



Landing and Knowledge Inventory

Engaged Communities

(Deliverable 5.2)

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Preface

NEST builds on innovation ecosystems that contribute to the long term systemic change of societal systems involved in health policy and the healthy living of people. We call this the health transition and we view this as a complex, mission driven and long term learning process.

We identified, based on our experience and the literature, four key determinants pivotal for this transition. They are the themes of our Innovation Communities Of Practice (ICOP) and each theme supports the paradigm-shift from the classic regime systems towards a more sustainable and just system. The themes identify and position, they "nest", themselves in the transition. Develop further the knowledge base, possible actions and methods to do so and offer innovation ecosystems practical support in the development of the specific themes. In the project these are the SIEHLs.

The themes social business development, reflexive monitoring, engaged community science and knowledge creation are all in a different phase of development and have their own learning process supported by learning questions. The themes are highly interrelated and the ICOPs work on many points together to develop the theme further and to support the SIELHs efficiently from their demand articulation to the use of methods and instruments.

This landing document shows the different level of development of the themes and their learning questions show the direction for development.

Introduction

Over the last decade, the value of participation and engagement has risen substantially, with governments, public services, academia, and businesses becoming increasingly keen to harvest insights and information from citizens. Frequently, projects that do not include a participatory element are seen as unethical or invalid. Governments turn to consultations, surveys or citizen panels, business and technology engage customers and users to keep innovating (Cleaver 1999).

In the field of social innovation in health, connecting social change with health improvement, it seems impossible as well to tackle long-term issues like ageing populations or chronic disease without citizen collaboration and engagement. Robust community engagement is a foundation of social innovation (Bayugo 2022), as bringing more diverse actors into the process of developing and then sustaining new solutions leads to more effective and more legitimate innovation (Davies 2013). Indeed, one of the main societal challenges when delivering public services (such as health)





is the need to balance individual user needs with broader political decisions and public values. Public services must not only cater to individual satisfaction but also uphold collective societal goals, requiring a focus on co-creation with users to avoid tension in governance (Sønderskov 2021).

But we know both from research and practice that citizen engagement is hard and requires commitment. Community processes can be complex and labor-intensive, and they require dedicated resources such as time, funding, and people with the necessary skills (Office of Public Health 2011).

In the context of the EU NEST project, WP5 is tasked to set up an International Community of Practice (ICOP) to support "Engaged Community" practices in the project's Social Innovation Ecosystems for Healthy Leaving (SIEHLs). The role of the ICOP includes investigating how the variety of stakeholders can be fully engaged, understanding how to grow and maintain collective agency of stakeholders, developing guidelines on citizen science as an embedded research method in SIEHL, and co-creating implementation and facilitation methodologies for stakeholder engagement in SIEHL.

In this deliverable, we consider the existing knowledge on the concept and practice of "engaged community" and we look at the forms of engagement that are most appropriate to developing and sustaining social innovations. We also look at the intersection of Citizen Science and social innovation for health, considering forms of engagement for citizens in the research and diagnosis of their local environment, as well as in the design and implementation of local solutions. This will help the ICOP to adapt and optimize established ways of engagement to the specific characteristics and requirements of each SIEHL in NEST, its projects and its initiatives.

Section 1 presents existing theory and established ways of engagement as found in scientific literature, focusing on the relations between engagement and social innovation, and presenting concrete practices such as co-creation and Citizen Science. Section 2 focuses on how ICOPs can interact, collaborate and benefit from each other's activities and learning, and Section 3 explores the relation between ICOPs and SIEHLs. Section 4 presents the multiple networks existing or under implementation that will help ICOPs scale and profit of national and international expertise.





Terms and definitions

Community

According to Wikipedia, "[a] community is a social unit (a group of living things) with a shared socially significant characteristic, such as place, set of norms, culture, religion, values, customs, or identity. Communities may share a sense of place situated in a given geographical area (e.g. a country, village, town, or neighborhood) or in virtual space through communication platforms.".

Importantly, "Human communities may have intents, believes, resources, preferences, needs, and risks in common, affecting the identity of the participants and their degree of cohesiveness."

When designing and planning for sustained engagement, communities can be looked at from various perspectives, each offering unique insights into community engagement (Office of Public Health 2011):

- **Systems Perspective**: Views the community as a living organism with different parts that must work together efficiently to ensure overall well-being. A healthy community is interconnected and collaborative in addressing problems.
- **Social Perspective**: Defines a community through the social and political networks that connect individuals, organizations, and leaders. Understanding these networks is essential for effective engagement planning.
- **Virtual Perspective**: Focuses on online interactions where individuals use digital communication tools to form "virtual communities." These communities are built around shared interests and organized online activities.
- **Individual Perspective**: Recognizes that individuals have their own personal sense of community, which may involve belonging to multiple communities. This sense of membership can change over time and influence their participation in community activities.

Community engagement

Citizen and community engagement in social innovation refers to the many ways in which more diverse actors can be brought into the process of developing and then sustaining new solutions to social challenges – essentially how citizens can be involved in developing social innovations and in social projects which are innovative. For health and well-being, community engagement can be used to accelerate implementation research, facilitate pragmatic clinical trials, inform local health policy related to social innovation, and help sustain social innovation over time. The Social





Innovation For Research Checklist (SIFR) recommends that all social innovation research describe the extent of community engagement (Ahumuza 2022).

In the field of health and well-being, the World Health Organization defines community engagement as "a process of developing relationships that enable stakeholders to work together to address health-related issues and promote well-being to achieve positive health impact and outcomes". At its core, community engagement enables changes in behavior, environments, policies, programs and practices within communities (WHO 2017). Engagement can also play a role in the processes of democratization both as a means and as goal in social innovation. Manifesting new/alternative interpersonal relations, which involve new ways of doing, knowing, framing and organizing, is one pivotal way in which social innovation actors are able to create the right conditions to challenge, alter, or replace dominant institutions (Pel 2020).

Citizen Science

Citizen Science (CS) refers to the involvement of non-professional scientists ("citizens") in the scientific process. The exact definition is still under debate in the scientific community (Auerbach 2019) and many similar variations can be found in the literature, e.g. "general public engagement in scientific research activities when citizens actively contribute to science either with their intellectual effort or surrounding knowledge or with their tools and resources' (Socientize Consortium (2013). In Europe, ECSA (the European Citizen Science Association) introduced 10 principles aimed at helping practitioners to identify true forms of CS.

CS is not a new concept, as it stems from a long and varied history of public participation in scientific research. For instance, volunteers have been collecting data for decades in many local and national schemes, from bird observation to weather and ocean monitoring. But only in the past two decades, the methodology has undergone rapid growth, with a wealth of new knowledge, ideas, and insights related to effectively engaging the public in scientific research.

What separates CS from less collaborative forms of public participation in scientific research is the element of an "active" engagement, i.e. non-scientists/laymen who are actively involved, to differing degrees, in the generation of new scientific knowledge. Indeed, the level of engagement is one of the key criteria commonly used to classify different typologies of CS. The most influential typology emerged in 2009 (Bonney 2009) and looks at the relationships between scientists and participants in terms of control over the project and its outcomes. It identifies three classes of projects - contributory, collaborative, co-created - each offering different levels of public





involvement, from simply collecting and contributing data (sensors) to projects where the public has a role throughout the scientific process from the questions asked through to dissemination of findings.

Some authors suggest that research results can be significantly shaped by increasing the degree and quality of public participation beyond data collection, especially with regard to embedding contexts and wider society (Phillips 2019). Recent studies also highlight a motivational framework for volunteers in co-created projects, where the wider social impact and cognitive, affective, social, behavioral, and motivational dimensions are all relevant. Engagement with citizen science can change participants' attitudes and behavior, with impacts far beyond the project itself (Brossard 2005).

Models of community engagement in social innovation

The increasing focus on "community" in health promotion is due, at least in part, to the growing recognition that behavior is greatly influenced by the environment in which people live. Proponents of community approaches to behavioral change recognize that local values, norms, and behavioral patterns have a significant effect on shaping an individual's attitudes and behaviors (Thompson 1990).

At its core, the practice of community engagement blends science and art. The scientific aspect draws from various disciplines, including sociology, psychology, and cultural anthropology, while the artistic aspect involves applying these insights with understanding, skill, and sensitivity to suit specific community needs. It is rooted in principles like fairness, justice, empowerment, participation, and self-determination. The main goals of community engagement are to build trust, attract new resources, improve communication, and enhance health outcomes, evolving successful projects into lasting collaborations. It can involve various partners, such as groups, agencies, or individuals, and aims to leverage the collective wisdom and energy of the community to address local issues and improve quality of life. In turn, it provides the opportunity to develop a sustained community where shared responsibilities build relations beyond service development and problem solving.





The continuum of community engagement

The fundamental question in developing a community strategy for engagement is: what problem do we want to address using community engagement, and how can community engagement serve as part of a larger solution to a problem?

In the field of health and well-being, an engagement strategy can aim at addressing behavioral, cultural and social conditions (e.g. awareness on harmful products, drunk-driving), health system determinants (e.g. access to primary health and care, information and programs for diseases), prerequisites for health (e.g. lack of housing, unemployment, water and sanitation), all the way to upstream forces (e.g. poverty, climate change, urbanization).

At the base, it's a theory of engagement based on shared goals and principles. The <u>International Association for Public Participation in 2007</u> laid out a spectrum of participation based on 5 participation approaches:

- 1. **Inform** -To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions;
- 2. **Consult** To obtain public feedback on analysis, alternatives and/or decisions;
- 3. **Involve** To work directly with the public to ensure that public concerns and aspirations are consistently understood and considered;
- 4. **Collaborate** To partner with the public in each aspect of the process including the development of alternatives and the identification of the preferred solution;
- 5. **Empower** To place final decision making in the hands of the public.

Today (Davies 2013) Community engagement is seen more as a continuum of community involvement.





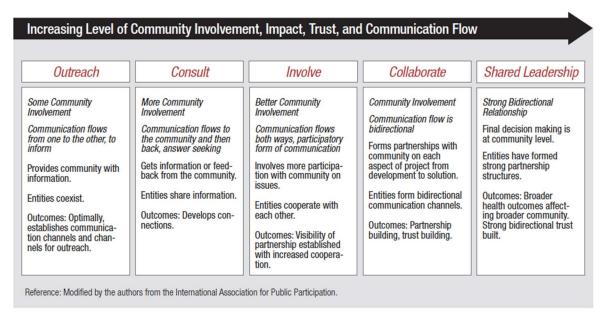


Figure 1.1. Community Engagement Continuum

Over time, a specific collaboration moves along this continuum toward greater community involvement: the community may be informed and mobilized to address immediate, short-term issues with significant external support; the community is then consulted and engaged by implementing internal interventions, with some external support; collaboration with community leaders is established to allow the community to set priorities and make decisions, with or without external partner support. Engagement reaches its maximum when the community creates self-governance systems, sets priorities, implements interventions, and develops sustainable health promotion mechanisms, with external partners as part of a supportive network (WHO 2017).

In this model, community engagement is both a process and an outcome. The approaches, i.e. informing, consulting, involving, collaborating and empowering, are not mutually exclusive, and one type is not better than the other. The appropriateness of the approach will depend on the objectives of community engagement.

Clearly, engagement is not just about increasing participation numbers or encouraging surface-level commitments, it's about creating an environment where members are truly invested and actively involved. To achieve this, community managers need to remain adaptable and open to the evolving community ecosystems and intertwine elements such as listening and responding with empathy, understanding the community's behavior through data analytics, or developing a code of conduct that promotes diversity and inclusion. This helps craft targeted engagement strategies and ensure that all members feel welcomed.





Overall, it is possible to identify three defining features of engagement:

- People take part in engagement activities voluntarily participation can be incentivized, but it cannot be coerced;
- Engagement implies some form of action by citizens participants are not passive recipients;
- Participation and engagement activities are usually directed towards a collective action aiming for a common purpose or goal. This means that they are often strongly connected to a social mission.

Why is citizen engagement in social innovation important?

Citizen engagement is not just beneficial but essential for the effective development, implementation, and sustainability of social innovations. There are several key reasons to this significance (Davies 2013):

- **To understand social needs**: Citizens, as experts of their own lives and living environment, have essential knowledge about their assets, needs, desires, and experiences, which is crucial for identifying challenges and developing solutions. Their involvement helps ensure that social innovations address real and relevant problems;
- **To generate innovative ideas**: Citizens can be the originators of innovative ideas. Engagement processes, such as co-design and competitions, help surface these ideas, which might not emerge through traditional expert-driven processes;
- To get diverse perspectives: Engaging a diverse range of citizens introduces diverse thinking, which is valuable for solving complex problems. Different perspectives bring various heuristics, preventing problem solvers from getting stuck and enabling novel solutions;
- To increase legitimacy: When citizens are involved in the design, development, and implementation of social innovations, these initiatives gain greater legitimacy and acceptance within the community (while also guaranteeing durability or sustainability of the change or solution);
- **To change behaviors**: Citizen engagement is crucial for ensuring the success of solutions that require broad participation and cooperation, and to foster the necessary behavioral changes.





Citizen science and social innovation

Similarly to the continuum of engagement illustrated above, the level of citizen engagement in CS projects varies from sporadic to more extensive, reflecting a spectrum of participation based on the type and depth of contribution, as well as the objectives they aim to fulfil. Some projects are structured by professional research teams and necessitate citizen involvement in particular activities, such as data collection or analysis, sharing their knowledge, or handling tools and sensors for research purposes.

Other projects are developed collaboratively, with active involvement from different stakeholders throughout all phases of the research process. Some projects are "co-created", i.e. designed collaboratively through mutual involvement of various stakeholders where participants can be involved throughout all research phases. Co-created projects are considered to enhance active, inclusive, and wide participation and evidence suggests that research results can be significantly shaped by the degree and quality of public participation in project design (Shirk 2012).

If the project prioritizes the interests of the participating community, the co-created approach promotes a shift from the traditional hierarchical scientific paradigm and allows for better outcomes, such as a more significant social impact, better scientific understandings, success in affecting on timely policy decisions or enhancement on resource management capacity of communities (Santos-Tapia 2024).

Co-creation, a concept originated in the design sphere, emphasizes the value of collaboration between various stakeholders with diverse knowledge, background, and stakes. To make the CS research design process inclusive, co-creative processes aim at involving citizens in all stages of the research process, from research question formulation to evidence-based collective results (i.e. develop the research question and set objectives, choose the study design and data collection methods, collect data, analyze data, disseminate finding, evaluate results and process). By doing this, they elicit a wider social impact and affect the cognitive, affective, social, behavioral, and motivational dimensions of participants (Phillips 2019). The knowledge produced in such projects benefits both science and citizens through the discoveries, applications, and policy decisions that the participation of citizens enable, highlighting the practical consequences of scientific results.

In practice, there are several ways CS can contribute to social innovation. A scientist or social entrepreneur might launch a project that engages citizens with the goal of developing solutions directly relevant to the participants. For example, an agriculturist could design a project aimed at introducing new soil improvement techniques in a particular region. This project could involve





tasks like soil measurement, sample collection, and understanding local farming methods or irrigation sources, with community members actively participating in these data-gathering activities. Indeed, some social innovations are further developed, adapted, or altered after the use of CS tools and methods such as action research, crowdsourcing, and community-based participatory research. Alternatively, the community itself could take on the role of scientists, applying scientific methods and collecting evidence to solve the challenges they encounter (Goi 2021).

Such methods are increasingly recognized as crucial for gathering data, addressing community needs, and creating engagement and cooperation between all stakeholders. Together with generating new scientific evidence, they provide in-depth understanding of an issue, fostering increased scientific literacy or behavior change. Indeed, CS can be seen as a catalyst for social innovation. The strength of integrating both approaches lies in combining scientific rigor to investigate environmental issues with the opportunity to turn research into action. This process makes a tangible positive impact for the community, but also creates new social structures and relationships that increase its capacity to act (Santos-Tapia 2024).

In any case, participative approaches prioritize the interests of participants, whether in terms of societal relevance or basic scientific curiosity, vs prioritizing traditional decision-making and organizational interests. So, the use of citizen science introduces some unpredictability for the outcomes of projects, due to citizens' contributions, opinions and actions.

Practical reference to engaged communities in Health Living (SIEHL)

Engaging communities in health promotion is grounded in the understanding that healthy lifestyles and health outcomes are influenced by their social and physical environments. To address existing issues effectively requires the involvement of community members, partners, and stakeholders who offer valuable insights into local life and health challenges (Office of Public Health 2011). Also, data suggest that robust community engagement across the life of social innovations initiatives in health may be more effective when organically emerging from local actors in partnership with community members.

(https://innovations.bmj.com/content/8/3/216)

The role of NEST's ICOP on Engaged Communities is to help and support members of existing Social Innovation Ecosystems for Healthy Lifestyle (SIEHL) in effectively engaging their communities in activities and social innovation projects aimed at promoting Healthy Leaving.





The primary way the ICOP supports the activities of the SIEHLs is by adapting and optimizing the theory and established ways of engagement (as described in the previous section) to the specific characteristics and requirements of each Social Innovation Ecosystem in NEST, its projects and its initiatives. The "tailoring" is needed because the value of engagement and participation tends to be contingent on the form and practice of each specific activity, the context in which it is performed, and the supporting structures around it.

In particular, the ICOP will provide help with addressing both theoretical and practical aspects of the strategy for engaging communities, including asking fundamental design questions, emphasizing specific aspects, and suggesting practical activities.

Asking fundamental questions

Some of the fundamental project design questions that social innovators and project organizers should reflect on at the very beginning of any engagement activities, include:

Goals and purpose

What are you trying to get out of this engagement activity and what are your key objectives? Is this activity necessary in generating and sustaining the social innovation being developed? And why is engagement critical to fulfilling these? How do you define success?

Target

Who do you want to engage? What are the barriers to participation? How can people be incentivized to participate? What are the existing dynamics of the groups of citizens you want to work with?

Uncertainty

Are you and your stakeholders comfortable with the amount of uncertainty associated with participative processes (where the focus is on process more than on outcome) and with the possibility of unexpected outcomes – both positive and negative?

• Experience and skills

Do members of your community, partners and stakeholders have the skills, expertise and knowledge to meet your goals?

Resources

Are you able to invest the time and money needed over the medium to long term, to implement and benefit from the planned activity or project?





Expectations management

Are you describing your project to all stakeholders in a "realistic way", or are you raising expectations (e.g. 'empowerment', 'local control') which raise expectations that cannot be met?

Emphasizing specific aspects

There are several aspects that all stakeholders involved in the SIEHL must consider before developing engagement activities.

Data

One of the functions of citizen engagement is for citizens to provide information about their assets, needs, preferences, ideas and opinions. This information is critical at every stage of the innovation process – from the earliest stages of identifying needs and potential solutions to the later stages of evaluation. ICOP on Engaged Community will support SIEHLs with some of the established ways to gather and share this knowledge. Information about community's issues, particularly in the case of CS projects, can be provided or collected in different ways and forms, from digital data (documents, photos, videos, ...) to written reports of experiences, perceptions, or emotions (diaries, interviews, ...).

Resources

During the design of engagement activities, resources such as time and money need to be planned, including participation in the form of volunteering and donations. Volunteering is often essential in sustaining social innovation projects.

Social context

Failing to sufficiently consider the context into which a participatory activity is introduced can result in unforeseen harm. For example, existing power structures and power asymmetries within communities can motivate some local stakeholders to use the participatory process to further their own interests rather than those of the local community. Also, social innovators should consider that while not everyone wants to take part in participatory processes, others might feel that they can't or shouldn't take part.

Ethics

Engaging ethically means fostering mutual respect and trust with communities, ensuring fair benefits, addressing participation risks through consultation, and understanding the research's impact on vulnerable groups. Additionally, social justice and health equity should be prioritized.





• Trust

Several activities can be put in place with the clear goal of building trust among participants and stakeholders and reducing existing gaps that can be related to geographic, linguistic, cultural and socioeconomic aspects. Activities of engagement should be done consistent with language, culture and context, such as face-to-face interactions, co-planning of agendas and actions, and co-decision-making.

Risks

It is important to think carefully about the potential risks of engaging citizens in new solutions for social challenges. For instance, legitimacy: if the participatory process is not representative of the entire local community, concerns may arise on the legitimacy of decisions that may come out of it. Another example is long term disengagement if activities are poorly conceived and executed.

Practical activities: Citizen Science and co-creation

Engaging citizens and stakeholders from diverse backgrounds to co-create solutions to social problems can be challenging, as it encourages different perspectives and approaches—which are essential for effective problem-solving. In these cases, where solutions cannot simply be imposed or provided for people, the process must be carefully prepared and designed collaboratively with their active involvement.

The ICOP on Engaged Community can help with the introduction to the concept and processes related to the co-creation of projects and initiatives and help with the facilitation of meetings and workshops. This includes training of members within the ecosystem who can manage and facilitate co-creation activities in the local language.

Learning questions

- 1) What are the challenges in operationalizing theoretical methods of engagement?
- 2) How useful will Citizen Science methods be to social innovation in the SIEHL, and which change/adaptation of the methodology will be required?
- 3) How can we effectively capture the (new) knowledge and experience produced within the SIEHL while engaging their communities?





Reciprocity SIEHL and ICOP

The relations between the ICOP on Engaged Community and the SIEHLs need to be based on the concept of reciprocity, where the ICOP both learns from and supports the SIEHLs.

During the consortium meeting held in Bragança in June 2024, multiple workshops between partners helped identify and discuss some concreate actions and activates that foster reciprocity between SIEHLs and the ICOP on Engaged Community.

In particular, the ICOP could:

- Provide an external and more generalized angle to the SIEHLs' different community engagement challenges, particularly regarding methodological inputs. This includes joint discussions on the implementation of the proposed solutions and help with the design of related activities.
- Help with the design and facilitation of co-creation workshops, including the training of local language facilitators.
- Where appropriate, help with the (co)design of activities which involve data collection or analysis by members of the community (Citizen Science) to use as bases for decision making.
 For instance, this can be the case when the community needs to assess, map or monitor specific issues.

On their side, SIEHLs should:

- Share their success and failure stories about engaging local communities, helping the ICOP expand its knowledge and build a database of relevant use cases.
- Proactively communicate their needs to the ICOP and specify how it can assist them.

For both groups, the most efficient methods for sharing needs and stories – such as calls, visits, documents, and accessible communication channels – must be discussed. Building reciprocity relies on personal connections that enable smooth, two-way communication between the involved parties. This will also build on the figure of "change agents" and on the parallel process of learning and co-creation. Change agents are skilled to establish, facilitate and sustain change processes through ICOPS and SIEHLs. In the ICOP, they will first help apply specific working methodologies and facilitate co-creation and co-learning. Towards the end of the project, they will oversee the framing, governing, and facilitating of the SIEHLs.





In practice, one of the first actions established by the ICOP is the design and distribution of a survey for the SIEHLs with key questions aimed at understanding their core functions, the context in which they can be supported, and how we can best communicate and collaborate with them. The insights gained will guide the support strategy over the remaining of the project.

Reciprocity ICOP to ICOP

ICOPs operate relatively independently, engaging with SIEHLs and supporting change agents across various groups. However, reciprocity is also essential for ICOP-ICOP collaboration, emphasizing the importance of interaction and mutual learning between ICOPs – alongside their exchanges with SIEHLs.

There are several areas where the interest and activities of the ICOPs overlap, making collaboration mutually beneficial:

- ICOP on Social Business Development mutual support with the engagement of multiple stakeholders in (and facilitation of) co-creation processes with the SIEHLs to support the development of feasible social business cases;
- ICOP Reflexive Monitoring exchange of knowledge and experience with building capacity towards evidence-based evaluation and impact measurement in SIEHLs, building on all partners' previous experience with EU (and other) projects;
- ICOP Knowledge Creation support with CS methodologies to investigate and generate knowledge useful for the different and diverse healthy living stakeholders. Help SIEHLs with their own agenda setting while growing and maintaining collective agency of stakeholders.

Overall, the focus of intra-ICOPs activities should be helping the SIEHLs with their specific issues and projects, fostering flawless and effective communication between ICOPs to adapt and interconnect existing knowledge and practices to best help SIEHLs answer their own questions.

Currently, following conversations at the Berlin and Bragança workshops, the following activities have been agreed to facilitate communication and reciprocity between ICOPS:

• Facilitate a quick share of updates via the creation of a dedicated WhatsApp group to exchange on short term, time sensitive issues;





- Set up the activities of the different ICOPs in an open manner, allowing partners the possibility to join meetings and specific activities based on mutual interest, experience, and especially overall benefits to the interested SIEHLs;
- Set up a series of "ICOP Connector" virtual meetings including all ICOP facilitators and focusing on one ICOP each meeting, to help learning from each other and to co-creating (transferable) solutions. The structure of the meetings will be open but should include an intro of the ICOP topic and news on ongoing activities (e.g. setting up the ICOP structure, members, and communication; connecting / co-creating with the different local SIEHLs and with the other 3 ICOPs; learnings, good practices, etc.).

Network & working groups

The ICOP on Engaged Community can profit from the knowledge generated in different working groups thanks to the network and connection of its members and of the NEST consortium at large.

Existing networks/connections

- European CS Association (ECSA) Working Group on CS4Health Citizen Science has a huge potential to contribute to innovative health research, as well as to society. Projects and approaches in CS for health range from applications in the domain of public health, to personal science approaches associated with the Quantified Self movement, and every shade in between. The purpose of the Working Group is to increase the social and scientific impact of citizen science for health;
- CS national and global networks: Several national and international networks and initiatives have been established to connect different citizen science activities within and beyond countries and scientific disciplines. These platforms help with promoting CS projects and connecting CS actors to foster innovation and learning. In Europe they include for example ECSA, Österreich forscht (CS Network Austria), Citizen Science Italia, Observatorio de la Ciencia Ciudadana in Spain, Citizen Science Netherlands (CS-NL). At the international level, they include, among others, the **Association for Advancing Participatory Sciences** in the US; Australian CS Association, CitizenScience. Asia, CitSci Africa, Red Iberoamericana de Ciencia Participativa in Latin America, and the recently established CS Global Partnership;





- Ecosystem of Citizen Science Zurich Network in Zurich and beyond including competence centers, service centers and hubs, CS projects, CSZ tools, and more;
- Bridge2Health group on CS (2023-2030);
- Our Voice Global research network on CS for health equity (2022-today);
- <u>IMPETUS</u>: setting a citizen science innovation program for exploring innovative funding schemes and boosting recognition (2022-2025);
- SIEHL-Eemsdelta: There is an exciting network with stakeholders of the SIEHL Eemsdelta. Together with ICOP-facilitator Annet there is a close collaboration and a good network. She is also joining the committee of Eemsdelta, which will make it easier to get a wider network and a more diverse working group;
- SIEHL network in the municipality of Groningen (2 Living Labs): 2021-2025;
- SIEHL network in the Provence of Drenthe (2 Living Labs): 2021-2025);
- ENRICH-Habits Horizon Europe project (Denmark, Latvia, the Netherlands) (2023-2027);
- Stay active from health care to living environment: the customer journey of citizens/patients, citizen science for health (2024-2027);
- Board member HEPA-WHO/Europe network (2021-today).

Future/to-be-contacted connections

- Healthy ageing researchers at WHO This group of practitioners is working on identifying how community-based social innovations are functioning across many rapidly ageing countries and on the policies, programs and health system factors underpinning their success:
- Network of other existing SIEHL's (outside NEST).





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Additional Resources

No PhDs needed: how citizen science is transforming research (2018)

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Book: "Citizen Science: Innovation in Open Science, Society and Policy" (2018) UCL Press DOI: https://doi.org/10.14324/111.9781787352339





White Paper On Citizen Science for Europe (2021)

https://eu-citizen.science/resource/8

The science of citizen science: a systematic literature review on educational and scientific outcomes

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