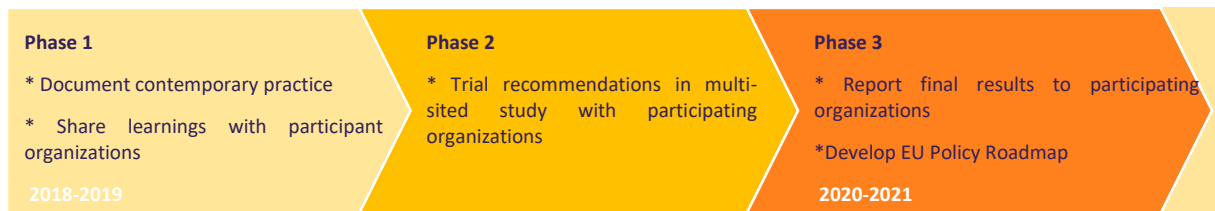


## Enhancing Co-Creation in Living Labs

### Introduction

In the changing world of innovation, ‘co-creation’ has emerged as a desirable mode of organization, bringing together diverse actors to produce mutual benefit through collaboration. The SCALINGS project seeks to understand and ultimately support practices that enable successful co-creation in different contexts, with particular attention to how societal characteristics shape innovation practice. One of our areas of focus has been a comparative study on the production and/or consumption of energy in urban environments, particularly in relation to living labs.

SCALINGS is an interdisciplinary project funded by the European Commission’s Horizon 2020 program. It brings together social scientists, legal scholars and economists to explore ‘best-practice’ in utilizing co-production for innovation. In 2018/2019, the first phase of SCALINGS included literature reviews and empirical research on extant co-creation projects across Europe. An initial summary of the research outcomes to-date is reported as an addendum to this concept note. In 2019/2020, SCALINGS will embark on phase two: collaborating with organizations engaged in co-creation to support their innovation practice through a series of interventions that operationalize learnings from the comparative study in phase one.



### Background

#### Embracing the Experiment

Co-creation and living labs are often positioned ways of enabling novel responses to otherwise intractable problems in a complex world.<sup>i</sup> Living labs promise to overcome the limits of traditional innovation settings by piloting future sociotechnical arrangements under ‘real-world conditions’ while also providing an experimental space for new forms of collaborative innovation activity. This framing may justify the creation of the living lab, but it doesn’t necessarily follow that all stakeholders share the same degree of change-orientation or commitment to the success of the project. As collective enterprises, living labs must bridge the gap between the problems stakeholders want to solve and what is achievable<sup>ii</sup>.

Taking on complex challenges in novel, collaborative ways and in real-world settings inevitably means that living labs ‘work’ is highly contingent and uncertain. From an outcome-oriented perspective, this can mean failure is just as likely as success. However, as a practice, living labs also shift the focus to process as much as product; “failure” becomes a provocation to re-organise or re-adjust the problem-definition. As such, living labs depend on the ability of stakeholders to negotiate and exceed the acute problems they are dealing with. This approach can be very disruptive and challenging to integrate into more traditional forms of governance, such as bureaucratic structures and inflexible funding and reporting models.



## Spatial and Social Situatedness

A core aspect of living labs is their active utilization of their spatial and social embeddedness. In other words, local context matters, not as an external condition, but as actively productive of the work living labs do. The literature indicates that successful living labs openly acknowledge and engage with their 'place' in terms of:

- physical characteristics, including infrastructural and logistical lock-in and potential
- social characteristics, capabilities and capacities, including formal and informal governance structures.
- local histories, including the experiences of stakeholders and wider publics with preceding projects.

As such, while some common principles pertain to implementing living labs, it is necessary to identify and adapt to the distinct features of the socio-technical environment in which particular labs are embedded.

### Role of Universities

Universities can play a key role in establishing and running living labs. They can be an asset to co-creation activity, through broadening the types of stakeholders to include the education and research sectors, providing significant human capital through student and staff engagement, or providing physical facilities and infrastructures for living lab activities.<sup>iii</sup>

However, universities also vary in their operational structures in relation to the external environment. Externally, depending on their legal and financial structures, they may be either directly managed or loosely regulated by government funding (at national or state level). Internally, they demonstrate wide variation in organisational structure and culture; while they commonly house familiar entities such as faculties and departments/schools and research groups, the degree of autonomy these units have varies widely, including in relation to: the scope of research activities, curricular and teaching content and delivery, and financial independence and control over facilities.

## Approach

The SCALINGS research team has expertise in socio-technical transitions and social science research more broadly. We are offering these skills and capacities to participating organizations in order to assist them in collecting and analyzing the data they need to improve their co-creation practices, including through directly supporting interventions that seek to operationalize these findings. Our general capabilities and capacities to assist, are:

- **Systematic analysis:** through qualitative data collection and analysis techniques, we can provide systematic, comprehensive and detailed analysis of the social and political aspects of your project, at all stages of design and implementation. We utilize interviews, observations and formal policy analysis methods, and can produce de-identified, independent and confidential reporting.
- **Workshops and training:** we can also offer active members of your project opportunities to systematically and creatively reflect on their practice, for example, in relation to Responsible Research and Innovation (RRI) or enabling co-creation more broadly. This can either be done on a project basis, or in a community of practice context, where we facilitate opportunities to engage with other experienced co-creation projects.
- **3rd Party funded support:** SCALINGS is fully funded under the European Union Horizon 2020 program. Therefore, we do not charge any monetary compensation for the research we do in collaboration with you.
- **RRI activity:** our research can assist your co-creation activities by supporting the inclusion of users and other interest groups in the design process to harness their creativity and achieve more robust results, in terms of technical solutions, social support and regulatory fit. Engaging in such analysis





increases and evidences RRI activity within your project and can be used to support the visibility of these activities and values.

- **Wider relevance:** our knowledge sharing and reporting activities help you situate your project and contributions in relation to the wider activity that is captured in the scientific and policy literature, bringing those knowledges into interaction with you, and acting as a mechanism for also reporting your contributions to these efforts to a scientific and governmental audience.

The detailed aim and format of interventions will be agreed with participating organizations. Possible approaches, to be considered as individual activities or in combination, are presented below.

- To assist projects where stakeholders are undecided about the best way to progress or a hiatus has been reached:
  - Conduct a limited number of interviews with stakeholders to systematically map their goals, concerns, expectations, and constraints. Provide a de-identified summary of findings as feedback to you and make recommendations of alternative approaches
  - Conduct a stakeholder-workshop to agree on a way forward for co-creative practices, and if possible, conducting a pilot of this approach
  - Play a role in the mode of conducting existing stakeholder workshops or meetings, either in design, facilitation or observation and summarizing outcomes/findings.
- Where ‘external conditions’ are felt to prevent innovation from taking place:
  - Conducting a policy review of the contemporary context and identify opportunities to re-frame the innovation activity in terms that have more currency in relation to current agendas.
  - Identify examples from other innovation activities (including in different sectors) that encountered and resolved similar issues.
  - Conduct interviews with appropriate experts and authorities outside of the innovation project.
  - Identify and propose alternative stakeholders and/or approaches to open up alternative pathways for engaging in innovation or progressing living lab activities.

The options above are indicative of the kinds of data collection and analysis SCALINGS can perform to support your innovation practice. To discuss the needs and requirements of your project, please speak with a member of the SCALINGS team. For further information, please contact us at the details provided.

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<sup>i</sup> Steen, K. and van Bueren, E., 2017. The defining characteristics of urban living labs. *Technology Innovation Management Review*, 7(7).

<sup>ii</sup> Karvonen, A. and van Heur, B. 2014. Urban Laboratories: Experiments in Reworking Cities. In: *International Journal of Urban and Regional Research* 38, 379-392, DOI: 10.1111/1468-2427.12075.

<sup>iii</sup> Evans, J., Jones, R., Karvonen, A., Millard, L. and Wendler, J., 2015. Living labs and co-production: university campuses as platforms for sustainability science. *Current Opinion in Environmental Sustainability*, 16, pp.1-6.





## Addendum: Preliminary Findings

Having conducted 13 in-depth case-studies of Living Labs across Europe, SCALINGS researchers have observed at close quarters the ways in which living labs operate in-context, and the strategies that they deploy to respond to challenges or take advantage of opportunities. While all contexts are different, this has enabled us to develop a sensibility to the kinds of mechanisms and effects which shape how co-creation works in practice. These observations are summarised into the broad categories below.

### Shared Objectives

With multiple partners, 'shared' doesn't refer so much to a single joint-objective as a more-or-less flexible area of convergence in which discrete objectives are mutually enabled or supported. What assists in this are: broad shared visions; shared commitment to the process of collaboration, sometimes generated through shared experiences and emotional as well as financial investment; valuing the network of engaged partners either intrinsically or extrinsically. Allowing these shared objectives to be revisited and renegotiated as stakeholder interest/makeup changes is also essential for maintaining cohesion.

Reaching shared objectives assumes some kind of mechanism through which they are communicated, shared and agreed: this might take the form of a workshop or mapping activity across engaged parties to identify their interests in establishing the living lab as a collective enterprise in the first place, as well as how their objectives, capabilities and capacities contribute to establishing its basic shared objective and format or mode of operation.

Key to the success of living labs is also clarity about what is not shared; if there are any hard-and fast rules or requirements for inclusion, they must be communicated. This pertains particularly to any regulatory, legal or financial burdens or requirements, for example: What infrastructure is provided for common use and what must users/collaborators pay for independently? How do IP or data protection concerns (specifically the GDPR) affect coordination of, and participation in, living labs? Uncertainty about these issues can hinder co-creation activity.

Another key issue is who shares in the living lab's design and operation. Depending on their objectives and ethical concerns, living labs will vary in the extent of participation they seek. It is important to be explicit about these objectives and to ensure that the mechanisms of participation are fit for purpose and do not unintentionally exclude certain populations. For example, digital modes of participation may exclude elderly populations, while language choice or lack of multi-lingual engagement may discourage involvement by recent migrants or minority groups.

### Process clarity

Maintaining collaboration in this complex institutional environment is aided by explicit agreement on, and clear definition and communication of, the participatory process (and any changes to it). This ensures partners know what to expect, can engage in good-faith, and reduce the potential for miscommunication and ineffective collaboration. Clarity in the co-creation process is enabled through clear mechanisms for the negotiation of goals, time scales, actors to be involved, as well as the ways in which involvement is intended to take place, the structure of the decision-making process, and how project outcomes are managed. Process clarity should not be mistaken for procedural micro-management; if processes are open, flexible or modular, it is important that partners understand this and what it entails for them.

### Connectivity and communication

Transparent and regular communication with all stakeholders is a key enabler of effective collaboration. The following considerations are particularly important:





- Explicit negotiation and compromise: this requires a ‘safe space’ for participants to be open and honest about their limitations and needs. To enable this, strong relationships of trust must either exist, or be developed and, crucially, need to be maintained. This maintenance is performed through the mode, tone, and frequency of communication in the everyday running of the living lab.
- Clear communication is aided through the development of a common language: participants should look out for, identify and work through miscommunications, these can be particularly difficult to identify or bridge across different sectors and/or disciplines. This process is supported through making space and time for open questioning and discussion in the process of running the living lab and ‘doing’ innovation.
- In addition to *what* is communicated and *how*, is the issue of *when* and *how often*. Frequency of communication matters, not only to maintain relationships and interest, but also to ensure that co-creation issues are identified and resolved.

### **Ownership and Coordination**

Preliminary findings suggest that living labs are particularly successful if there is a sense of ownership and control amongst stakeholders. This can be at the organisational level, for example: many living labs suffer from unclear divisions of responsibility and/or responsibilities being taken on as voluntary, unpaid or otherwise unacknowledged work, with the result that limited time resources are provided to the project. Other living labs have overcome this issue by ensuring there is a paid project leader or coordinator. Without this, lack of leadership or coordination can mean the project drifts to a halt or becomes incoherent. At the individual level of participants or users, a sense of personal ownership of the project, e.g. through intimate knowledge, personal investment or the experience of control supports buy-in both in terms of garnering social support for the project as a whole, but also in the sense of enabling more active contributions to the substantive outputs of the project, as knowledge production.

### **Output (in)tangibility**

One of the major outputs of living labs lies in the exchange of perspectives, knowledge and learning (social and technical). However, this contrasts with the product-oriented expectations living labs find themselves confronted with. Bridging this gap constitutes a central challenge for living labs. However, if they neglect immaterial outputs for the sake of good publicity, they run the risk of undermining their own co-creative achievements.

Living labs often find themselves under pressure to constitute a replicable ‘product’ or tangible output that easily signifies the success of the project. This approach is deeply embedded in modern understandings of progress and development, including in the way funding institutions and/or the general public assess whether ‘research is worthwhile.’ Over-insisting on pre-defined visions of what success means in the project context may unnecessarily limit the mode or scope of living lab objectives and means of achieving them. It may furthermore obscure the value of immaterial ‘social’ ties, such as the capacity of the living lab network or organisational structure to respond to other research challenges.

