens' input in urban research.	Researchers are empowered to produce data-informed, inclusive studies.

### 3.4 Fostering Sustainable Collaborations

SER thrives on long-term, trust-based collaboration between academia and societal actors. Moving beyond ad hoc partnerships, institutions are working to build durable and structured relationships with stakeholders across the Quadruple Helix—government, civil society, business, and other knowledge communities.

This section presents tools and formats that facilitate mutual learning, joint agenda-setting, and co-created research. From platforms like the Academic Bridge to participatory labs and think tank sessions, these initiatives aim to embed collaboration into the research process itself, rather than treating it as an external outreach effort.

The tools highlighted below are being used to institutionalize a culture of cooperation, ensure reciprocity, and align academic inquiry with real-world challenges.

BETTER Life recognizes the importance of long-term, trust-based partnerships across the Quadruple Helix (academia, government, civil society, industry). Activities include:

Activity	Description	Expected Impact
<b>Academic Bridge</b>	Ongoing collaboration with local municipalities for co-designed research agendas.	Strengthened alignment between university research and local needs.
<b>Think Tank Sessions</b>	Regular dialogue platforms involving external stakeholders to co-define challenges and research priorities.	Shared ownership of research initiatives and increased policy relevance.
<b>Human Ecosystem Integration Lab</b>	Cross-sectoral simulation spaces for mutual learning and project prototyping.	Stronger interdisciplinary and intersectoral bonds.

Through these instruments, institutions ensure that socially engaged research does not remain isolated but becomes embedded in a wider network of sustainable partnerships.

### 3.5 Establishing Monitoring and Evaluation Mechanisms

To ensure the effectiveness, accountability, and adaptability of Socially Engaged Research initiatives, institutions must establish mechanisms for regular monitoring and evaluation. These mechanisms were designed to track both individual engagement efforts and institutional progress over time.

Tools such as self-assessment instruments, feedback loops, and data visualization platforms are used to collect insights, measure uptake, and inform iterative improvement. These approaches support a culture of reflection, transparency, and evidence-informed decision-making.

The table below outlines how specific tools are being applied to monitor SER integration and impact. They enable researchers, administrators, and leadership to assess what is working, where adjustments are needed, and how institutional learning can be supported.

To ensure effective implementation and iterative improvement, the following Monitoring & Evaluation (M&E) actions will be introduced:

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<b>Mechanism</b>		<b>Description</b>	<b>Purpose</b>
<b>Self-Assessment Tool</b>		Used by researchers to reflect on their engagement levels and track progress over time.	Encourage continuous self-improvement and identify support needs.
<b>Annual Internal Report</b>		Compilation of SER activities, outcomes, and lessons learned.	Provide institutional feedback and accountability.
<b>Stakeholder Surveys</b>		Civil society and public sector partners evaluate relevance and impact of collaboration.	Validate effectiveness and inform policy alignment.
<b>Tool Uptake Metrics</b>		Quantitative tracking of the use of BETTER Life tools in curricula and projects.	Measure institutional integration and scaling.

## 4. Actions & implementation

This section constitutes the operational core of the Action Plan. It sets out the concrete actions through which institutions will implement its strategic objectives for integrating SER across its structures.

Each action is aligned with one or more of the five outcome areas defined by the BETTER Life framework and is designed to ensure that SER becomes a sustainable, measurable, and visible part of academic and administrative practice.

For each action, the table provides:

- A description of the specific measures being undertaken,
- The key activities and tools used to support implementation,
- A defined timeline or reference period and
- Clearly designated units or persons responsible for delivery.

Together, these measures form a coordinated roadmap for translating institutional ambition into practice. They support cross-departmental ownership, foster accountability, and ensure that the promotion of SER is not only aspirational but actionable.

This implementation matrix is intended as a living framework—one that can be adapted as institutional needs evolve and as new opportunities for engagement emerge.

<i>Action</i>	<i>Measures</i>	<i>Description</i>	<i>Activities</i>	<i>Key Tools</i>	<i>Timeline</i>	<i>Responsible Unit/Person</i>
<b>1. Create a Culture of SER Awareness</b>	Communication training	-Increase communication skills for research visibility and engagement	-Disseminate the "Promote Your Research Communication" guidelines.	Promote your Scince Communication Tool	Year 1–ongoing	Science Communications Office, HR Training Unit
	Interactive Education	-Use gamified learning to raise awareness on SER and cooperation	-Use the BETTER Life Boardgame to teach collaborative dynamics.	BETTER Life Boardgame	Year1-Ongoing	Research Office, QH stakeholders
	Introductory SER Training	-Offer onboarding sessions for ECRs on core SER principles; -	-Organize institutional SER awareness weeks	Summer School Tartu; Visual Methodologies	Recurring annually	HR/Training Dept

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<b>2. Integrating SER into Institutional Processes</b>	<p>and thematic workshops.</p> <p>- Appoint and train one SER Ambassador per department (staff or students). Their role: promote SER locally, organize engagement events, support the mentoring system.</p>					
	SER Evaluation Metrics	-Include SER in researcher evaluations and funding schemes	-Incorporate the BETTER Life Self-Assessment Tool and BL-SER Self-Reflection Tool into researcher annual evaluations.	Self-Assessment Tool, BL-SER Tool	Q4 2025. - Q2 2026.	Academic Affairs, HR, Research Council
	<p>-Adjust promotion criteria to include SER contributions.</p>					
	SER Policy Alignment	-Develop internal guidelines for research engagement	-Develop department-level SER strategies;	Think Tank Outputs; Mentorship Program	Q4 2025 - Q1 2026.	Institutional Evaluation Committee, Rectorate, Legal Office
<b>3. Capacity Building for SER</b>	Institutional Mentorship Scheme	-Embed structured mentorship support with SER focus	-Implement BL-SER reflection sessions	Mentoring Plan; Bootcamp I & III	Done	Academic Development Office
	Tailored Training for ECRs	-Equip young researchers with engagement skills	-Launch an internal mentoring scheme using the Mentoring Plan and Think Tank methodology.	Summer Schools, Mentoring Plan, Bootcamps I-III;	Ongoing	Research Office, Teaching & Learning Center
	<p>-Conduct annual summer schools and training on SER;</p> <p>-Create an Internal SER Certification Program- Design a certification track for researchers, recognizing SER-related competencies (training, community engagement, tool usage).</p>					

<b>4. Fostering Sustainable Collaboration</b>	Research Methods Enhancement	-Promote use of visual and participatory research methods	-Offer recurring training based on Visual Methodologies, Design Thinking Toolkit, and Summer School formats.	Visual Methodologies; Design Thinking Toolkit	Annually	Research Units
	SER Data Interpretation	-Enable user-friendly data visualization and hypothesis building		R Shiny Tools (Wordclouds, Time Series, Exploratory Analysis)	Year 3 of the BL project	Digital Lab
	Academic-Civic Matchmaking	-Facilitate partnerships between municipalities and researchers	-Actively use Academic Bridge platform to connect with local authorities.	Academic Bridge; Think Tank Series	Year 2 of the BL project-ongoing	Partnership Development Office, Local Engagement Hub, External Relations
	Stakeholder Ecosystem Mapping	-Broaden reach of QH collaboration,  -Foster International Collaboration with SER Networks  -Join or engage with international networks.	-Promote ECR visibility via the Human Ecosystem Integration Lab (H-EIL), organize stakeholder engagement events through H-EIL	H-EIL,	Ongoing	
<b>5. Monitoring and Evaluation Mechanisms</b>	Community-Driven Design	-Implement participatory urban planning approaches	-Facilitate cross-sectoral collaboration forums	Design Thinking Toolkit;	Annually	Faculty of Urban Studies
	Institutional Self-Audit	-Regular evaluation of SER integration	-Set quarterly review mechanisms for SER activities	BETTER Life Self-Assessment Tool	Quarterly	Institutional Quality Assurance Office
	Engagement Tracking System	-Develop dashboards and scorecards for SER metrics	-Use R Shiny apps to visualize SER-related data.  -Include indicators from the Mentoring Plan and Communication Toolkit in annual reporting.  -Track word cloud results and self-assessment scores over time.	R Shiny Tools, Word Cloud Generator, Self-Assessment System	Q3 2025-Q2 2026.	IT & Research Office
	Stakeholder Feedback Loops	-Formalize external feedback processes	-Mentorship Evaluation; Bootcamp Feedback		Continuous	Institutional SER Taskforce

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## 5. Conclusion

Through the strategic use of BETTER Life tools, institutions are embedding Socially Engaged Research as a pillar of their identity. This action plan reflects a commitment to not only fostering academic excellence but also contributing to the societal good. The approach serves as a model for other institutions aiming to achieve sustainable and participatory research ecosystems.

This Action Plan provides a structured framework for raising awareness, embedding engagement into institutional policies, building researcher capacities, fostering sustainable partnerships, and establishing systems for ongoing evaluation and improvement.

Rather than approaching SER as a temporary initiative or parallel activity, this plan positions engagement as an integral part of research culture, grounded in public value, interdisciplinary collaboration, and responsiveness to societal challenges.

The implementation roadmap, supported by the BETTER Life tools and methodologies, ensures that actions are measurable, accountable, and adaptable. Each strategic area is accompanied by clear activities, responsible units, timelines, and key performance indicators to facilitate coordination and institutional learning.

To support long-term sustainability, institutions should commit to:

- Formal endorsement of this Action Plan by the University Senate or equivalent governing body
- Nomination of departmental SER coordinators to ensure implementation across units
- Allocation of financial and human resources for training, digital infrastructure, outreach, and mobility
- A review and update cycle every two years to reflect institutional learning, stakeholder input, and evolving policy environments

Through this Action Plan, institutions position themselves not only as a center of academic excellence, but also as a proactive societal actor—deeply connected to its community, responsive to change, and committed to producing knowledge that matters

## Monitoring and Evaluation

To ensure that the institutionalization of Socially Engaged Research (SER) remains not only aspirational but measurable, institutions should monitor progress through a set of clearly defined indicators aligned with strategic actions and outcome areas. These indicators will serve as tools for internal learning, quality assurance, and continuous refinement of SER practices.

By embedding monitoring methods into the implementation process—such as training records, feedback loops, usage analytics, and periodic self-assessment—the institution creates a feedback-driven environment that supports transparency, accountability, and sustained impact.

## Institutional Commitment

Leadership commitment is essential. Institutional endorsement of this action plan should be formalized through a strategic resolution by the University Senate or equivalent governing body. Each department should nominate SER coordinators to support implementation.

## Budget & Resources

Institutions are encouraged to allocate funding for:

- Training and capacity development programs
- Technical infrastructure for digital tools (Self-Assessment Tool, H-EIL, R Shiny)
- Communication and outreach
- Mobility and partnership-building initiatives

## Review and Update Cycle

The Action Plan shall be reviewed every two years to assess progress, address emerging challenges, and revise objectives and tools accordingly.

**Contact:** For support in implementing this plan, please contact the BETTER Life team. (<https://www.better-life-digital.eu>)



# Annex 1: Template for Specialised Action Plans

## NAME OF THE INSTITUTION Action Plan

This document sets out the concrete actions through which “THE INSTITUTION” will implement its strategic objectives for integrating SER across institutional structures.

Each action is aligned with one or more of the five outcome areas defined by the BETTER Life framework and is designed to ensure that SER becomes a sustainable, measurable, and visible part of academic and administrative practice.

For each action, the table provides:

- A description of the specific measures being undertaken
- The key activities and tools used to support implementation
- A defined timeline or reference period
- Clearly designated units or persons responsible for delivery

Together, these measures form a coordinated roadmap for translating institutional ambition into practice. They support cross-departmental ownership, foster accountability, and ensure that the promotion of SER is not only aspirational but actionable.

This implementation matrix is intended as a living framework—one that can be adapted as institutional needs evolve and as new opportunities for engagement emerge.

Action	Measures	Description	Activities	Key Tools	Timeline	Responsible Unit/Person
<b>1. Create a Culture of SER Awareness</b>	Communication training	-Increase communication skills for research visibility and engagement	-Disseminate the "Promote Your Research Communication" guidelines.	Promote your Science Communication Tool	Year 1–ongoing	Science Communications Office, HR Training Unit

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	Interactive Education	-Use gamified learning to raise awareness on SER and cooperation	-Use the BETTER Life Boardgame to teach collaborative dynamics.	BETTER Life Boardgame	Year1- Ongoing	Research Office, QH stakeholders
	Introductory SER Training	-Offer onboarding sessions for ECRs on core SER principles; -	-Organize institutional SER awareness weeks and thematic workshops.  - Appoint and train one SER Ambassador per department (staff or students). Their role: promote SER locally, organize engagement events, support the mentoring system.	Summer School Tartu; Visual Methodologies	Recurring annually	HR/Training Dept
<b>2. Integrating SER into Institutional Processes</b>	SER Evaluation Metrics	-Include SER in researcher evaluations and funding schemes	-Incorporate the BETTER Life Self-Assessment Tool and BL-SER Self-Reflection Tool into researcher annual evaluations.  -Adjust promotion criteria to include SER contributions.	Self-Assessment Tool, BL-SER Tool	Q4 2025. - Q2 2026.	Academic Affairs, HR, Research Council
	SER Policy Alignment	-Develop internal guidelines for research engagement	-Develop department-level SER strategies;	Think Tank Outputs; Mentorship Program	Q4 2025 - Q1 2026.	Institutional Evaluation Committee, Rectorate, Legal Office
	Institutional Mentorship Scheme	-Embed structured mentorship support with SER focus	-Implement BL-SER reflection sessions	Mentoring Plan; Bootcamp I & III	Done	Academic Development Office
<b>3. Capacity Building for SER</b>	Tailored Training for ECRs	-Equip young researchers with engagement skills	-Launch an internal mentoring scheme using the Mentoring Plan and Think Tank methodology.  -Conduct annual summer schools and training on SER;  -Create an Internal SER Certification Program- Design a certification track for	Summer Schools, Mentoring Plan, Bootcamps I-III;	Ongoing	Research Office, Teaching & Learning Center

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			researchers, recognizing SER-related competencies (training, community engagement, tool usage).			
	Research Methods Enhancement	-Promote use of visual and participatory research methods	-Offer recurring training based on Visual Methodologies, Design Thinking Toolkit, and Summer School formats.	Visual Methodologies; Design Thinking Toolkit	Annually	Research Units
	SER Data Interpretation	-Enable user-friendly data visualization and hypothesis building		R Shiny Tools (Wordclouds, Time Series, Exploratory Analysis)	Year 3 of the BL project	Digital Lab
<b>4. Fostering Sustainable Collaboration</b>	Academic-Civic Matchmaking	-Facilitate partnerships between municipalities and researchers	-Actively use Academic Bridge platform to connect with local authorities.	Academic Bridge; Think Tank Series	Year 2 of the BL project-ongoing	Partnership Development Office, Local Engagement Hub, External Relations
	Stakeholder Ecosystem Mapping	-Broaden reach of QH collaboration,  -Foster International Collaboration with SER Networks  -Join or engage with international networks.	-Promote ECR visibility via the Human Ecosystem Integration Lab (H-EIL), organize stakeholder engagement events through H-EIL	H-EIL,	Ongoing	
	Community-Driven Design	-Implement participatory urban planning approaches	-Facilitate cross-sectoral collaboration forums	Design Thinking Toolkit;	Annually	Faculty of Urban Studies
<b>5. Monitoring and Evaluation Mechanisms</b>	Institutional Self-Audit	-Regular evaluation of SER integration	-Set quarterly review mechanisms for SER activities	BETTER Life Self-Assessment Tool	Quarterly	Institutional Quality Assurance Office
	Engagement Tracking System	-Develop dashboards and scorecards for SER metrics	-Use R Shiny apps to visualize SER-related data.  -Include indicators from the Mentoring Plan and Communication Toolkit in annual reporting.	R Shiny Tools, Word Cloud Generator, Self-Assessment System	Q3 2025- Q2 2026.	IT & Research Office

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			-Track word cloud results and self-assessment scores over time.			
	Stakeholder Feedback Loops	-Formalize external feedback processes	-Mentorship Evaluation; Bootcamp Feedback		Continuous	Institutional SER Taskforce

## Annex 2: Implementation Measures

Established methodologies with best practices					Tools										
BetterLIFE outcomes	Bootcamps	Summer Schools (live/online)	Mentorship programmes	Think tank sessions	Boardgame	BL-SER Self-Reflection Tool	Academic Bridge	Promote your Research Communication	Shiny R	Visual Methodologies for Landscape Observatory	Design Thinking for the co-design of public open spaces	Integrating Citizens' Perceptions of Urban Environmental Quality into Inclusive City Planning Processes	Human ecosystem integration LAB	Empowering growth through guided connections	BETTER Life Self-Assessment Tool
Targets															
Promoting Awareness and Understanding of SER	<ul style="list-style-type: none"><li>- Key SER concepts were introduced, raising awareness among ECRs and EMs about the societal role of science.</li></ul>	<ul style="list-style-type: none"><li>- In-depth exploration of SER principles was provided through lectures, roundtables, and hands-on case studies. Participants gained a deeper understanding of how research can address societal and environmental challenges.</li></ul>	<ul style="list-style-type: none"><li>- Mentors are suppose to guide ECRs in understanding the core values and practices of SER, helping them reflect on the societal relevance of their research. Awareness should be raised through one-on-one mentoring and group sessions.</li></ul>	<ul style="list-style-type: none"><li>- Awareness about the value of SER was raised by engaging mentors, researchers, and doctoral candidates in discussions on the role of research in society. Real-life examples and personal experiences made SER concepts more reliable and tangible.</li></ul>	<ul style="list-style-type: none"><li>- The game provides an engaging and experiential learning environment in which players learn about the dynamics of collaboration, stakeholder roles, and the societal impact of research through simulation.</li></ul>	<ul style="list-style-type: none"><li>- The tool guides ECRs through key engagement areas, helping them understand what it means to conduct SER and how to reflect on their own efforts.</li></ul>	<ul style="list-style-type: none"><li>- By directly involving municipalities in collaborative research, the platform increases awareness of the societal value of academic work and demonstrates how SER can address real local issues.</li></ul>	<ul style="list-style-type: none"><li>- The guidelines help researchers understand the value of communicating their work beyond academia and how public engagement supports transparency, accountability, and societal relevance of research.</li></ul>	<ul style="list-style-type: none"><li>- The apps support ECRs in better understanding how data can be used for effective engagement and communication with stakeholders, especially in life sciences.</li></ul>	<ul style="list-style-type: none"><li>- The awareness of research as a collective, community-oriented process by using visual tools to make scientific ideas and planning concepts more accessible to the public is being fostered.</li></ul>	<ul style="list-style-type: none"><li>- The toolkit introduces Design Thinking as a participatory, human-centered approach, reinforcing the role of research and planning as collaborative and socially responsive processes.</li></ul>	<ul style="list-style-type: none"><li>- The guidelines raise awareness about the importance of citizen involvement in urban ecosystem planning, helping researchers and planners better understand the societal perspectives and ecological sensitivities.</li></ul>	<ul style="list-style-type: none"><li>- By involving Quadruple Helix stakeholders in dialogue and abstract sharing, the platform fosters a broader understanding of the societal relevance of life science research.</li></ul>	<ul style="list-style-type: none"><li>- Through structured guidance and regular reflection, the plan introduces mentees to the principles and relevance of SER within scientific careers.</li></ul>	<ul style="list-style-type: none"><li>- The tool raises researchers' awareness of what SER entails by prompting them to reflect on their own engagement practices and alignment with SER principles</li></ul>
Integrating SER into Institutional Processes	<ul style="list-style-type: none"><li>- Bootcamps addressed how SER can be embedded in institutional strategies (e.g. through open science and transdisciplinary approaches).</li></ul>	<ul style="list-style-type: none"><li>- The role of institutions in embedding SER into research practice, particularly through the presentation of BETTER Life tools and Digital Center of Excellence strategies was emphasised. Case studies and discussions fostered institutional reflection.</li></ul>	<ul style="list-style-type: none"><li>- By working closely with mentors affiliated with institutions supportive of SER, mentees are being introduced to institutional pathways and strategies for embedding engagement into academic structures.</li></ul>	<ul style="list-style-type: none"><li>- The sessions laid the foundation for the institutional Mentorship Program, aligned with SER principles. They mobilized faculty, researchers, and external actors, promoting SER integration across academic structures and networks.</li></ul>	<ul style="list-style-type: none"><li>- By using the game as part of training sessions or academic workshops, institutions can promote SER-oriented thinking and stakeholder engagement among students and staff.</li></ul>	<ul style="list-style-type: none"><li>- While primarily individual-focused, the tool can support institutions in embedding SER by promoting a shared language and framework for engagement assessment and planning.</li></ul>	<ul style="list-style-type: none"><li>- The platform facilitates structured partnerships between academic institutions and local governments, embedding SER into research agendas and institutional outreach practices.</li></ul>	<ul style="list-style-type: none"><li>- By encouraging structured communication practices and outreach strategies, the tool supports the institutional culture of openness and public engagement within research institutions.</li></ul>	NA	<ul style="list-style-type: none"><li>- By positioning visual communication as part of spatial research and planning, institutions are encouraged to adopt participatory, interdisciplinary, and engagement-focused methodologies.</li></ul>	<ul style="list-style-type: none"><li>- By offering structured methodologies and templates (e.g., Empathy Map, Stakeholder Map), the toolkit encourages institutions to adopt participatory frameworks within research and urban planning workflows.</li></ul>	<ul style="list-style-type: none"><li>- By proposing a decision-making framework and participatory strategies, the tool supports integration of inclusive and citizen-driven approaches into urban planning policies and research agendas.</li></ul>	<ul style="list-style-type: none"><li>- The platform encourages regular cross-sectoral engagement, making SER principles part of ongoing institutional collaboration and researcher development.</li></ul>	<ul style="list-style-type: none"><li>- The plan supports formalization of mentoring as part of institutional support structures, embedding engagement-oriented goals such as outreach and ethics into career development.</li></ul>	<ul style="list-style-type: none"><li>- Institutions can adopt the tool as part of evaluation or development programs supporting systemic integration of SER standards in academic environments.</li></ul>
Capacity building for SER	<ul style="list-style-type: none"><li>- Hands-on trainings in related fields like science communication, media interaction, and public engagement skills were provided.</li></ul>	<ul style="list-style-type: none"><li>- Through fieldwork, interactive exercises, and direct engagement with real-world issues (e.g., national parks, local communities), participants developed practical skills to implement SER in diverse contexts.</li></ul>	<ul style="list-style-type: none"><li>- The program should enhance mentees' competencies in SER through tailored guidance, skill-building assignments, and feedback on real research projects, promoting confidence and expertise in engaging with society.</li></ul>	<ul style="list-style-type: none"><li>- Through interactive workshops, participants identified essential skills and knowledge for SER. The dialogue between mentors and mentees helped define training priorities and competence development.</li></ul>	<ul style="list-style-type: none"><li>- Players develop skills in negotiation, resource management, compromise, and systems thinking—essential for real-world socialy engaged research and multi-actor collaboration.</li></ul>	<ul style="list-style-type: none"><li>- By identifying strengths, gaps, and providing targeted recommendations, the tool helps researchers build competencies needed for meaningful engagement with non-academic stakeholders.</li></ul>	<ul style="list-style-type: none"><li>- Municipal employees gain exposure to research processes and evidence-based methodologies, while researchers and students develop skills in stakeholder communication and applied problem-solving.</li></ul>	<ul style="list-style-type: none"><li>- The tool builds ECRs' skills in stakeholder communication, impact monitoring, and content creation tailored for different audiences, improving their ability to engage with society.</li></ul>	<ul style="list-style-type: none"><li>- The tools help ECRs develop basic data interpretation and visualization skills, supporting early stages of hypothesis development and stakeholder communication.</li></ul>	<ul style="list-style-type: none"><li>- Participants (researchers, planners, administrators) develop skills in visual storytelling, community dialogue, and inclusive research communication, enhancing their ability to conduct context-sensitive and impactful research.</li></ul>	<ul style="list-style-type: none"><li>- Users gain concrete skills in problem-solving, stakeholder engagement, ideation, prototyping, and impact evaluation—key competencies for conducting socially engaged, applied research.</li></ul>	<ul style="list-style-type: none"><li>- The tool empowers users (researchers, planners, citizens) with methods to recognize, classify, and respond to urban ecosystem disservices, enhancing their ability to mediate conflicts and co-create nature-based solutions.</li></ul>	<ul style="list-style-type: none"><li>- ECRs gain opportunities to present their work, receive feedback, and connect with diverse actors, which supports skill development in communication, networking—essential skills for meaningful social impact.</li></ul>	<ul style="list-style-type: none"><li>- It enhances mentees' competencies in communication, public engagement, ethical research, and networking—essential skills for meaningful social impact.</li></ul>	<ul style="list-style-type: none"><li>- By offering personalized feedback and practical recommendations, the tool guides researchers in improving their engagement skills and planning future SER activities.</li></ul>
Fostering sustainable collaborations	<ul style="list-style-type: none"><li>- Bootcamps facilitated dialogue between academia, industry, and policymakers, building cross-sectoral partnerships.</li></ul>	<ul style="list-style-type: none"><li>- Both schools connected researchers from over 10 countries, encouraging intercultural dialogue and establishing networks among academia, policymakers, and local actors. These collaborations support long-term exchange and co-creation.</li></ul>	<ul style="list-style-type: none"><li>- Long-term mentor-mentee relationships should promote cross-generational and cross-institutional collaboration. Mentors should encourage mentees to connect with external stakeholders, fostering a collaborative mindset.</li></ul>	<ul style="list-style-type: none"><li>- The sessions connected actors from academia, government, NGOs, and the private sector.</li></ul>	<ul style="list-style-type: none"><li>- The game models Quadruple Helix cooperation and highlights the value of aligning individual and collective goals, encouraging real-life partnership behavior.</li></ul>	NA	<ul style="list-style-type: none"><li>- Academic Bridge is built around long-term, mutually beneficial partnerships between municipalities and academia, creating a platform for continuous collaboration and shared impact.</li></ul>	<ul style="list-style-type: none"><li>- By reaching stakeholders through targeted communication, researchers can attract interest, feedback, and collaboration opportunities from non-academic sectors.</li></ul>	<ul style="list-style-type: none"><li>- By enabling researchers to present data in accessible and engaging ways, the tools can facilitate clearer dialogue and mutual understanding with non-academic partners.</li></ul>	<ul style="list-style-type: none"><li>- Researchers, local communities, SMEs, and public administration are being connected in joint exploration of landscape challenges, building long-term, place-based partnerships.</li></ul>	<ul style="list-style-type: none"><li>- The co-design process promoted by the toolkit facilitates long-term partnerships between researchers, planners, communities, city administrations, and SMEs, grounded in mutual trust and shared goals.</li></ul>	<ul style="list-style-type: none"><li>- Encouraging dialogue between citizens, city officials, environmental groups, and researchers, the tool creates opportunities for lasting cooperation rooted in shared urban challenges and solutions.</li></ul>	<ul style="list-style-type: none"><li>- (H)EIL functions as a digital meeting point for academia, government, business, and civil society, enabling sustained, inclusive cooperation based on shared interests.</li></ul>	<ul style="list-style-type: none"><li>- By encouraging relationship-building across disciplines and sectors, the plan facilitates long-term collaboration, particularly between junior researchers and experienced professionals.</li></ul>	<ul style="list-style-type: none"><li>- Partially applicable. While not directly a networking tool, the increased SER awareness can lead researchers to seek broader collaborations with non-academic stakeholders.</li></ul>
Establish monitoring and evaluation mechanisms	<ul style="list-style-type: none"><li>- Each bootcamp included feedback tools, reflection tasks, and follow-up activities to assess learning and engagement impact.</li></ul>	<ul style="list-style-type: none"><li>- Participants actively tested and provided feedback on BETTER Life tools during the programs. Reflections, presentations, and peer input served as informal mechanisms for evaluating SER implementation and tool effectiveness.</li></ul>	<ul style="list-style-type: none"><li>- Progress should be tracked through mentoring logs, evaluation forms, and reflective reports. These tools allow both mentors and coordinators to monitor growth, provide feedback, and assess the program's impact on SER development.</li></ul>	<ul style="list-style-type: none"><li>- Think Tank sessions contributed to designing the feedback and evaluation structure of the mentorship program.</li></ul>	<ul style="list-style-type: none"><li>- Not directly applicable. However, post-game debriefings can be used to reflect on collaborative behaviors and group dynamics, offering qualitative insights for engagement strategies.</li></ul>	<ul style="list-style-type: none"><li>- The tool enables self-monitoring and reflection over time, offering structured data for tracking personal growth in engagement and informing institutional SER evaluation efforts.</li></ul>	NA	<ul style="list-style-type: none"><li>- The tool includes guidance on how to monitor communication impact and assess visibility, supporting continuous improvement of engagement efforts.</li></ul>	NA	<ul style="list-style-type: none"><li>- Partially applicable. Visual methods support qualitative feedback, enabling researchers to collect stakeholder insights and community responses, which can serve as informal evaluation tools.</li></ul>	<ul style="list-style-type: none"><li>- The Testing phase and Feedback Capture Grid provide iterative evaluation steps, enabling users to assess impact, refine strategies, and document results throughout the co-design process.</li></ul>	<ul style="list-style-type: none"><li>- Partially applicable. The use of the decision tree and stakeholder feedback mechanisms allows users to evaluate perceptions and adapt strategies for urban ecosystem management over time.</li></ul>	<ul style="list-style-type: none"><li>- Partially applicable. The submission and profiling features can generate data for mapping engagement levels and tracking participation trends over time.</li></ul>	<ul style="list-style-type: none"><li>- The plan includes regular meetings, goal setting, and feedback cycles, allowing for continuous monitoring of progress and adjustment of mentoring strategies.</li></ul>	<ul style="list-style-type: none"><li>- The structured assessment and scoring system allows for tracking individual and institutional progress in SER over time, contributing to internal and external evaluation processes.</li></ul>

### D5.1 Action Plans for SER in life sciences in Europe (EU-wide and specialised)