GUIDELINES FOR URBAN LABS
Project team URB@Exp
Gerhard Ablasser, City of Graz
Mette Agger-Eriksen, Malmö University – The School of Arts and Communication (K3)
Nik Baerten, Pantopicon
Johanna Block, City of Malmö
Eric Clark, Lund University – LUCID
Ron Cörvers, Maastricht University – ICIS
Wolfgang Domian, City of Leoben
Thomas Drage, University of Graz – RCE Graz-Styria
Maja Essebo, Lund University – LUCSUS
Trevor Graham, City of Malmö
Per-Anders Hillgren, Malmö University – The School of Arts and Communication (K3)
Thomas Hoeflehner, University of Graz – RCE Graz-Styria
Alexandra Janze, City of Leoben
René Kemp, projectleader URB@Exp, Maastricht University – ICIS
Gertraud Klingsbigl, City of Leoben
Wolf-Timo Köhler, City of Graz
Joop de Kraker, Maastricht University – ICIS
André Landwehr, City of Malmö
Günter Leitner, City of Leoben
Per-Arne Nilsson, City of Malmö
Oscar Pelin, City of Malmö
Nicole Rijkens-Klop, Pantopicon / Maastricht University – ICIS
Christian Scholl, project coordinator URB@Exp, Maastricht University – ICIS
Anna Seravalli, Malmö University – The School of Arts and Communication (K3)
Jos Simons, City of Maastricht – M-Lab
Gert Vandermosten, City of Antwerp – Citylab2050
Anna Wachtmeister, Malmö University – The School of Arts and Communication (K3)
Tim van Wanroij, City of Maastricht – M-Lab
Petra Wlasak, University of Graz – RCE Graz-Styria
Friedrich Zimmermann, University of Graz – RCE Graz-Styria

Referencing to this booklet as follows

* Editorial team
Acknowledgements
The URB@Exp project team would like to thank:

**Antwerp**
Gert Vandermosten, coordinator Citylab2050, City of Antwerp
Iris Gommers, coordinator Sustainable City, City of Antwerp

**Graz**
Wolf-Timo Köhler, Department for Citizen Participation of the City of Graz
Gerhard Ablasser, Department for European Programmes and International Cooperation of the City of Graz
Remko Berkhout, participation process facilitator
All the people who participated in the Governance Lab Graz

**Leoben**
Wolfgang Domian, municipal director
Alexandra Janze, office for project management
Gertraud Klingsbigl, office for social affairs and arbitration board
Günter Leitner, Leoben Economic Initiatives
Students of the University of Graz
who participated in the transdisciplinary research experiments to develop a city lab
Volunteers who are engaged in supporting refugees

**Maastricht**
Tim van Wanroij, process manager of the municipal department of spatial planning and M-LAB coordinator
Jos Simons, manager of the municipal department of spatial planning
Gerdo van Grootheest, alderman spatial development
All participants in “Operatie Steenbreek” and “Stadsnatuur Maastricht”

**Malmö**
Återskapa and Carin Hernqvist, who provided materials and facilitated the process of collaboratively creating the images representing each guideline
Moa Björnson and Victoria Percovich Gutierrez, former Innovation Platform managers
Per-Arne Nilsson, Christina Olofsson, Johanna Block, Environmental Department
Oscar Pelin, lab manager of Malmö Innovation Arena, The Environmental Department
André Landwehr, project officer, Innovation Platform
Andreas A. Pedersen, project officer, Innovation Arena
Trevor Graham and Lena Eriksson, Environmental Department, initiators of Innovation Platform and coordinators of Malmö Innovation Arena
Steering group members of the Innovation Platform Malmö South East
Partners and participants in projects and partnership and co-lab events around the Innovation Platform and Innovation Arena
Anneli Krell and Kristina Elding, library development, region Skåne
The librarians and other regional officers who participated in the process about future libraries
All the people who participate in driving and carrying out activities at ReTuren
Anna Strannegård and Savita Upadhyaya, coordinator and project leader of ReTuren
STPLN, Malmö’s makerspace
The South Area Program in Malmö VASYD, waste handling department and particularly Ebba Sellberg and Annika Sevrell

Many thanks also to
Jarmo Eskelinen, external evaluator, Forum Virium Helsinki
François Mancebo, external evaluator, Rheims University – IRCS & IATEUR
Jan Klerkx, English proofreading, Maastricht

This guidelines booklet is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License
How to use these guidelines

These guidelines are intended for team members and managers of urban labs and, more generally, for civil servants and facilitators in cities working with experimental processes to tackle complex challenges. They aim to support the everyday practice of collaboratively experimenting and learning how to create more sustainable and inclusive cities.

Why guidelines for Urban Labs?
Policy-makers and urban development stakeholders may struggle to implement urban labs, and seek guidance for further development. Evidence-based guidelines and design principles are needed to decide for which types of challenges urban labs are most suited, how urban labs can best be organized in terms of structure, process and participation, and how urban labs can best be integrated into local government structures.

The overarching aim of the URB@Exp project was to develop guidelines for urban labs, in order to enhance the successful uptake of this new form of urban governance and contribute to improved governance of urban complexity, creating more sustainable, inclusive, attractive and economically viable cities. The project’s action research approach ensured that various urban actors became effectively involved in the co-creation of these guidelines. Direct access to a variety of urban lab experiments and contexts through collaboration with five city partners enabled the URB@Exp consortium to jointly develop these guidelines in a collaborative and iterative reflective process.

For whom are these guidelines intended?
We wrote the guidelines with three key target groups in mind:

Urban policy-makers Urban policy-makers are the primary target group of this booklet. The guidelines aim to support them in determining the types of challenges most suited to
being dealt with in urban labs, as well as ‘good practices’ for organizing urban labs in terms of processes of co-creation, engaging stakeholders, organizing learning processes and seeking effective approaches to the integration of urban labs into local government structures.

**Current or future urban lab practitioners** This refers to professionals involved in the organization and facilitation of urban labs. They can benefit from the experiences that are captured in the guidelines, above all in the illustrative lab stories. The guidelines should also support them in reflecting strategically on the daily business in their labs.

**Urban stakeholders** The project results will be of indirect value to urban stakeholders. When urban policy-makers implement the guidelines produced by this project, other urban stakeholders (including the more marginalized ones) can expect to benefit from more inclusive engagement in urban governance through participation in urban labs and from better results of these urban labs in terms of public value created.

**Which kind of guidelines?**  
The eight guidelines are based on experiences and learnings from urban lab initiatives from five different European cities: Antwerp (B), Graz and Leoben (A), Maastricht (NL) and Malmö (S).

We do not pretend that these guidelines touch upon all possible challenges an urban lab may be confronted with, but we have incorporated all those we encountered in our collaborative project. In establishing each guideline theme, we identified common and recurrent patterns and positive attributes across urban experiments and urban labs in different urban contexts.

A fundamental insight emerging from URB@Exp is the importance for each urban lab to consider its own specific local conditions. Hence, the following guidelines do not provide a single definitive answer on ways to organize and run an urban lab or its experimental activities, but rather they offer, through frameworks and examples, guidance for ways to act in relation to, and reflect on, key issues.

We hope the result is inspiring and instructive for all those who want to wrap their minds around experimental co-creative approaches to urban governance and city development.

**The structure of the guidelines**  
The guidelines are organized according to the same structure:

- A title presenting the core of the guideline
- An abstract representation of each guideline that has been collaboratively developed by researchers and practitioners.
- A brief presentation of the topic of the guideline and why it is relevant for urban labs.
- The design goal, i.e. what urban labs should aim to achieve in relation to the specific issue at hand.
- Some of the challenges, tensions and opportunities related to the issue.
- Two or three concrete examples about how urban labs have been dealing with one or various aspects of the issue.
- The design principles, some suggestions about the way urban labs can try to achieve the design goal.

In addition to this booklet, a LAB kit has also been developed (see urbanexp.eu/labkit). The LAB kit is a tool to be used in meetings and in discussions about ways to practically organize and/or develop an urban lab.
Contextualizing the guidelines

This booklet presents eight guidelines for setting up and running urban labs. They are the result of the transdisciplinary research project URB@Exp. This means that they are the outcome of an intensive and productive collaboration between researchers and city officials. Such collaborations are not always easy, but we believe that they are worthwhile to engage in in order to gain practice-based insights that help to address real-world problems. We hope these guidelines provide inspiration for lab practitioners, policymakers and urban stakeholders thinking about and struggling with experimental collaborative approaches and wanting to learn about new forms of participatory urban governance.

For the benefit of readers curious about the broader context of these guidelines, this introduction briefly addresses three questions: What is an urban lab? Where do urban labs come from? What is the URB@Exp project about?
What is an urban lab?

Urban lab is a generic term that incorporates a great variety of different methodological and conceptual approaches to deal with the increased urban complexity, promoting new platforms for experimentation, citizen participation and collaboration. Although there is no consensus on how to define an urban lab, most of them share conceptual roots with ‘living labs’, which can be described as participatory platforms for open innovation that support experimentation with real users in real contexts. Living labs can be understood both as a methodology and as a space for user participation in innovation processes. Today, living labs generally seem to attract attention and interest from various scholars, public authorities and politicians, as a result of which there are a large number of different names, forms, and purposes of the concept. In the URB@Exp project, practitioners and researchers jointly engaged in exploring what an urban lab is and how it can be defined. In an iterative process based on literature review, insights from existing urban labs and collaborative discussions, we identified eight characteristics that are central to urban labs and their functioning (i.e. agendas, participation, positioning, organizational structure, activities, learning, outcomes and time framing). The eight guidelines presented in this booklet provide support for reflecting and acting in relation to each of these characteristics. Each of them presents a design goal. Together, these design goals form a definition of what an urban lab is according to the researchers and practitioners involved in URB@Exp.

Urban labs …
... explore alternative futures in a collective approach, without fixed ideas or preconceived solutions...
... provide opportunities for diverse and marginal actors to participate in and influence processes and activities...
... are hybrid niches positioned at the boundary between local administration and society....
... have transparent leadership and organizational structures tailored to specific goals and local conditions...
... carry out time-limited experiments with the ambition of creating long-term relationships...
... aim to maximize learning from lab experiments by multiple actors …
... co-create public values, distributed transparently and fairly...
... disseminate and anchor lab lessons throughout urban governance structures.

The big lab family
Urban lab is an umbrella term that tries to capture a variety of organized experimental approaches in an urban context. Urban labs are far from the only labs around. In recent years, a real labification of politics and society can be observed. The overview below lists some of them. This is not meant to be a definitive list, nor a final definition. These phenomena are developing and changing far too quickly for that, and sometimes come to overlap more and more. This means that urban labs can incorporate several of the characteristics of any (or many) of the labs mentioned here.

Change Labs are transdisciplinary initiatives that develop and apply innovative approaches for scaled and systemic transformation processes by actionable intervention approaches.

City Labs are participatory platforms in which local governments and other stakeholders jointly seek to learn about and become involved in new ways of dealing with...
urban challenges. Often they have been initiated and are at least partly funded by departments of local governments.

**Design Labs** is a generic name, covering various forms, like Gov Labs, Innovation Labs, Policy Labs, and DESIS Labs (Design for Social Innovation and Sustainability). They challenge many established practices, organizational entities and procedures of innovation and are less technology-oriented than Living Labs. They commonly apply design-oriented approaches, often focus on urban sustainability, and engage in governance-related experimentation.

**DESIS Labs** are teams of professors, researchers and students who focus their design and research activities on design for social innovation and sustainability. They can operate at the local scale with local partners, but in collaboration with other DESIS Labs, they can also engage in large-scale regional and global projects and programmes.

**Gov Labs** aim to strengthen the ability of institutions and people to work more transparently and collaboratively to make better decisions and solve public problems. The goal is to deepen our understanding of ways to govern more effectively and legitimately, using new advances in technology and science.

**Impact Labs** focus on experimental learning and work with a wide range of public and private-sector partners to tackle analytical and strategic problems. They support innovators to bring projects to scale, usually in the area of health, education and sustainability.

**Innovation Labs** are cross-disciplinary platforms designed to support a range of stakeholders, to foster innovation and entrepreneurship. They usually focus on networking, consulting and qualification services.

**Lab-like Initiatives** are increasingly being implemented by municipalities. They integrate living or design lab approaches in their local work, but without using the specific names and vocabulary. They work from a local, citizen-centred perspective and have the mandate and opportunities to experiment and explore new forms of collaboration and governance.

**Living Labs** represent an approach to user-centred innovation by engaging users actively as contributors to the creative and evaluative processes in innovation and development.

**Makerspaces** (or FabLabs) are small-scale workshops that provide access to tools and knowledge which can be used to engage with various kinds of production and to experiment primarily with technology. The sharing of resources and collaboration between participants can be considered as a form of commons-based peer production which builds on shared ownership, social capital and use value.

**Policy Labs** are non-partisan platforms focusing on multiperspective dialogues, which actively engage in projects for shaping societal developments. They often experiment with new policy techniques and design services, using data analytics and new digital tools.

**Reality Labs** (or real-world laboratories) are testbeds where solutions and concrete implementations are tested under real conditions. This incorporates places for trans-disciplinary research in order to experiment with potential solutions to sustainability challenges.

**Social Innovation Labs** (or Social Living Labs) function as vehicle for systemic change by experimenting with social innovations. They shift away from technology and efficiency centred approaches towards more people-oriented strategies for dealing with urban challenges in the field of social and planning issues.
The URB@Exp project

The URB@Exp project received funding from the Joint Programming Initiative Urban Europe (www.urbaneurope.eu) and ran from 2014 to 2017. The project looked at urban labs and new forms of urban governance and city development. The guidelines you find in this booklet were its main goal. In its research on and elaboration of these guidelines, the URB@Exp team applied a transdisciplinary approach cutting across various disciplines and domains, similar to what many urban labs do. As such, URB@Exp was a kind of ‘lab’ as well. The innovation component of the project primarily concerned the implementation of urban labs as new forms of urban governance.

The URB@Exp consortium strategically merged a transdisciplinary set of partners including four universities, five cities and one consultancy. These partners contributed a wealth of scientific, professional and experiential knowledge to the collaboration.

The city partners (from Antwerp, Graz, Leoben, Maastricht and Malmö), as end-users of the guidelines on urban labs, played a major role in defining the research questions to be addressed. Their experiences were essential input for the examination of previous urban lab experiments.

The academic partners (Maastricht University, Graz University, Malmö University and Lund University) contributed insights, theories and approaches from a diversity of research domains, forming the basis for action research methodology, evaluation and synthesis of findings.

The foresight studio (Pantopicon) contributed essential professional expertise on the organization and facilitation of participatory, multi-actor approaches.

All partners were involved in the design of the urban lab experiments, in joint reflexive learning during the experiments, and in evaluating and drawing lessons from the experiments. It is important to note that this concerns all urban stakeholders involved in these experiments and not the only policymakers of the partner cities.

Below, we briefly introduce each of the five urban labs that were part of the URB@Exp project and part of the collaborative development of the guidelines you will find in this booklet.

Antwerp: Citylab2050

Citylab2050 is the lab for sustainable innovation in Antwerp. The most important motivation underlying Citylab2050 is the urgency that is felt by politicians and inhabitants to transform the city into a more sustainable city in the long run. The city strives to co-create its sustainable future with its citizens, knowledge centres, civil society organizations and companies. The campaign to organize this co-operation and facilitate the implementation of actions and experiments for a sustainable city provided the initiative for creating a Citylab2050.

The goal of the lab is to function as a breeding ground for setting up sustainable actions and experiments for and with the urban community and to learn how the transition towards a sustainable city can take place. The
lab is intended as a broad forum that invites the whole city community to build on the city’s sustainability ambitions. The forum is to be a frontrunner with regard to a transition programme, to transform the city into a sustainable city for everyone. Bottom-up initiatives will be stimulated, while looking for breakthroughs and innovative solutions. Citylab2050 is also intended as a meeting place, creating cross-linkages between actors, and resulting in new initiatives, or facilitating the implementation of measures decided upon. The task of Citylab2050 is contextualized in the sustainability policies of the City of Antwerp, set down in the Antwerp policy plan called ‘Sustainable city for everyone’. In addition to this, the local government is experimenting with a new role, moving from initiating and implementing policies towards facilitating and setting up a framework in which actions and experiments can grow and be learned from. The lab can be seen as a facilitating vehicle in this respect.

Citylab2050 organizes various thematic trajectories focusing on different sustainability challenges and thus different target groups. The expectation is that it will be mostly frontrunners and people with ideas, who feel committed to the future of the city, who will visit the lab and create, prototype and implement experimental ideas. Because the city lab is being coordinated by the Department of Energy and the Environment (DEE), one of the departments of the local government, the issues on the Citylab’s agenda should be related to energy and/or environmental challenges. It is acknowledged that sustainability is more than just its ecological dimension (it is also about the socio-cultural and economic and spatial dimensions), but the DEE coordination means that the ecological dimension should always be included in the choice of specific thematic areas.

So far the following issues are on the agenda of Citylab2050:
- Greening the city
- Sustainable housing
- Sustainable energy for the centre of Antwerp
- Circular fashion, named Fashion Flows
- Sustainable food for and in the city
- Antwerp as a sharing city
- Development of a climate-proof district in Antwerp, named Sint Andries
- Implementation of ’circular entrepreneurship’ in the New South district

For each trajectory, specific organizations are approached to become a partner in the thematic trajectory. The idea behind such partnerships is to create more ownership for the lab and the initiatives coming out of it, to realize more outreach, also in terms of the lab not being the lab of the local government but of the Antwerp residents, and to engage more helping hands for the logistics, including involvement in working out concrete initiatives. Finally, crucial players in the lab are the people visiting the lab in meetings organized in the context of a specific thematic trajectory.

A project grant from the Antwerp government is available, provided in the context of the government’s sustainability policies. So-called ’Idea Teams’ of the lab can submit ideas. If their proposal is accepted by an independent jury, the idea teams get funding to start an initiative.

The Citylab2050 initiative also involves other departments of the city government. The project leader from city government also invites colleagues from other units and departments within the city government to become
involved in specific city lab initiatives. This facilitates the internal anchoring of the city labs way of thinking and specific experiments.

**Governance Lab Graz**

There is a multifaceted tradition of innovations regarding citizen participation in Graz. Since the emergence of the first citizen initiatives in the 1960s and the establishment of an office for citizen initiatives (later Department for Citizen Participation), a number of activities and projects have endeavoured to achieve participative urban development. Examples have included ‘district work housing estate Dengenhof’, ‘Strategy cell Neutorgasse’, ‘Charette for the redesign of the Sonnenfelsplatz’, the planning workshop ‘Time for Graz’, the ‘Advisory Board for Citizen Participation’, the ‘Vito’ future workshop, ‘Redesigning Annenstraße’ etc. Urban experiments are seen as a further innovative form of citizen participation. In the course of the URB@Exp project, a governance lab was established in Graz, which can be seen as a ‘facilitating space’.

The ‘Governance Lab Graz’ is a ‘facilitating space’ for projects of shared, integrated urban development. The core team of the governance lab consists of representatives of the City of Graz and researchers of RCE Graz-Styria of Graz University. It fans out into the domain of the influence of citizens, NGOs, administration and politics. The ‘Governance Lab Graz’ is both a project and a research approach. As a project, the governance lab facilitates experimental learning and working on the basis of real challenges. The concept of urban labs defines projects (like those mentioned above in the tradition of citizen participation) as urban experiments. Urban experiments are particularly characterized by the criteria of temporal restriction, definition of learning goals and transferability. In this approach, experiences gained in past experiments are incorporated in future initiatives. For the URB@Exp project, for example, the step of establishing the guidelines for citizen participation was later defined as an independent, documented experiment which had been temporary. It had produced successes in terms of learning, and yielded insights that influenced further experiments. Accordingly, the trial phase of the guidelines has been organized as an additional, central experiment of the ‘Governance Lab Graz’. The lab’s goal is shared learning and researching by means of experiments, in order to collaboratively meet future’s challenges with new answers. Crucial elements of the work process in the governance lab are sensitization and calling attention, indirectly and directly, to the developments regarding governance in Graz (from government via new public management to governance).

Motivation and goals behind the governance lab Graz:

- **Awareness raising** for governance and citizen participation
- **Space for experiential learning and feedback** for citizens, civil servants and politicians
- **Knowledge exchange** between civil servants who implement the ‘participation guidelines’
- **Capacity building**: know-how for organizing participation processes within the city management including communication, space for dialogue, support and empowerment for implementation
The main experiment in the Governance Lab Graz involved testing the guidelines for citizen participation. The experiment started in January 2015 and ended in December 2016. Citizen participation in projects of the City of Graz means that the city invites its citizens to join in the preliminary discussions about decisions and to contribute their points of view and their concerns. The core of the guidelines consists of three elements: information about a project list, preparation and realization of participation and encouragement of citizen participation by the instrument of formal suggestion.

The City of Graz uses a project list to inform the citizens as early as possible about important city projects and let them know if citizen participation is offered in the project or not. The majority of projects have concerned the area of city planning (approx. two thirds). High quality participation needs a clear, transparent and reliable framework for all protagonists. This is attempted by elaborating a participatory concept involving consultation of relevant stakeholders. Where the City does not yet plan participation, at least two of four defined groups can prompt the City to re-check whether citizen participation can be offered despite its previous considerations.

The experiment showed that during the trial phase, applying the guidelines had worked, so the guidelines for citizen participation contributed to meeting the self-defined aims (information, communication, transparency, commitment). Citizen participation is an ongoing learning process, requiring all stakeholders to have qualities like seriousness, openness to dialogue, respect and understanding.

A second experiment was a project that was handled according to the guidelines for citizen participation. This smaller experiment dealt with citizen participation in city planning.

City Lab Leoben

In Leoben the process of trying to include citizens and various stakeholders in strategic city planning started in 2000 with the ‘Leitbildprozess’, a participatory urban planning strategy. Actual urban development projects were realized by trying out new forms of citizen participation, such as open space conference, district workshops and goodwill-project initiatives. Despite its success, the city realized that dealing new urban challenges required innovative and more exploratory forms of participation. This need was met by (1) close cooperation with existing lab-like initiatives, (2) projects initiated by the Leoben local government to try out makerspaces and social innovation labs, and finally (3) the establishment of a ‘City Lab Leoben’ run by the local authorities of Leoben itself.

1. Lab like initiatives: Refugees in the City
Lab-like initiatives are developed and undertaken by citizens. At some point of their development, they can gain such an impact within the city that they can put their interests on the urban policy agenda. One example of such an initiative is the civic support for refugees in the city. Several volunteers as well as NGOs gathered to organize different types of support for refugees, such as food and clothes donations, German language courses, sports activities and events for intercultural dialogue.
The City of Leoben has acknowledged their efforts and has worked with them to share their knowledge and inform the public about the needs of refugees.

2. Projects to try out labbing: Learning Lab Leoben Ost
The City of Leoben has developed a virtual participation platform by implementing the project entitled ‘Learning Lab Leoben East’, in cooperation with scientific and economic project partners. The project is funded by the Climate Fund in the category ‘Smart City Project’. The platform is intended to offer citizens and businesses the opportunity to check information about projects and plans, to propose ideas regarding certain projects, and to comment on and evaluate proposed plans. This will ensure, on the one hand, that citizens and businesses can actively participate in urban development projects, and on the other hand, that the requirements and wishes of the stakeholders can already be considered in the planning and implementation stages.

3. Establishing the ‘City Lab Leoben’
The City of Leoben decided to create the ‘City Lab Leoben’, run by the local government itself and providing a physical space for working together on solutions to current urban challenges. The concept of the lab was designed in the course of a transdisciplinary process between city partners and academic partners. The experience gained from working with lab-like initiatives and from concrete projects, as well as what was learned from the ‘Leitbildprozess’ were reflected on in several workshops. Based on these reflections, key elements of a future City Lab Leoben were defined and a concept for the lab was worked out. The academic and the city partners agreed that the City lab Leoben should provide a space for everyone to engage in creative activities and should be as low-threshold and flexible in its design and space as possible. The defined vision was to ‘create a concrete, physical, mobile space in which to create, design and discuss visions, missions, strategies and projects for participatory, smart and sustainable city development.’ This space had to serve as an open platform and meeting point for politicians, civil servants, researchers, citizens, civil society and stakeholders from the domains of art, culture, education, economy and society. The consortium of city partners and academics agreed on the term Future Experiments, which should take place within the City Lab Leoben. The interpretation of a Future Experiment is as follows: ‘At City Lab Leoben, individuals and groups meet and learn from each other, by sharing their specific knowledges, experiences and needs. Together they create and visualize in participatory workshops new ideas for a needs-oriented, sustainable and smart city. Each Future Experiment has participatory learning goals, which will be reflected on continuously in order to proceed with the learning process and contribute to knowledge exchange.’ The topics that should be dealt with are suggested by the political decision-makers of the city, and can also be expanded if the participants of the City Lab prefer this. In the long term, the City Lab Leoben should also serve as a platform for lab-like initiatives.

In cooperating with and implementing all three types of urban labs, learning remains the overall objective. The aim is to develop new perspectives on different ways of working with different partners on urban development processes. Academic partners as well as the city partners continuously develop new perspectives by exploring different approaches to implement and support new forms of participatory governance. Based on this knowledge exchange, the city can develop further needs-oriented urban development strategies.
Maastricht: M-Lab

Maastricht is a medium-sized Dutch city (120,000 inhabitants), the capital of the Province of Limburg, and situated in the very south of the Netherlands, close to the borders with Belgium and Germany. From the end of World War II until recently, urban development in Maastricht was growth-driven and had become a game of ‘master plans’ and ‘big players’. However, since the start of the economic crisis in 2007, the urban planning and development landscape has changed with the breakdown of the large public-private partnerships in a context of both demographic and economic stagnation. In the absence of new large-scale plans and projects, the municipality now wants to stimulate a transition towards novel modes of urban development. Key notions of this transition are repurposing of empty buildings, incremental, small-scale development, temporary use, flexibility, sustainability, co-creation, and bottom-up initiatives.

To anticipate this change, the city has developed a new long-term vision for spatial planning. The establishment of Maastricht-LAB (M-LAB) as an experimental space for new forms of urban planning was briefly announced in this ‘Structuurvisie Maastricht 2030’ and realized shortly afterwards, in 2012.

M-LAB is placed partially outside of the municipal government: institutionally by having an external partner as one of the two project leaders, and physically by being accommodated in a separate building. Political responsibility resides with the alderman responsible for spatial planning and environmental issues. M-LAB is a temporary governance platform with the aim of learning about new modes of urban development and thus stimulating the transition towards a different type of urban governance. The activities of M-LAB rest upon three pillars: the development of new coalitions (connecting), implementation of local experiments (acting) and creation of a broad knowledge infrastructure (learning).

In the first two years (2012-2014), Maastricht-LAB conducted eight experiments, seven of which were initiated by the municipal authorities. Each experiment had its own challenges, complexity and specific research questions (see the box below). What they have in common is a spatial focus and an innovative or experimental aspect which cannot be dealt with by the municipal authorities alone or within the current governance structures.

<table>
<thead>
<tr>
<th>The experiments of Maastricht-LAB 1 (2012-2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park of the Future:</td>
</tr>
<tr>
<td>How should a park be developed in the future,</td>
</tr>
<tr>
<td>in an open planning process where there is</td>
</tr>
<tr>
<td>room for citizen participation and local</td>
</tr>
<tr>
<td>initiatives?</td>
</tr>
<tr>
<td>New Zoning Tapijn:</td>
</tr>
<tr>
<td>What does a new zoning plan for a former</td>
</tr>
<tr>
<td>military area look like, when the redevelop-</td>
</tr>
<tr>
<td>ment phase lasts at least 10-15 years?</td>
</tr>
<tr>
<td>Old fire-station:</td>
</tr>
<tr>
<td>How can an old fire-station be transformed</td>
</tr>
<tr>
<td>into a site for public and business activities</td>
</tr>
<tr>
<td>in the city, based on a process of co-creation</td>
</tr>
<tr>
<td>with possible end users?</td>
</tr>
<tr>
<td>Repurposing large monumental buildings:</td>
</tr>
<tr>
<td>How can large monumental buildings be re-</td>
</tr>
<tr>
<td>purposed, in a more open governance approach</td>
</tr>
<tr>
<td>involving stakeholders and the market?</td>
</tr>
<tr>
<td>Long-term vacant properties:</td>
</tr>
<tr>
<td>How should the city deal with an abundance of</td>
</tr>
<tr>
<td>long-term vacant property, in a societal</td>
</tr>
<tr>
<td>context where more supply exceeds demand?</td>
</tr>
</tbody>
</table>
High streets:
How can a high street be redeveloped by working together with property owners, entrepreneurs, city centre management and the municipal authorities?

Sustainable energy:
How can a local high school become more sustainable and CO2 neutral, in terms of energy use, education and community building?

In 2014, a new phase for M-LAB started: M-LAB Next. The main difference with the first phase is a new mode of operation. Instead of taking an initiating role, M-LAB now wants to transfer the initiative to the citizens and local (professional) organizations by means of a permanent open call for project ideas. These ideas should meet four criteria, with respect to (1) content (the project should be innovative and contribute to a new way of urban development); (2) value (the project should result in value creation in a broad sense); (3) exemplary nature (the project should be an example for the city and transferable to other sites in the city); and (4) the project owner (the initiator must be able to take final responsibility for the project). The new M-LAB team, led by one internal and one external coordinator, selected 9 out of about 65 project ideas.

When the URB@Exp project started, M-LAB had already entered its second phase. The researchers therefore evaluativied the experiments and the functioning of the lab’s the first phase, and joined two of the second-phase experiments as action researchers (‘Operatie Steenbreek’ and ‘Round Table on Urban Wildlife’). The researchers also contributed to the more general reflections on and evaluation of the second phase, feeding the re-positioning of the lab in the third phase.

For more information, see: www.maastrichtlab.nl

Malmö: the Innovation Arena and two lab-like initiatives

In the City of Malmö, the focus has been both on an Urban Lab (Malmö Innovation Arena) and two lab-like initiatives (ReTuren and Exploring Future Libraries). The latter are initiatives that are not explicitly labelled as Urban Labs, but overlap with them in terms of characteristics and goals.

URB@Exp researchers have been focusing on understanding and supporting all three initiatives in their experimental and learning efforts. Specifically, the focus has been on capacity building among civil servants for experimenting and on enhancing organizational learning within and across city departments.
In 2011, the Environmental Department initiated a platform engaging civil servants, companies and researchers to support sustainable city development. This platform went through a number of iterations and has grown into what in 2016 was framed as the Malmö Innovation Arena. The Arena already includes various municipal departments, universities and companies, and currently aims to also involve actors from the third sector and individual city residents. The Arena focuses on the housing shortage in Malmö and aims explicitly at supporting fast and sustainable construction processes in the city. However, the Arena approaches these questions from different angles, such as: the development of new neighbourhoods; facilitating access to the housing market for weaker social groups; supporting sharing economy initiatives, etc. Moreover, the Arena aims at promoting new cultures and practices regarding innovation, stakeholder engagement (including people living in the city) and governance among city authorities and stakeholders engaged in city development.

URB@Exp researchers participated in and drove a reflection process (called Co-Lab) with the steering committee and the project management group of the Arena. The process consisted of regular workshops organized by the researchers to support reflection and learning on issues that were jointly identified. Examples of some of the issues are: who is included, what issues does the Arena deals with, what kind of working procedures and structures should be prioritized and how might this influence the Arena focus.

Exploring future libraries

As a part of the work on libraries innovation and development carried out by the Region Scania, URB@Exp researchers engaged in driving a process to explore what the library of the future could be like. The process (March-November 2015) focused in exploring new possible functions (such as integrating makerspaces as part of the premises) as well as new ways of working for libraries (i.e. how users could be engaged). The process involved 12 librarians from six different libraries in the region and two people from the regional office responsible for the development of strategies for libraries. Librarians carried out hands-on experiments at their libraries and then discussed and reflected together about such experiments during seminars led by researchers.
ReTuren has been a pilot for the first Swedish upcycling centre, a new service for waste handling focusing on promoting waste minimization. ReTuren provided people of a neighbourhood with the possibility to dispose of their cumbersome and hazardous waste, exchange things for free, participate and organize activities regarding upcycling and repairing. The pilot was led by the municipal waste handling organization (VA SYD) and it was operative from November 2015 to October 2016 in the Lindängen neighbourhood. Starting from the autumn of 2014, various actors have been progressively involved, first in refining the concept and then in driving and learning from the pilot. These actors included researchers, Malmö makerspace, civil servants working in the neighbourhood, the local library, NGOs and citizens. ReTuren has been a platform for collaborative experimentation and learning about new practices, forms of organizational and decision-making structures within waste handling.

URB@Exp researchers have been directly engaged in operating ReTuren, by supporting experimentation, ongoing reflection and mutual learning on the ground among the people involved in the project.
ALIGNING AGENDAS

Finding common ground
Cities are facing fundamental societal challenges of a social, economic and environmental nature. To meet these challenges in ways conducive to enhanced and sustainable well-being, cities around the world have increasingly tested new forms of urban governance. Governance is used here in the broad sense of all governing processes, involving experimentation and the engagement of multiple actors including citizens, community organizations, private and social enterprises, NGOs, urban developers and municipal authorities. In doing so, this wide range of societal actors aim to create common platforms with a broad base that can be used as a source of inputs and actions. The benefits of such an approach include both an enhanced innovative capacity, as groups traditionally excluded from the processes become engaged, as well as more practical advantages, such as new financial input and allocation of funds. To facilitate such broad participation, including actors with different backgrounds, working practices, knowledges and, to some extent, purposes, it is crucial to find shared objectives where such extensive input can become a constructive and creative force; in other words, to align agendas.

Some of the most central aspects and strengths of urban labs involve articulating and aligning agendas, i.e. promoting participation, creating dialogue and stimulating open-minded experimentation. As it has been shown throughout our case studies, these processes face several challenges, including harnessing the creative potential of conflict, and balancing power relations in a context of social, political and economic inequality. Finding ways of identifying and communicating the core problems, aspirations and values of participating stakeholders in the face of these challenges is therefore one of the key tasks in setting up, running and learning from urban laboratories.
Aligning agendas

Models of governance
The complex societal challenges facing cities today cannot be adequately met by local governments and the silo departments of the local executive alone. New forms of urban governance are needed, which are receptive to engaging many different stakeholders in taking initiatives and responsibility in dialogue with local authorities. Governance here refers to all processes of governing, and incorporates a broad range of actors from public as well as private and civil society organizations.

The rise of these new forms of urban governance has to be understood against the background of at least half a century of political and institutional change regarding the way cities have been governed. Very roughly speaking, for decades prior to the 1970s, traditional public administration across the developed world was characterized by governance through hierarchical structures of command and control. Some stakeholders – in civil society and in private enterprise, as well as in government itself – regarded this form of governance as flawed, however, and pushed for new ways to organize the management of public affairs along lines similar to private enterprise.

New Public Management, as it came to be called, was rapidly and widely disseminated during the 1970s, 80s and 90s, as cities established forms of governance along the lines of market mechanisms. Additionally, changes in the economic landscape, such as de-industrialization and a shift towards developing so called ‘creative cities’, pushed cities further to find new forms of managerial approaches. This involved partly a shift to market-based provision of public services, such as health care, schools and urban development, and partly a shift toward understanding, operating and managing cities as if they were corporations. But criticisms of the societal impacts of new public management led to efforts
to establish more inclusive and fairer forms of governance that involved balanced participation of state (especially the local state: municipal government), market (businesses) and civil society (community organizations). It is in this context that urban labs came to be proposed as one possible way to practice the new model of urban governance that was still in the making.¹

Exploring experimentation
The attention given to the experimental, cross-sectoral network-based format of urban labs has grown rapidly over the past decade. By characterizing the city as an arena for experimentation or a ‘test bed’ for alternative visions and solutions², the approach draws on the notion of bringing together various societal actors including NGOs, municipal workers, private citizens and businesses.

The approaches used by many of the urban labs that have been studied in the URB@Exp project show willingness and indeed eagerness to include a wide array of stakeholders and to apply innovative approaches to current urban challenges. These include applying existing professional skills in novel ways to find solutions tailored to the local context, as in the case of Maastricht; creating structural approaches that can incorporate and further guide the exploratory nature of urban labs, as in Graz; or creating a physical space for participatory dialogue, as in Malmö. Yet the study has also revealed the scope of value-based challenges. These include difficulties of going beyond existing structures and modes of operation as new practices encounter old paradigms. While governance includes a vast array of actors, traditional governmental institutions often have set hierarchal and fixed modes of agenda setting that may dominate over newer or more marginalized actors. Hence, urban labs operate on potentially contested ground and have to navigate ideas and practices through established institutions and modes of operation.
The dangers of solutionism
Several of these difficulties can be related to the established and, in some cases, fixed notions that participants bring into the lab. These include pre-conceived ideas of what the core of the problem is, the values that should guide the process, and what the outcome of the lab should be, i.e. what can be termed a success. For some participants, a lab has been deemed successful if it has brought together stakeholders that otherwise would not interact, while others have measured outcomes on a more material basis, so valuations of the lab’s achievements may differ. Judging a lab solely on its practical outcomes carries the dangers of a ‘solutionist’ agenda, i.e. focusing on practical outcomes (solutions) rather than on the inherent values of experimentation and learning as such.

The importance of dialogue
In order to avoid such pitfalls, the communicative side of urban labs must be emphasized. Urban labs provide sheltered spaces for dialogue on inherently conflict-laden processes of urban development or redevelopment. Contradictory interests can meet in urban labs and collaborate in exercising their right to the city: creating the city in accordance with their desires, which inevitably involves compromise.

Yet while dialogue remains one of the most central aspects of urban labs, the case studies indicate that these dialogue need not, and in some instances possibly should not, be based on pre-established and collectively shared values. Drawing on the creative power of social discord, a practice known as agonism can introduce alternative views and solutions that would otherwise be missed. We therefore wish to emphasize that aligning agendas does not equate to sharing one single story, but to inviting a variety of stories that can all contribute to a common purpose of achieving positive and purposeful urban development. It is also important to make it clear that while having a pre-defined solution may hamper innovation, it is nevertheless crucial to articulate and share a common purpose within the lab. Such shared purposes are key starting points for defining and building the organizational structure of the lab (see GUIDELINE 4).

Creating space
With such a wide input from actors and interests while remaining receptive to conflicting values, the importance of some sort of common ground or platform becomes central. Here, urban labs highlight the importance of place as such; physical spaces for interaction, dialogue and experimentation. Several of the labs in the study have focused primarily on spaces as such, creating platforms where the participants themselves have great influence over agenda and action. This user-centred approach emphasizes the importance given to local needs and preconditions, which, in many cases, are best understood by those directly affected by the issue at hand.

All in all, the elements of comprehensive participation, experimental openness, continual dialogue, alternative views and physical spaces for interaction emphasize the need as well as the capacity for aligning agendas.

Lab Stories
from the cities of Leoben and Maastricht

The lab stories presented below illustrate how several of the key elements and interests have been aligned to create an urban lab: innovative use of existing knowledges, local conditions and needs, and the importance of alternative visions.

From ‘Leitbild’ to ‘City Lab’ in Leoben
This story was written by an URB@Exp researcher, based on interviews and dialogues with various civil servants of the City of Leoben who were involved in the Leitbild process.

I have been living in Leoben my whole life and have been working for the City of Leoben for almost 30 years now. During this long time I have seen the city undergo tremendous changes. Leoben, which is located in Upper Styria in Austria, has been famous for its regional ore deposits and used to be a prosperous centre of steel industry. At the end of the 1970s, things started to change. The international steel crisis also hit Leoben. Factories were closing, people were losing their jobs and moving away. The effects of these developments were also visible in the city. Our population of around 36,000 people in the 1960s continued to drop and reached its lowest point in 2000 with around 24,600 inhabitants. It became obvious that the city needed to undergo some changes to give the people new ideas and visions about why Leoben was and still is a city worth living in. Leoben is surrounded by the beautiful landscape of the Eisenerz Alps and has numerous opportunities for outdoor activities in the mountains. Furthermore it is home to many traditions of the historic steel industry and a hot-spot for more than 4000 students from all around the world who attend the renowned Technical University in Leoben. The local government wanted to highlight and foster these positive aspects of Leoben and its economic, cultural and social potential. Together with various stakeholders from science, the business sector and civil society, the local authorities worked out a jointly compiled strategic planning document, the so-called ‘Leitbild’. The aim was to define visions for the city and, based on this, develop concrete projects to realize these visions. The Leitbild process started in 2002 and lasted until 2007. We called it ‘Designing the Future’ (Zukunft Gestalten), and the whole process was supported by a research team of the Institute of Geography of the University of Graz. The research team guided us and we developed a variety of participatory methods, which we used to include the citizens and get them to articulate their needs and visions for Leoben. For example, we held citizens’ assemblies, informal meetings and workshops, and also had private sponsorships by citizens for specific projects. Each civil servant of the city who was involved in the process worked together with a citizen responsible for a specific
project. Together we had to make sure that the project was actually implemented. The process was quite a success and more than 198 urban development projects with various stakeholders from science, the business sector and civil society were realized. The projects ranged from small initiatives and changes in public spaces to a couple of large prestigious projects in the city, such as the realization of a mall in the middle of the old city centre of Leoben (2007 - Leoben City Shopping), an Asian health and spa centre including a conference and events centre (2007 - Asia Spa Leoben). The city also established a regional museum which presents international exhibitions each year (Kulturquartier Leoben since 2004). Although there were some criticisms of the large investment projects, people are now very satisfied with the outcome and we have growing numbers of people using the mall, the conference centre and the museum. In general, the residents agree that the Leitbild process and the ‘Designing the Future’ project can be regarded as a success, since the economic, social and cultural situation in Leoben stabilized and improved.

Despite the successful realization of these projects, Leoben is being confronted with new challenges, for example how to deal with the demographic changes of the urban population in terms of age structure, and the increasing diversity in terms of origin and social status. Our city is challenged on the one hand to remain attractive for internationally operating industries and research clusters and thus provide local job security, and on the other hand to offer a high quality of living for its ever more diversifying population and thus to avoid emigration in the long run.

In internal meetings and workshops of the local authorities we agreed that we needed new and experimental forms of civic participation enabling us to react effectively. The challenge is now to focus on innovation in this new process and to introduce new methods to keep citizens and stakeholders engaged and focus on sustainable development. Clearly, Leoben is both in need of and interested in exploring new forms of participation.

In cooperation with the University of Graz, we have had various discussions and agreed that an urban lab in Leoben could be a way to meet our requirements for developing a new smart, sustainable and inclusive urban development strategy. In interactive workshops we designed the vision of a ‘City Lab Leoben’. This city lab is intended to be an open, low-threshold venue, which functions as a participatory meeting place to create, discuss and negotiate ideas for the future urban development of Leoben. The Leoben City Lab should be seen as an open learning platform and meeting point for politicians, officials, citizens and stakeholders from different societal domains such as arts, education, economy, social services and research. Individuals and representatives of groups are expected to work in so-called ‘Future Experiments’ on specific topics of urban development. Different types of knowledge, as well as experiences and needs should be shared, explained and discussed within the settings. In moderated participatory workshops, the participants are expected to jointly develop new visions for the future of Leoben, based on knowledge exchange. These visions should then be translated into concrete projects. Leoben is both in need of and interested in exploring new forms of participation to be able to respond to urban development. So we think an urban lab could be a way to find solutions to our current challenges, in which all residents can articulate their needs and participate in designing a sustainable, inclusive and smart future for Leoben. We are now about to realize our vision together with our partners from universities, businesses and civil society.
Why Maastricht needed a lab
This story was written by an URB@Exp researcher based on an interview with the first external M-LAB coordinator.

I was working in Norway for a while and when I returned to Maastricht, I noted a stark contrast. Whereas in Norway, the economy is still thriving (mainly on oil), reflected in a booming construction market focused above all on size and luxury, there was a lot of vacancy in the cities of Limburg. My partner and I decided to stay here and explore the relevance of my profession in such a situation; to use our insights and passion not just for making the world a bit more luxurious but also to make it a better place.

We started doing research and drawing maps of vacant buildings in the region. The question that drove us was how to do urban development in times without demo-

graphic growth. We also organized lectures, exploratory games, etc. We came in contact with one of the organizers of the ‘Biennale for Vacancy and Re-purposing’, and through him with a number of key figures in the municipal government of Maastricht who were involved in spatial planning and urban development. During a talk with the alderman for urban development at the Biennale, he showed an interest in establishing a research group on city development. On the last day of the Biennale, the manager for spatial planning of the municipal authorities of Maastricht and I decided that it was time to actually set up a lab with one municipal and one external partner to carry out such research and bring experimentation back into urban development practices.

The search for a name actually took a while, I first favoured ‘Public Works’, because I wanted the research to focus on the functioning of public spaces. Finally, a municipal department director proposed ‘Maastricht-LAB’, which was more convincing as it included the name of the city and as it clearly communicated the experimental character of this project.

In the same year, the ‘Structuurvisie’, a vision document guiding urban planning and development which is typically written every 5-10 years in each Dutch city, announced the creation of the ‘Maastricht-LAB’ as a ‘temporary vehicle to search for new forms of urban development’. We wanted to avoid too strict guidelines for the way the lab had to function. Together with the municipal partner of this new lab, I worked out a set of rules to guide the first experiments.
Initial guiding principles for the M-LAB

M-LAB is a temporary catalyst;
stimulates the transition of urban development in Maastricht;
inspires with experiments;
relates to the requirements of Maastricht;
generates vision through a diversity of views;
exchanges experiences globally and employs expertise locally;
uses creativity to capitalize on existing values;
opts for development by critical mass;
thinks in terms of systems;
uses the past as a conscience, acts now but aims for the future;
collaborates with users to achieve sustainable energy;
must celebrate and permit failure.

Design Principles
How to align agendas

Merging agendas
• Urban labs draw from a broad participant base that incorporates people, networks, businesses and agencies with various backgrounds, knowledges and modes of operation. It is therefore important to carefully articulate and discuss the aspirations and purposes of the lab, making it clear what the agendas are and how they do, or do not, overlap.
• Those setting the agenda should highlight and discuss how perspectives from non-traditional or previously excluded groups can be used to formulate a clear purpose.

Avoiding the solutionist trap
• Bringing pre-defined solutions and problem framings into a lab risks restricting its exploratory and experimental potential. It is therefore of the utmost importance that all participants remain receptive to alternative problem framings, methods and outcomes, while keeping in mind the fundamental importance of intangible values.

Shared platform
• In finding shared agendas, physical platforms for discussion and experimentation can be crucial. Aligning agendas hinges on active participation, and both the communicative and experimental aspects of the urban lab emphasize the importance of a physical location where different interests and experiences can meet.
• Participants should consider setting up a ‘neutral’ meeting place or rotate venues in order to avoid one group having both the burden and the implicit power of providing a physical space.
Establishing continuous dialogue

• As the lab progresses, participants have to be prepared to re-formulate the aims or even the problem/issue itself in light of new discoveries and input.
• Many urban labs are set up without a specific end-game in mind. As a consequence, participants need to continuously re-evaluate what their agenda and expectations are, both to themselves and to their partners.
• Organizers should consider setting up regular meetings specifically devoted to discussing the participants’ agendas, rather than relying on individual participants raising the issue.
FOSTERING PLURALITY

Participation and ownership
Urban labs engage a range of participants: civil servants, researchers, business people, NGO representatives, and city residents. Bringing together a plurality of perspectives and knowledges is key to finding new ways of understanding and addressing complex issues. Plurality is also important for the aim of urban labs to create more inclusive cities. A city is made up of different values and interests, and it is important that in the processes and activities of urban labs incorporate such diversity and ideally provide opportunities for different groups in the city to be heard and to contribute to the processes and outcomes of the lab.

Fostering plurality is not an easy task. Reaching out for and engaging marginal and non-traditional actors requires time and resources. It is also important to continuously reflect on how processes aim to achieve inclusion, and how new participants are invited. Additionally, including different perspectives requires lab teams to be able to deal with the tensions and conflicts that diversity inevitably entails.

As a consequence, urban labs struggle with plurality and, far too often, merely activate the highly educated urban elite instead of involving society at large. The risk is that, often without even realizing it, instead of exploring new ways and possibilities, urban labs end up proposing solutions that perpetuate existing challenges rather than address them.
Fostering plurality

Plurality for innovative solutions …

Urban labs experiment with new ways of tackling complex urban issues, both in terms of finding solutions to individual issues as well as finding new governance models (see GUIDELINE 1).

Urban labs are often grounded in approaches derived from the field of innovation. These approaches are based on the idea that tackling complex issues requires working across silos and specializations as well as involving city residents. The importance of working across sectors has long been discussed, leading to the idea that innovation processes should be based on collaboration between the public sector, private sector and academia (the so-called triple-helix), and lately also including the third sector of civil society (the so-called penta-helix model). Additionally, notions such as open1 and democratic innovation2 celebrate the fact that new solutions often emerge outside of traditional innovation structures and that end-users might be as innovative (if not more so) than experts.

If plurality is not carefully and continuously considered, the risk is that urban labs perpetuate and sustain ways of thinking, doing things and taking decisions that are actually part of the system that generated the issues they aim to address3.

…and more democratic urban labs

Fostering plurality is not only important to ensure innovation while tackling a specific issue. Urban labs often deal with questions that affect different actors and initiatives in a city and develop new solutions that might affect the city as whole. Including a wide variety of actors and also paying attention to marginal and critical voices is a way to strive towards providing those who will be affected with opportunities to have a say and influence urban lab processes and activities. From this perspective, urban labs can be regarded as platforms for democratically addressing city problems. As the political philosopher Chantal Mouffe reminded us, vibrant democracy is characterized by plurality and the contestation of different perspectives4. In other words, democracy needs debates between different, even radically different, perspectives. If there is no plurality, then democracy dies. Hence, it is always important for urban labs to encourage debate and make room for marginalized and alternative voices.

Why is plurality so difficult to achieve?

As already pointed out above, plurality is difficult to achieve, for a number of reasons.

Overall, different societal actors have become more similar to each other. Specifically, in recent years managerial ideas from industry have strongly influenced the public sector and academia (see for example the discussion of New Public Management in GUIDELINE 1). The third sector is also increasingly adopting models and procedures from the private sector5, which is reducing the plurality of visions and modes of operation.

Another overall issue is that there is currently a strong emphasis on reaching consensus, which risks reinforcing established structures, norms and values in a society. What makes it extra difficult is that norms and values are usually internalized by large parts of the population and taken for granted as common sense and the ‘natural’ order of things.

Some reasons are also connected to the urban lab concept itself. In striving towards inclusion, urban labs often set up open-call processes and/or organize public events to present their activities. However, these initiatives often reach only people who are already active in some way. Time and other resources are required to engage and build trust with a range of actors, but also to try out different formats for engagement and understand how different interests might
be reconciled (see for example the lab story from Malmö below, about experimenting with different activities for participation). Bringing together a variety of interests might entail clashes and possible conflicts, making the task of the lab team more difficult.

Moreover, participants’ interests might be difficult to understand and navigate through. In URB@Exp labs it emerged how participants have always a range of different interests, including those of the organization they represent but also personal ones. These values are often interwoven and might be difficult to clearly articulate and discuss.

Finally, we have observed a tension between the need for labs to fulfil specific goals in a specific time frame (i.e. being efficient) and their aspiring towards inclusion and diversity (i.e. being plural), which requires time and facilitation skills.

**Urban labs as agonistic arenas**

We suggest that urban labs should try to be agonistic arenas that include plural and critical voices and that provide space for confrontations between these different voices.

We argue that it is not enough to set up a cross-sector partnership structure. Rather, labs need to pay attention to the more specific agendas of potential partners, to ensure that they represent alternative, marginal and potentially challenging perspectives. A typical first phase would consist of locating and building relationships with marginalized actors in the city, such as NGOs or citizen groups. It should also involve initiating experiments that could potentially challenge established values that are taken for granted, regarding the way we are supposed to live and work in the future. The lab team should try to achieve that claims and voices of the marginal actors can grow strong enough to be respected as a valid alternative that can be debated. This could be done by creating new alliances between these marginal actors and more established actors (such as researchers, policy-makers and civil servants) (see **GUIDELINE 5**). A good example of the way alternative perspectives can grow and push for new ways of dealing with a specific issue is presented in the lab story from Leoben presented below.

Additionally, it is important to support actors in exploring and understanding possible areas of friction, rather than trying to avoid them. A possible way to enhance such a dialogue is to set up processes that do not rely on consensus. In these processes the parties involved are not asked to find the lowest common denominator among their different interests as a starting point, but rather to explore activities and initiatives that can generate different values that make sense to the different actors. (More on this can be found in **GUIDELINE 5**.)

**Participation: strategic anchoring and ad-hoc solutions**

A key question in fostering plurality is how participation should be organized and practically implemented. URB@Exp labs often mix more formal requirements with more ad-hoc solutions. In Graz, for example, a set of guidelines for participation at a municipal level requires every city project to engage citizens. How this should be done, however, is left open, which provides the opportunity for individual projects to opt for approaches that might better fit their specific characteristics. In Malmö there has been growing recognition of the importance of fostering plurality in the urban lab, and this has been formalized as an explicit goal for the lab. At a practical level, this translates as ad-hoc experimentation with different activities to reach out to and include different groups. In line with this, we suggest that it is important for plurality and participation to be grounded at a more strategic level (including formal requirements) but then to be approached very much on the basis of the specific conditions and characteristics of each process.
From ‘participation in’ to ‘co-ownership of’ lab processes

Besides considering who is invited to join lab activities and processes, it is important to also consider to what extent those who do so have the possibility to influence and decide on such activities and processes. We suggest it is important to go beyond the notion of ‘inviting’ actors to ‘participate’ in the Lab, by opening up opportunities for actors and citizens to propose and drive processes and/or to influence agendas and arrangements. This would entail thinking about ways in which processes and activities can be jointly owned and how those engaged could share responsibility and control over them (which has been referred to as commoning⁸).

Creating conditions for shared decision-making and control can actually facilitate the engagement of different actors, since this provides them with the opportunity to shape the process to suit their own interests.

Such a higher degree of involvement might be important in ensuring engagement and plurality over time, but may also support ideas and practices that emerge from the urban lab and help maintain them. An interesting example in this respect is presented in the lab story from Malmö in GUIDELINE 8, where co-ownership by the partners involved has been fundamental in ensuring the continuation of a process when the main actor of the urban lab pulled out.

Supporting shared decision making and responsibility for lab processes is, however, not an easy task for the lab team. It is important to discuss together with participants the frames and possibilities for shared responsibility and control (when and how can participants influence the process?). It requires the ability to understand different actors’ interests and support negotiations for their alignment.
Lab Stories
from the cities of Leoben, Malmö and Graz

The story from Leoben highlights how plurality can represent a resource in finding new ways to address specific issues, but also how it challenges existing positions and power relationships. The story from Malmö highlights how sustaining plurality in urban labs requires ongoing effort and reflection in everyday practice as well as at a strategic level. The story of Graz shows how formal requirements for participation at city level have led to greater transparency, better communication and improved participation processes.

Leoben: Refugees (not) welcome?
Working together for inclusion

The story was written by an URB@Exp researcher, based on interviews with citizens of Leoben, who started an NGO to support refugees in Leoben.

Refugees share their stories with the citizens of Leoben through letters and drawings © Petra Wlasak, University of Graz

Every month at a café in Leoben refugees give presentations on their countries of origin © Petra Wlasak, University of Graz

I have been living in Leoben my whole life and I know quite a lot of people. I have a pretty active social life, as I am involved in the local music association and the hiking club. Whenever there is a local event, I am also there, because I enjoy engaging with different people in Leoben. Also, I have many friends with different cultural backgrounds, who have been living in Leoben since the ‘Gastarbeiterbewegung’ (migrant workers movement) in the 1960s, as well as people who came here as refugees from the war in Former Yugoslavia in the 1990s. I am generally receptive to people with different backgrounds, and I find it interesting to explore different cultures and perspectives.

With this background, obviously it made me curious when I heard in the autumn of 2015 that, for the first time in decades, Leoben was ordered by the federal government to provide space for sheltering refugees, mostly from Syria and Afghanistan. However, our mayor made it quite clear that it was not the city’s responsibility or official task to take care of the refugees, because this was all done and decreed by the federal government. The reactions of my neighbours in Leoben to the 400 refugees who arrived in the town were quite varied. The majority were clearly opposed to them, and many ugly comments about foreigners in general were made. Like me, most of my friends could not understand this reaction. Together we wanted to support the refugees who clearly had lost everything they possessed after their traumatic and exhausting flight to Austria. So we organized a donation campaign collecting clothes and toys for the refugees. They were grateful for the urgently needed donations. As we presented them with what we had collected, we started talking to each other – fortunately, some of my friends’ first languages are Arabic or Farsi – and it became obvious that the refugees needed some distraction during the days of waiting to be interviewed by the asylum court. So we organized some hikes and city tours,
which were a great success. We were lucky because the local sports clubs supported us with equipment for the hikes. Inspired by our success, some of my friends, who are retired teachers, decided to start German language courses for the refugees.

It was amazing how much help we got from the many people who supported us with their wealth of know-how and resources. The head of the refugee camps also welcomed our activities and helped us promote them among the refugees. We also started a ‘godparent’ project, where citizens of Leoben could meet and interact with refugees. More than 70 people from Leoben have registered as godparents so far! Furthermore, we organize an intercultural coffee meeting each week, where Leoben residents can meet and get to know refugees. As our activities to support the refugees increased, more and more volunteers joined us. The City of Leoben, which has no legal right or duty to deal with refugee issues, also became active. They held a series of information events for the local population, where they informed the public about the facts, figures and legal framework of asylum in Austria and gave us the opportunity to present our activities for the refugees. Furthermore, the city appointed an official refugee coordinator and started a service hotline to inform people about current developments regarding refugees in the city. It is great to see that the city has now also become active and supports us. What we have learned so far from our experience is that networking, getting organized and talking to different actors in the city who are potential partners for cooperation are the key elements of a successful project implementation!

Malmö: Discussing and reflecting on participation at a strategic level and in everyday practice
The story was written by an URB@Exp researcher, based on interviews with the lab manager of Malmö Innovation Arena.

As part of the Malmö Innovation Arena, URB@Exp researchers organized a collective process of reflection (Co-Lab) with the steering committee and the project management group, to support them in reflecting on and learning from issues like who is included in the Arena, what issues it deals with, what kind of working procedures and structures should be prioritized and how this might influence the Arena’s focus. The Co-Lab highlighted several issues that were regarded as crucial in dealing with and pushing for a more inclusive and democratic structure.
From the start, the Malmö Innovation Arena had a clear Triple-Helix perspective, with the public, private and academic sectors as the main partners. Civil society, which is regarded as playing a crucial role in supporting democracy by adding plural and critical voices and an alternative rationality, only played a minor role in the initial platform. It became clear that the platform needed to more explicitly include civil society and city residents in its processes. This was also written into the funding applications for the Malmö Innovation Arena, and efforts were initiated to connect the Arena to a network focusing on the third sector.

Besides supporting reflection and discussion on participation and collaboration at a strategic level, the Co-Lab also focuses on the actual everyday work in the Arena. In particular, its focus has been on how participation formats and methods influence who gets to be involved, and in what ways challenges are framed and addressed, but also what possible solutions are prioritized.

In this respect the Arena decided to experiment with activities that could support the inclusion of city residents and the third sector in addressing specific challenges.

An example was the Climathon, a 24-hour gathering where participants jointly engaged in addressing an issue related to climate change. The issues were framed by various city departments and housing companies in collaboration with the Arena team, and focused on the management of stormwater and ways to organize the temporary use of vacant shop facilities. The winning proposal received support from a business developer, so that it could be further developed and, later on, prototyped.

Although participation was open to everyone, it was mostly students who showed up. The project leader of the Arena explained that, even though they knew that the Climathon would not initially attract older people or professionals, they saw it as an opportunity to experiment with alternative forms of engagement and also to make a statement about the Arena’s efforts to achieve diversity in participation. He also highlighted how during the preparation of the Climathon, they had tried to engage third sector organizations, though this did not succeed, mostly because it was difficult to communicate and understand each other’s expectations. He said that perhaps a more ad-hoc format should be tried to engage NGOs earlier on in the process.

The Arena team worked closely with the problem owners to define the challenges. The aim was to try and commit them to funding the winning proposals, but at the same to indicate their specific concerns to include other perspectives and ideas, such as how a solution for managing stormwater could at the same time promote the creation of meeting places in the city.

He also pointed out how this kind of involvement would have been beneficial for the jury as well. After the event, some of the jury members had quite a difficult task to perform in a short time, and therefore would have welcomed more support in understanding the criteria and framing used by the problem owners.

Overall, the project leader sees the Climathon as an activity that could support a broader and more diverse participation in the Arena, but not the only one. He emphasized the importance of the Arena team’s role in facilitating engagement and participation of new actors and creating relationships and trust among actors and people who have never worked together before. He also highlighted the importance of continuing to provide opportunities to critically reflect on and discuss participation in the everyday work of the Arena.
Finally, he also pointed out the importance of being receptive to input from various actors in relation to the way the challenges addressed by the Arena and the issues it focuses on are defined.

Graz: Systematic approach to organizing participation
This story was written by an URB@Exp researcher.

Graz has a long tradition of citizen participation, to which was added a new facet in September 2012, in the form of a unanimous basic decision on formulating guidelines for citizen participation in Graz’. The ‘Guidelines for Citizen Participation Concerning Planned Projects by the City of Graz’ were developed from 2013 to 2014, by means of a joint dialogue between citizens, the city’s administration and politicians. On 15 May 2014, the guidelines were ratified unanimously by the district council of the City of Graz. Starting from mid-January 2015, the city’s civil servants were encouraged to test the guidelines. The trial phase lasted until the end of 2016. From a research perspective, it was interesting to see how the guidelines could contribute to timely information, transparency and better coordination for high quality planning and implementation of participation processes. A prerequisite for the application of the guidelines was the availability of a decision-making authority in a local government institution, whose responsibilities were stipulated by the rules and regulations of Graz as the provincial capital (‘city constitution’). Citizen participation in projects of the City of Graz means there is some room for creative contributions to projects of the city, and the city invites its citizens to join in the preliminary discussions about decisions and to bring forward their points of view and their concerns. The decisions themselves must then be made by the political bodies according to the rules of the charter of the City of Graz.

The guidelines have 3 key components:

— Key Component 1 ‘List of Planned Projects’: The guidelines contain rules defining which projects the City of Graz is required to list, including project information on a web page. The list serves the purpose of providing information about important projects within the city as early as possible. It also provides information about whether citizen participation opportunities concerning the project are offered or not.

— Key Component 2 ‘Participation concept and Consultation’: The guidelines define the specific steps the public administration has to take in the preparatory phase of citizen participation. A special focus needs to be put
on examining the importance of manoeuvring space as a requirement for citizen participation. Based on this participation, concepts for each specific planning project are created presenting, inter alia, goals, stakeholder groups, methods and a schedule for the participation process. The participation concepts are forwarded to the relevant regional administration office, advisory councils and city representatives, giving them the opportunity to comment on the concept. After this feedback loop, the participation concept is presented to the political authorities for ratification.

— Key Component 3 ‘Formal Proposal’: In case no citizen participation is officially required for a planning project, four defined groups have the possibility of make a formal proposal for citizen participation. Using the instrument of ‘formal proposal’, citizens can request the City of Graz to re-evaluate if there is any room to manoeuvre concerning the specific project and if participation processes could and should be offered.

The use of the Graz guidelines for citizen participation during the trial phase was found to work well, in that the guidelines contributed to meeting the predefined aims (information, communication, transparency and commitment). What has to be emphasized as essential for the effect of the guidelines is the ‘care function’ of the city’s Department for Citizen Participation. Furthermore, if the system of citizen participation is to become permanently rooted, it is essential that well-defined specifications and procedures are adhered to by all participants. The trial phase has also shown, however, that guidelines cannot prevent differences of opinion or solve clashes of interests. Guidelines do, however, add to timely awareness of such differences or clashes, and do put a special focus on making them visible and comprehensible. Therefore, guidelines as quality assurance measures can be regarded as a step towards open and transparent dialogue between citizens, politicians and the administration, all of whom have an equal status in the discussion. What has to be considered in the overall political context of the city and its dynamic development is how the number of projects, as well as the range of topics in the project list will develop, and whether all protagonists will comply with the specifications of the guidelines. For the longer term, the question arises how successful the guidelines will be specified by a cooperative participation culture.
**Design Principles**  
**How to foster plurality**

**Urban labs as agonistic arenas**  
- It is not enough to set up a cross-sector partnership structure; attention needs to be paid to plurality. It is important to carefully consider the specific agendas of potential partners, to ensure that they represent and contribute with different perspectives, knowledge and influences to the lab.
- Reach out and create relationships and trust with marginal, alternative actors.
- Ensure that marginal, alternative perspectives are not lost along the way.
- Support participants in exploring and discussing possible frictions, rather than avoiding them.

**Participation: strategic anchoring and ad-hoc solutions**  
- It is important to try and anchor the need for participation (and the importance of plurality) at a strategic level within the lab.
- The way participation is organized and carried out should be tailored to the specific conditions and characteristics of each process.

**From participation to co-ownership**  
- Consider how participants can initiate and operate their own processes within the lab.
- Consider what opportunities participants have to influence the processes they are engaged in.
- Support participants in articulating, discussing and understanding their different interests.
- Resonate with participants regarding where and how responsibility and control can be shared.
FINDING A POSITION

The many ways in which an urban lab can be connected to the local administration and society

The position of an urban lab within the broader context of urban governance should be carefully considered. Each position impacts on its space for experimentation, its visibility and its legitimacy. Since urban labs aim for co-creation, most of them are positioned at the interface of local administration and society. It is good to realize that ‘at the interface’ involves a continuum of possible positions. Urban labs can, for good reasons, be close to the local administration, or remain at a distance. The lab may be initiated and run by the local administration, or by other parties. The partnership may involve research organizations and local businesses in an official or personal capacity. Each of these choices for the positioning of an urban lab has consequences for its functioning.
Finding position

Know where you come from
An urban lab will never cover the entire cosmos of urban governance. Many other, even similar, participation and co-creation initiatives may exist. By connecting to such initiatives where possible, urban labs become part of a broader governance structure and participation culture. A good insight into the existing participation culture and historical context of urban governance in a specific city is a highly useful prerequisite for effectively positioning the lab. Awareness of this context also helps to avoid the idea that an urban lab is an all-encompassing remedy. In fact, an urban lab may be even seen as part of a longer trajectory of democratizing urban governance and finding adequate ways of engaging citizens and other stakeholders. There are always many lessons from previous approaches to incorporate before experimenting with new ones. In the URB@Exp project, we addressed the following eight aspects of the governance culture and structure of each city:

1. The national context of urban governance
2. Municipal structures
3. The historical context of urban governance
4. Main driving forces behind participatory governance approaches
5. Current practices involving participation
6. Municipal culture of education and training
7. Municipal information and communication culture
8. Municipal culture of evaluation and learning

Taking stock of and mapping these eight aspects helps to position an urban lab in its wider context of urban governance and to find tailor-made positions depending on local specificities.

A niche for each lab
Urban labs are often placed outside of the sectoral structure of a municipality as a somewhat separate organizational entity. The advantage of this arrangement is that urban labs become a ‘niche’, a place for experiments offering the freedom to try out new things, without putting at risk the daily operations of the municipal organization, in case of failure. The disadvantage of being too much of a niche is, however, that the lab can become invisible to potential participants and collaborators. Working from a position outside the municipal system may increase the chances to create alternatives to the status quo, but involves the risk of being ignored or marginalized. Acting from within the municipal administration and directly influencing the levels of responsibility carries the risk of being compartmentalized and shifted from radical to incremental change. This radical’s dilemma is perhaps the most fundamental challenge to the organization and further development of urban labs, and therefore requires subtle navigation between outside interventions and finding support among powerful actors inside the system.

Institutional back-up
Experimental niches need to be protected to be able to flourish, so institutional back-up by high-ranking city officials and policy-makers may be necessary. A clear mandate for the lab provides legitimacy and, maybe even more impor-
straight-forwardly by political agendas. Too much involvement by policy-makers and high officials may also heavily restrict the experimental energy.

**The urban lab as a node**

Urban labs can be seen as a form of triple-helix (government, business, knowledge centres), or better penta-helix (government, business, knowledge centres, civil society and other stakeholders). However, exemplary penta-helix initiatives (such as ‘Brainport’ in the Dutch city of Eindhoven) usually have a much bigger scale and much larger resources than urban labs. Nevertheless, their multidisciplinary and cross-sectoral approach is an inspiration to urban labs. This does not mean, however, that urban labs had better choose a cross-sectoral position across various policy domains. Institutional back-up has proved to be crucial for the survival and functioning of urban labs, and it may be much harder to organize back-up from multiple departments than from the head of one department (see the lab stories below). Cross-sectoral approaches can be encouraged in different ways as well, for example by engaging city officials from other departments in specific urban lab projects or mobilizing their expertise for exploratory workshops.

**Many actors, so many roles**

Urban labs bring together different stakeholders from different domains. It is important to realize that these different stakeholders can have very different roles and contributions – and that these might change over time. Each role has its implications, certainly in terms of how responsibilities and control are shared. We distinguish five roles in urban labs and their projects: initiators, funders, coordinators, partners and participants. Various role divisions are possible, and they may also change over time. It is important, however, to realize that each role division has consequences for the positioning of the lab, and the way its position is perceived by others. In the URB@Exp project we found that municipal authorities often adopt the role of initiator, funder and coor-
be seen as ‘boundary organizations’ that are engaged in ‘boundary work’\(^2\). What happens in boundary work is that ‘the demarcation of something against something else’ is either emphasized or de-emphasized. Sometimes, differences need to be made explicit, while at other times they need to be explicitly bridged. The knowledge contained in a scientific report or testimony by a scientist may be emphasized as ‘knowledge from science’ by the scientist or government official who wants to rationalize a particular choice, or may be de-emphasized in recognition of the (expert) knowledge of business actors and the (situational) knowledge and life-world concerns of citizens. Boundary work helps to cross disciplinary boundaries and boundaries related to formal responsibilities. Boundary work can be done by individuals, for example the lab coordinators, or by the urban labs as (temporary or institutionalized) boundary organizations. In adopting such a task, urban labs need to transcend boundaries created by different interests, values, knowledge domains and institutional logics.

**A hybrid position**
Hybridity refers to a mixture. Hybrid combinations may combine the best of two worlds. In the case of urban labs, a hybrid position means that they are neither fully a municipal nor fully a societal project. They are neither fully top-down, nor bottom-up. They cut across and combine elements of both worlds to solve urban problems. This also means that urban labs often appear to be more than just one entity. At least, different people engaging with an urban lab may think of the lab in very different ways. We call this the ‘chameleon effect’ of urban labs. Being in a hybrid position, they can easily relate to the different purposes of different actors. However, this may also raise questions in terms of accountability. To whom are urban labs accountable, and whom do they just want to please? Whose purpose will carry more weight when it comes to conflicts? These questions are by no means meant as an argument against a hybrid position. They should make the point, however, that such a position is no excuse for being unclear about intentions and responsibilities.

**Boundary work**
Because of their hybrid position, urban labs work at the interface – or boundary – between government and society (and sometimes also science and/or business). They can
budgetary arrangements, changing/declining political and/or administrative support, shifting purposes behind the lab, gaining new partners or involving new participants, etc. Each of these reasons affects the possibilities for re-positioning in a different way. What can be easily overlooked is the use of repositioning for the purpose of collectively learning about such a process and its impact.


Lab Stories
from the cities of Maastricht and Antwerp

The following two urban lab stories from Maastricht and Antwerp present two rather different examples of urban labs in a hybrid position but still connected to the municipal administration. Whereas Maastricht-LAB remains essentially a municipal initiative, though coordinated by a civil servant and an external lab coordinator, City Lab Antwerp is now trying to become embedded in a broader partner structure. Both labs can be seen as somewhat hybrid organizations.

The hybrid position of the Maastricht-LAB
This story was written by the lab manager and an URB@Exp researcher.

Formally, M-LAB is a project of the Maastricht municipal authorities. Its experimental mission, however, makes it an unusual project, and an unusual project also requires an unusual position. From a municipal government perspective, M-LAB was initiated by and is situated within the Department of Spatial Planning. As manager of spatial planning for the municipality, I am officially responsible for the results and outcomes of M-LAB and act as the institutional anchor in the local administration.
The alderman responsible for spatial development at Maastricht is politically responsible and provides crucial support to the M-LAB and its activities towards the City Council.

In practice, however, M-LAB functions as a vehicle for several departments in the municipal policy and development sectors. M-LAB works closely together with individuals and organizations from the domains of real estate, neighbourhood development, economic affairs, permitting issues, urban planning, etc. This demonstrates one part of M-LAB’s hybrid position.

M-LAB is also intended to be a co-creative platform for the city. In order to reach out to external local partners for specific projects, it therefore needs to be positioned somewhere on the boundary between local administration and civil society/market. The most explicit expression of this hybrid position is M-LAB’s two coordinators: one from the municipal administration and one from outside this administration. This construction has proved to work very well. Not only does this involve two very different working styles, but M-LAB can also tap into the networks of two rather different worlds.

Another way to involve external stakeholders in M-LAB’s first phase was the ‘Gideon’s group’ (a voluntary advisory board with influential regime players and innovative niche players from various societal domains). The M-LAB team met regularly with this group of ‘frontrunners’ to rethink urban development processes and thereby discuss the most important challenges of specific M-LAB projects. For each project, one or two group members were selected as ‘guardians’ to support the core team. This Gideon’s group was also discussed in the local media at various times, with negative comments about its supposedly secretive character.

For the second phase, we ended the close collaboration with the Gideon’s group and started a network of ‘city-makers’: a more open network where local thinkers and doers come together to share their resources, time and knowledge for projects and activities related to M-LAB. M-LAB organizes regular citymakers’ lunches to explore certain topics and projects or to receive feedback on ongoing ones. Several citymakers have become project initiators themselves. Others were invited to participate in ongoing projects of M-LAB, many of them having a professional background related to urban planning or development.

Finally, the hybrid position is also reinforced by branding M-LAB with its own logo, which gives it an organizational identity separate from the local administration. M-LAB communicates with its network by means of a separate website and a Facebook page. M-LAB has also had several temporary office spaces outside of the municipal buildings. This was a conscious choice, since M-LAB wants to function more transparently and therefore needs to be publicly visible and easily accessible. The downside of this choice has been that we need to find a new space every now and then, and that it takes time before all basic facilities (such as Internet connection etc.) are in place.

The hybrid position of City Lab 2050 in Antwerp
This story was written by an URB@Exp researcher, based on interviews with the lab manager.

Workshop on sustainable energy experiments for the city centre © StadsLab2050
Citylab2050 is an initiative of the municipal administration of Antwerp. We try to strengthen the activities of the lab as much as possible through partnerships. Since the start of Citylab2050 (2013), partners have been approached in the context of specific issues regarding the agenda of Citylab2050. The challenge is to get partners involved from a diversity of backgrounds: people from business, knowledge centres, societal organizations, and citizen organizations. As an example, the participatory track on ‘circular fashion’ in Citylab2050, named ‘Fashion Flows’, is supported by the following partners: a Flemish platform from the fashion sector (Flanders Fashion Institute), a research institute focusing on materials management (Plan C), and the municipality itself. In the case of the Fashion Flows track, the users of the lab are representatives of research institutions, businesses, social organizations, start-ups, fashion designers, citizens’ organizations, various government agencies and employees of the municipal administration.

Over the course of 2016, Citylab2050 attempted to set up a partnership structure at the level of the whole lab, instead of that of thematic tracks. The underlying idea was to link companies, societal organizations, governmental organizations, citizens’ organizations and knowledge partners more permanently to the lab itself. The idea was that they would support the lab explicitly, for example financially and/or by means of labour. After a year of comprehensive discussions, Citylab2050 has had to conclude that, while a valid idea, the quest to establish a partner structure for the urban lab as a whole was premature.

This is the reason why in 2017, the partnership focus will be shifted to the track level again. It is easier for partners to see their role in, and a return on investment at, the thematic track level, where concrete alliances are formed and experiments are set up. The ‘raison d’être’ of their connection and involvement is thus more concrete than merely a general contribution to the urban lab’s much broader ambition to render the city more sustainable. Hence it is easier for them to justify their investment, whether financial or otherwise. Moreover they can be involved more closely in the set-up and running of the process, experiments or pilots.

Potential new partners will be invited again around the summer of 2017 to discuss the general agenda for the urban lab. The discussion will be based on a foresight exercise, mapping out the developments that might produce new sustainability challenges in Antwerp, as well as strategic visions at the local, regional, national and European policy levels. The potential partners will join the effort to answer the question: which themes (i.e. tracks) have the potential to attract and stimulate sustainable innovation at the city scale?

The internal organization of the urban lab is becoming ever more tuned to its task. The core team of Citylab2050 is working to further anchor the methodologies employed within the lab, as well as the lab’s (temporary) results. For example, a question that was raised in the ‘Sharing’ track was: how can we as the municipal administration prepare ourselves for the sharing economy which is becoming increasingly important in everyday society (e.g. platforms are growing, their diversity increasing, etc.)? Insights into this matter are
shared amongst colleagues and management teams across the municipal organization by means of internal policy letters, recommendations etc. It is the ambition of Citylab2050 that eventually it will also reach the political agenda. Where necessary and possible, the core team attempts to co-facilitate pilot experiments set up within the lab and support their implementation more directly. Citylab2050’s outcomes are generally interdisciplinary by nature, making them touch upon different policy domains (e.g. economic, social, ecological, etc.). Hence it is a major advantage that the core team consists of members covering all of these domains.

In recent years, the municipal administration has become increasingly, as well as more deeply, engaged in the functioning of the urban lab, whereas in the early years the lab mostly focused on mobilizing external stakeholders and innovators. This has led to a rebalancing of the internal-external focus of the lab.

By entering into broad partnerships and in order to position the lab as a free thinking space for a diversity of actors, we try to characterize the lab as a hybrid organization. As the Citylab2050 manager, I see the hybrid position of our lab as something valuable in the context of the complex sustainability issues we concentrate on. I note that close cooperation with partners and external actors, as an integral part of our lab, offers both knowledge and an increased capacity to contribute. This generates knowledge on issues, barriers and solutions that we had never seen before as a government organization. But it is also about more punching power, networking and access to organizations and individuals. The ability to create joint action also enables this hybrid form. In addition, this mode of operation creates more credibility for the internal organization of the municipality. Citylab2050 also has an antenna function, that of showing and sensing what the ‘outside world’ is doing.

**Design Principles**

**How to find a position**

**Local embeddedness**

- Finding a suitable position for an urban lab requires deeper insight into the local context, above all the local culture and structure of participatory urban governance. Lessons from past initiatives can be incorporated into the urban lab, and other ongoing participation initiatives can be connected to the lab to increase synergies and avoid overlap.
- Institutional back-up has proved to be vital, and needs to be organized. It can help if the establishment of a lab is set out in a policy document. Even better is active support and engagement by high-ranking city officials and policy-makers who can act as ambassadors for the lab towards their colleagues and the outside world.
- It is important to consider the connections an urban lab should establish, and to involve stakeholders from various domains and municipal sectors.

**Hybrid niches and boundary work**

- A niche is an obvious position to choose for an urban lab. It helps in launching experimental projects and trying out new approaches. As a niche, a lab can still become visible as a somewhat autonomous platform and create its own identity, which will help to get new people involved in city-making.
- A hybrid position gives the urban lab space to act and engage different worlds and different actors in addressing urban problems. There is not one perfect hybrid position; rather, it is a continuum of possible positions, some of them closer to the local administration and others closer to society.
In order to integrate the language, values, knowledge and interests of different actors from different domains, urban labs need to do active boundary work. Different values and interests need to be rendered transparent and intelligible, and their integration should be facilitated.

Continuous negotiation

- It is important to clarify the roles, the ensuing responsibilities and the mutual expectations of all stakeholders. The local administration in particular has a chance to experiment with new roles.
- The position of an urban lab is never set in stone and should be open to negotiation. It is especially evaluation moments or transitions to a new phase which can be useful for reflecting on the lab’s position and readjusting it.

GUIDELINE 4

BUILDING THE ORGANIZATION
BUILDING THE ORGANIZATION

Exploring possibilities and combining efforts for setting up and running an urban lab

Organizational characteristics of urban labs are as diverse as the labs themselves. Therefore, there are no specific operation models and organizational structures that are particularly useful for urban labs. Nevertheless, lab practitioners should be clear about basic questions regarding the tasks and the ways in which they are fulfilled. This includes the identification of strategic orientations, target groups, responsibilities and modes of value creation. Additionally, municipalities implementing urban labs as new governance forms should decide how to anchor the lab within the overall administrative structure, and whether the lab should get a political mandate. These considerations provide a solid basis for the further elaboration of internal operating procedures, decision-making and conflict management processes. After the specific operating procedures and routines of the urban lab have been defined, there is the need to clarify the roles and responsibilities of the lab practitioners. In addition, it can be very useful to think about installing a reflection group made up of experienced practitioners and experts who supervise the lab to ensure that the tasks are fulfilled, and who provide guidance and troubleshoot where necessary.
Building the organization

The organizational structures of urban labs can be defined in many different ways, depending on their specific objectives and missions. The modes in which urban labs function and perform can range from loose organizational structures to rather strict operating procedures and routines. The choices as to how the work of the lab gets done and how responsibilities are shared are largely influenced by the operation model of the lab, which basically describes how value is created. This involves both the approach regarding the way the lab and its partners create public value, as well as the way in which the lab, along with its stakeholders, creates value for each party involved. The specific operation model of an urban lab is based on its vision, goals and strategic orientation, as these aspects shape the lab’s unique characteristics and service package. Lab practitioners can use this model to frame their strategies for motivating efforts, coordinating activities and allocating resources.

Developing a lab operation model

As urban labs include various stakeholders (e.g. politicians, officials, citizens, research institutes and private companies) and apply a variety of working methods (see GUIDELINE 5), the development of a suitable operation model is a complex venture. However, formulating a rationale for the way the lab creates, delivers and captures value is fundamental, as it provides a powerful mechanism to grasp, examine, communicate and coordinate strategy-oriented decisions. In the process of defining the lab operation model, various aspects need to be taken into account, for instance:

- What features does the lab need according to its objectives?
- What is the target group of the urban lab?
- How can community interaction be managed?
- Who is responsible for what?
- How is value creation achieved?

When exploring what operation model the lab should ideally have, it is important to be clear about its goals, while keeping up an open dialogue on alternative aims and individual ambitions (see GUIDELINE 1).

The specific features a lab needs to function vary from case to case. For instance, a lab aiming to catalyse innovation needs a different structure than one which focuses more on raising societal awareness. This question is closely related to the intended target groups (see GUIDELINE 2) which also depends on the thematic orientation and geographic location of the lab’s activities. Another question one might want to address in advance is: what type of network do we want to take part in? Various typologies are possible, ranging from more centralized to loose and decentralized ties.

The lab’s positioning (see GUIDELINE 3) will also influence the choice of a suitable operation model. It is a crucial question whether and how the lab is anchored within the overall administrative structure of the city, and if it should get a political mandate. One needs to define who carries (final) responsibility for the lab, whether it is the municipality itself or multiple partners which are in charge (e.g. private companies, civil society, citizens, knowledge centres, etc.).

In addition to straightforward top-down or bottom-up strategies, urban labs experiment with new operation models that support organizational changes in governance institutions by being set up as hybrid organizations, combining elements of government and society in order to act as interface between these two worlds.

The operation model of a lab is also related to its cost structure and the funding of activities, e.g. public funding or income from services offered. It should be considered that diversified funding structures, including financial arrangements without narrowly defined conditions, monitoring processes and funding guidelines are likely to enhance the successful implementation of transformative social change.
processes independent from the existing system. On the other hand, public funding offers the potential of reaching a wider audience, as it usually includes pre-determined reporting and dissemination obligations that can support the introduction of innovative practices to the predominant socio-political context. The ownership and decision-making structures that arise out of the lab operation model might limit the practices a lab feels able to engage in.

**Establishing an organizational structure**

Based on these general reflections on the operation model, the urban lab can be established either as an independent, new organization, or as a subsidiary of an existing institution. Based on to the circumstances, a suitable organizational structure can be established. This may involve various types of internal operating procedures, decision-making and conflict management processes: from the very organic to the rigidly planned. The structure chosen often reflects the culture of the organization taking the initiative to set up the lab. In more hierarchical organizations, it should come as no surprise that more formalized modes of structuring the urban lab are more likely to occur, with strict task descriptions, responsibilities and performance indicators. Flat organizational structures have less closely defined chains of command and fewer rules, and put more decision-making power in the hands of the lab team. The extent and nature of the way leadership is distributed throughout the lab significantly influences the way decisions are made, conflicts are resolved and information flows. Therefore, the advantages and disadvantages of hierarchical and flat organizational structures should be considered carefully.

Both hierarchical and flat organizational structures need to be designed in a way that allows the successful operation of the lab according to its specific goals and missions. Experiences within URB@Exp show that tasks and responsibilities that need to be fitted into the organizational structure of an urban lab include at least the following:

- allowing and facilitating people to participate
  Urban labs allow people to become involved in lab activities via a clear single point of contact. The active management of stakeholder networks is central to running a lab.
- maintaining a good level of activity/dynamics and moderating discussions across media
  This generally requires a community manager working across the board of the lab’s activities.
- ensuring clarity about who is responsible for which activity
  This is crucial especially when responsibilities are shared across multiple people or organizations (see GUIDELINE 3).
- communicating within and about urban labs
  This is key to their success, yet the capacity needed to ensure both quantity and quality of communication is often underestimated. Communication contributes to and reflects the identity and branding of a lab.
- aggregating and creating knowledge
  Urban labs tend to generate a lot of valuable knowledge about societal dynamics, which needs to be captured and translated in such a way that others within and beyond the lab can use it to their benefit.
- learning and disseminating lessons learned
  Urban labs are networks of learning. Learning is at the basis of knowledge creation, so requires equally explicit attention in terms of capturing, structuring and feeding key learnings back into the operations of the lab. Within URB@Exp, the Antwerp Citylab has worked with a ‘neutral’ knowledge centre (university department) to guide learning.
- taking care of administration and logistics
  Urban labs require quite a bit of practical support, e.g. when organizing events, inviting people, looking for venues, accommodating for different types of activities, etc.
• **providing feedback to civil servants in and around the municipal organization**

Urban labs not only communicate outwards to residents and society but also internally towards the municipal organization. Insights and new ways of working emerging from lab activities need to be fed back into the city administration. This requires the explicit attention of a group of people within the municipal organization, e.g. a team of civil servants brokering insights between lab and municipality. Such a team can grow into a solid support structure for the lab that assists in setting up and implementing experiments and stimulating learning processes.

**Clarifying the roles of lab practitioners**

After the specific operating procedures and routines of the urban lab have been defined, the roles and responsibilities of the lab practitioners need to be clearly defined. This is a crucial step because it determines which individuals get to contribute to which decision-making processes, and thus the extent to which their perspectives shape the lab’s functioning. In order to fulfil the tasks envisaged in the operation model it is necessary to engage a lab coordinator and/or a core team. If the lab runs multiple thematic trajectories or carries out complex experiments, it can be beneficial to organize an extended lab team. Its members are not part of the core team, but only provide dedicated services related to the specific lab trajectories. This can include, for example, the introduction of experiences from various fields of expertise, cooperation for rarely used methods or the provision of pre-defined tasks. These persons may be subject to the internal administration and control processes of the lab, but this is not always necessary. Delivery arrangements may also have been agreed in such a way that the lab coordinator and/or core team only receive and check the quality of work delivered, but not the process by which it has been created.

The lab story from Antwerp below provides an overview of the way an urban lab can be coordinated and how the roles of the lab practitioners can be defined.

**Implementing a reflection group**

To ensure that the envisioned tasks are fulfilled, it can be very useful to think about setting up a reflection group made up of experienced practitioners and/or experts, to supervise the lab team. Such a committee, which is invited to reflect on the lab’s processes, is a very powerful instrument, as it can help mediate between different stakeholders and offers a superior decision-making structure, in which all decisive lab activities converge. The quality of the lab work depends to a large extent on the powers allocated to the reflection group. It can support or troubleshoot the lab team’s work and provide assistance or guidance on important tasks and strategic decisions. Moreover, it can play an important role in monitoring progress, checking the lab’s administrative department and resolving conflicts. It can also function as a communication hub, as the group makes observations and echoes their impressions back into the everyday life of the lab team in order to implement the necessary measures. In order to carry out its task efficiently, the members of the reflection group not only need to be competent, but also have to be powerful opinion formers. Since a committee can influence strategic decisions of the urban lab, it is important to ensure that a diversity of perspectives and knowledge is represented within the group. When composing the committee, the lab management should therefore pay attention to a heterogeneous mix of functions and people. The lab story from Graz illustrates these considerations and clearly shows how a reflection group can be constituted.
Lab Stories
from the cities of Antwerp and Graz

The following two stories from Antwerp and Graz illustrate different aspects of the organization of an urban lab and the role of a reflection group.

Organization of the Antwerp Citylab2050
This story was written by an URB@Exp researcher

The Antwerp Citylab2050 falls under the responsibility of the municipal Department of Energy and Environment of the business unit City Development. In this department, one civil servant is the project coordinator, working full-time on the Citylab process. The project leader works under the responsibility of his manager, who has the final responsibility for the Citylab2050 initiative. One town council member has the final responsibility from a political point of view.

A so-called core team has been organized, assisting the project leader in coordinating the lab. In the early stages of the Citylab2050, the tasks of the core team were formulated as follows: designing the process, logistic assistance and attuning the activities of the Citylab to activities in other departments of the municipal administration. As regards designing the process, our experience is that the project team prepares a process design and the core team reflects on it.

It was a deliberate choice that the Citylab2050 has a political mandate. At the start of the Citylab it was felt that some accreditation was needed to put the lab on the market as a test bed for sustainable city innovations. Furthermore, it was felt that the initiative for a Citylab and the actions and experiments undertaken by it should not only come from the municipal administration itself, but should be more broadly supported. Hence, the lab needs partnerships with other organizations.

The Citylab is organized around thematic interactive multi-stakeholder processes. For each thematic trajectory, specific organizations are approached to become a partner in that specific trajectory. The idea behind such partnerships is to create more ownership for the Citylab2050. The initiatives arising out of lab activities should strengthen the public perception that the lab is owned not just by the municipality but by the Antwerp people. Therefore, all citizens should feel invited to engage in and work out concrete initiatives.

Crucial players in the lab are the people visiting the lab at meetings organized in the context of a specific thematic trajectory. They join such meetings completely volun-
The question is of course at what stage their roles might become less voluntary. Experience has shown that their roles do indeed remain voluntary, which implies that members of the project team in particular often have to encourage and enable people to act, or to attend meetings.

The Citylab2050 is assisted at different levels by hiring professionals. An external organization has been hired for process design, or the facilitation of learning processes. The coordinator of this external organization is also a member of the project team. Furthermore, there is a pool of facilitators, who particularly have to facilitate and coach so-called ‘idea teams’ to make progress in working out and implementing ideas. Coordinators of idea teams can apply for assistance (through requests that are embedded at a natural stage in a thematic trajectory). In case their proposal is accepted by an independent jury, they get extra resources for their idea team (from 2 up to 10 person-days). Extra assistance for communication is provided by an external communication expert, while some internal staff of the municipal communication department also offer helping hands on request.

The role of a steering committee as reflection group
This story was written by an URB@Exp researcher.
evaluation period. The evaluation of the guidelines for citizen participation during the trial period was the central experiment in the Graz Governance Lab.

In the course of the experiment of testing the guidelines for citizen participation, the basic group met three times. The purpose of each of these meetings was to reflect on and evaluate the practical observations as well as the evaluative insights gained and possible ongoing adjustments. During the experiment of testing the guideline, two meetings of the steering committee were called. In these meetings, the steering committee was informed about the current state of testing the guidelines and about the first evaluative insights gained. The steering committee was and remains an important body to discuss controversial issues regarding the guidelines.

From a scientific point of view, both bodies were valuable for the experiment to reflect on implemented activities, to learn from the implementations and to discuss future developments. The steering committee constituted a platform which facilitated the exchange of key persons. From a research point of view, it was interesting to observe that, even given the background of an open-ended experiment, there were decisions that had to be made. Retaining these two bodies is seen as extremely expedient for the further implementation of the guidelines for citizen participation in the City of Graz.

Design Principles
How to build the organization

Develop a lab operation model
- Identify the main objectives of the lab and features needed for it to function according to these objectives.
- Define the target groups of the lab activities and the networks the lab wants to take part in.
- Consider the positioning of the lab and whether it should get a political mandate.
- Think about the necessary resources and costs and how funding of the lab and its activities can be secured.

Establish a suitable organizational structure
- Clarify the tasks, operating procedures and responsibilities of the lab.
- Establish the urban lab either as an independent, new organization, or as a subsidiary of an existing institution.
- Carefully consider the advantages and disadvantages of hierarchical and flat organizational structures.
- Pre-define procedures for making decisions, resolving conflicts and managing information flows.

Clarify the roles and responsibilities of lab practitioners
- Determine who contributes to which decision-making processes, and thus to what extent their perspectives shape the lab’s functioning.
- Consider if there is a need for external support by professionals in order to enhance change processes.
Establish a reflection group

- Consider establishing a reflection group made up of experienced practitioners and/or experts who supervise the lab team and ensure that the envisioned tasks are fulfilled.
- Ensure a heterogeneous mix of functions and people with a variety of perspectives and knowledge within the reflection group.
- Carefully consider the extent of the group’s authority as well as its accountability.
EXPERIMENTING ALL THE WAY

Designing and carrying out processes and activities
Urban Labs design and carry out collaborative processes, bringing together various people with the aim of exploring and formulating new responses to complex issues. Processes usually combine different kinds of activities, for example mixing more traditional meetings with physical interventions in the city.

While the processes and activities often focus on generating solutions, they also create new relationships among participants, new ways of understanding and acting in relation to the specific issue. In fact, the knowledge and relationships emerging from these processes might be more relevant than the specific solutions themselves.

In view of the importance of new relationships and knowledge, we suggest that the processes and activities of an urban lab should be regarded as experiments. This implies that the focus is not so much on finding a conclusive solution, but rather on learning. Additionally, we suggest that lab processes and activities should aim to create and consolidate relationships between actors that last beyond the single process (i.e infrastructuring). Such relationships can work as ‘infrastructures’ for moving forward and stewarding knowledge and solutions generated in the process, but in the long-run also for continued experimentation regarding a specific issue.
Experimenting all the way

There is of course not just one way to organize and manage urban lab processes and activities. Choices regarding formats depend on agendas (GUIDELINE 1), participation (GUIDELINE 2) and organizational structure (GUIDELINE 4). In this chapter we suggest some framings that may help lab teams in designing and/or facilitating processes and activities. We introduce a particular interpretation of experiments, we discuss the role of material objects and of making things in collaborative processes, and we highlight the importance for urban labs to create constellations of actors that last beyond the individual process.

Experimenting as a process of exploring, learning and failing

Urban lab activities and processes are often framed as experiments¹, to highlight how they can be understood not only as ways of finding solutions to complex urban issues but also as ways to learn about these issues and, more generally, about the way cities work. As we followed the five urban labs involved in the URB@Exp project, we found that knowledge production was in fact the main result.

It is important to underline that experimenting in urban labs cannot be compared directly with experimenting in the natural sciences. Urban labs are far from controlled environments where it is possible to test solutions and come up with definitive answers. Rather, we suggest that experimentation in this context should be understood as a more explorative and tentative practice, characterized by dedicated reflection moments², where the lab team and the people involved in the process discuss and evaluate the activities themselves.

Considering urban lab processes and activities as experiments also expands the focus from merely developing individual solutions towards developing new ways of understanding, thinking and working together. This entails considering the issue at stake from a broader perspective. The perspective can be so wide that the lab might examine existing organizational and decision-making structures within a city.

Experimentation also welcomes mistakes as opportunities for learning and improvement. However, it might be difficult for urban labs to get the mandate to fail, as actors and politicians involved may expect results in terms of concrete solutions or because there might be quite specific goals linked to funding schemes. We suggest that lab managers and teams should be upfront about the importance of failing to the different stakeholders involved, and should negotiate room for failure in each process.

Initiating, maturing and finalizing experiments

What has been defined as an experiment within URB@Exp urban labs varies greatly. The term experiment has been used to describe small-scale time-limited activities, larger monthly urban interventions or large cross-sector innovation projects. Although, the focus and formats for experiments should be tailored to the specific situation, this chapter suggests possible roles that experiments can play, using a typology developed in design research³.

Initiating experiments are seen as exploratory both in their approach and receptiveness to surprises and in terms of outputs. Yet, they can play a key role in starting to build a repertoire of examples and establishing a practice. An example of such activities can be found in the lab story from Graz below. It describes open-ended participatory activities that engage citizens and other actors in exploring and understanding a specific issue. In such initiating experiments, it might be important to carefully consider who is invited to participate and how the individual activities are providing the possibility to include a range of perspectives (see GUIDELINE 2).

Maturing experiments are seen as assisting in stabilizing or maturing the ongoing work and knowledge production process, or as challenging the work and knowledge production
process so it can be adjusted and re-formulated, e.g., in terms of aims and focus. They can concern experiments happening in real-world contexts or have a more reflective character. An example of this type of experiment is described in the lab story from Malmö below, where a process based on a series of meetings and workshops supported emerging initiatives. Rather than hands-on activities, these experiments focus on supporting a more thorough evaluation and reflection. This might require using formats and tools that support discussion and collecting reflections. For example, the story from Malmö discusses how sketches and drawings were used to support dialogue among different participants. Finally, finalizing experiments are defined as events that to some extent conclude or condense the key insights and approach of an innovation process. In the case of Malmö, an example of such an experiment would be to actually test the designed process and evaluate it. While these kinds of experiments can be quite tightly structured and specific, it is still important that they include space for reflection and questioning.

Consolidating relationships: beyond time-limited processes and activities
Although urban lab processes and activities might involve different time frames, they are always time-limited. One challenge is therefore how to ensure that the results of processes are not lost after the process is over. While discussions about the harvesting of results are developed in GUIDELINE 7, this chapter focuses on how it is important to introduce a long-term perspective, even at the stage of setting up and driving processes. As already pointed out, urban lab processes often also create new relationships or rework existing ones among actors. We suggest that processes should place particular emphasis on the way such constellations are created and consolidated during the process, since they may play a key role in achieving further process results. It is important that the process fosters co-ownership of the results among the actors involved. It is also important that the lab team reflect on who they should involve and on the kind of resources and competences that might be required for the progress of new ideas and ways of doing things. Another important aspect is that of building capacity for further experimentation among the actors involved, so that they may continue after the process is concluded. From this perspective, processes can be regarded as a matter of reconfiguring relationships among people, knowledge and resources (i.e., that which has been defined as infrastructuring) that can support the dissemination and further development of experimental outcomes.

Visualizing and materializing to support collaboration
From the above perspective, it becomes particularly important to consider how urban lab processes and activities support the establishment of relationships.

Lab teams examined in the URB@Exp project spent most of their time in meetings and discussions with different actors. However, it is important to not forget the role of material objects and making things in urban labs, not just because they represent concrete manifestations of urban lab activities and processes, but also because they can play a central role in collaborative processes of ideation and reflection.

Visualizing and materializing thoughts and ideas in a meeting can support the alignment of diverse interests, participation and mutual learning. For example, sketching, visualizing ideas or building rough models can support a different way of thinking than just talking (see again the role of sketching and drawing in the Malmö story). For example, the meeting might focus on how an idea might be realized, rather than just expressed: which materials might be appropriate, and how they should be assembled. Physically making things introduces a new way of looking at and ex-
amining a specific issue (see how interventions in Graz story shed new light on ways of discussing and considering future plans for a neighbourhood).

Moreover, focusing on more material ways of communicating and reflecting might also enable and facilitate the participation of people who might not always feel comfortable expressing themselves verbally. By shifting the focus away from just oral communication, making things might facilitate the dialogue among actors who, despite being gathered to discuss the same issue, might have very different interests and might use the same words in slightly different meanings. Sketching and building become ways to enrich the communication process and exchange among participants. An example is the graphic representations of guidelines in this booklet. They have been co-created by researchers and practitioners involved in URB@Exp during the process of formulating the guidelines. Participants were divided into small groups and were given the task of creating a graphic representation for each guideline, using a kit with various objects and materials. The making of these visualizations sparked discussions and provided new insights. Discussing how a guideline could be represented very much entailed reflecting on the content and common understanding of the guideline itself.

Additionally, materializing ideas and proposals also implies that they become physical: they are no longer just words but become actual presences in space and time, and this can stimulate other ways of reflecting on and relating to them, for example regarding the way they might connect to existing structures and actors.

Introducing materials and making things in collaborative processes might happen in various ways and at different scales. It could merely mean having a small-scale exercise during a meeting (such as inviting participants to draw schemes and sketches that connect key concepts to actors and resources). It could also involve workshop formats that combine joint discussion and making things (for example by using different kinds of objects and/or visuals to represent an idea/concept; building rough prototypes; creating and staging short stories to represent different issues or possible solutions). And it could involve actual events focusing on building something together and/or physically intervening in a public space. As regards the latter, it has been pointed out that engaging a variety of actors in organizing and carrying out an event together and/or in constructing something might support mutual understanding of each other’s interests and collaboration beyond consensus.  

In planning these activities, it is important to remember that most people do not frequently engage in making things, sketching or visualizing, and therefore many of them might feel a bit awkward and uncomfortable doing so, especially within a group of people they are not familiar with.

‘Griesviertel’ is a district in Graz where many urban challenges come together. Buzz words, to name but a few, include inequality, integration, traffic congestion, gambling, petty crime, youth unemployment, red-light district and drug dealing. But it is also a district that its inhabitants describe as safe, colourful, interesting, different and lively. Our participation process aspires to play a role in its development.

‘How many times do I have to say this’, exclaims the chairman of the district council, ‘we need a vision for this district. Once we have a vision, we can develop policies and strategies, and then it’s just a matter of implementation. Without it, my hands are tied’. ‘What planet are you living on?’, responds a citizen, ‘politicians have produced visions and policies for decades. Look around you, this is what it has led to: a mess, where you’re not even able to solve the simplest of problems for the people who live here. What we need is action. We’re done talking. We’re going to bombard you with initiatives, protests, projects, guerrilla actions for change, until you politicians realize that ultimately, you work for us, and not the other way around’. Our project ‘Verweile doch und mach es schön’ (http://www.managerie.at/portfolio/verweile-doch-und-mach-es-schoen/) sits in between these two perspectives, and attempts to use the best of both. The starting points for our interventions are the many practical challenges in people’s ‘life-world’. These could be as simple as a failing pedestrian crossing or a badly lit square.

We deliberately bring together mixed groups of participants, civil servants, thematic experts, business people and ‘ordinary citizens’, to analyse and contemplate solutions. We do so using playful participation methods that animate collaboration, learning and creative problem solving. In our social safaris, for example, we turn the concept of participation ‘on its head’. During a pressured...
time-slot of 24 hours, participants engage in a guided process to go out, learn from local residents and co-create and test possible solutions. When looking at, say, the quality of a park, we take the views of the elderly dog-walker just as seriously as those of the alleged soft-drugs dealer. We start with their perspectives before turning to more institutionalized players in the system, such as the local police, social workers and park maintenance services. We get these people to talk to each other at the spots where the problems are most visible, far away from town-hall meeting rooms and conference venues. And we do not stop there. Where possible we turn solutions into instant experiments and prototypes. If you think this street would benefit from more benches – let’s get hold of some wood and build them tomorrow, together. You believe that there is a lot of demand for a local farmer’s market, like the one you had here in the 1960s? Let’s host four pop-up markets in the next few months to test what works.

We maintain close ties with other labs (e.g. French 27th region, the British Finance Innovation Lab, the Kenyan I-hub and the collection of Dutch labs hosted by Kennisland) to share learnings and experiences. Our methods mix elements from design thinking, theory U, Agile approaches, and participatory development. I could well imagine our initiative growing into a bigger and more visible social innovation lab. But we are far from there yet. The question for now is, are we making any difference at all? Some critics have suggested that our way of working addresses ‘the low-hanging fruit’ at best and at worst functions as an excuse for failing political interest to address serious issues. Time will tell if they are right. Our theory of change is to mobilize new energy for change, around concrete, tangible issues. Our hope is that small solutions chip away at mistrust, cynicism and paralysis and thereby generate new entry points for addressing longer-term issues. Our assumption is that creative formats and good process facilitation can forge new ties, respect and mutual understanding in a fragmented ecosystem of actors who all hold parts of each other’s puzzle. Our honest assertion after one year of hard work is that it is too soon to tell if any of the above makes any sustainable sense. The handful of practical tangible changes we have brought about induce a sense of modesty. But we also cannot deny the joint aha-reactions and new relationships that might be the seeds of more substantial changes in years to come.

Malmö Innovation Arena: from ad-hoc activities to a designed process to support new initiatives
The story was written by an URB@Exp researcher based on interviews with the lab manager of Malmö Innovation Arena.

In its first period, the Malmö Innovation Arena focused mostly on driving ad-hoc experimental activities. Further experimentation and reflections on this first period led to the design of a process model to support activities driven by other parties.

The coordinator of Malmö Innovation Arena describes how during the first period (2013-15), they worked in a rather ad-hoc manner as regards what to engage in. At
first, they were initiating smaller projects themselves, but soon realized that their limited time and staffing resources, and the many different tasks they had to fulfil, made this unrealistic in the long run. So they started instead to support various partners and other actors in driving innovation processes (around 25 at the end of the first period). This meant helping to bring different people together, repeatedly discussing barriers and relevant topics internally within the municipal government, helping people navigate through the structures of the municipality, financing some of the work based on a decision made in the cross-partner steering group, etc.

For example, the Arena supported the civic organization called Connectors – a team of young entrepreneurs in a process of urban renewal. The team worked in a specific neighbourhood, exploring together with citizens how it might possible to revitalize the local square, where nothing had happened for decades. Besides providing funding for activities, the Arena also facilitated the connections between the Connectors and the Streets and Parks Department, who were generally positive about the process. Towards the end of their funding term, the Connectors invited the locals to get together at the square on a Saturday to create their ideal new square e.g. by painting the benches, planting greenery, setting up new signs, painting possible new pedestrian crossings on the streets, etc. However, a few days later the Streets and Parks Department came along and took down several signs and removed painting, with the argument that it was against the laws and could cause danger. This led to frustration amongst many local citizens and the Connectors, who later in an interview for the local newspaper expressed how they had perceived support from the Environmental Department (where the Arena was located) but not from the Streets and Parks one. Still, as a result, the process was analysed quite thoroughly and was developed into a method for neighbourhood revitalization through collaboration between the local authorities, citizens and civic organizations.

This analysis was done as part of a process of reflection and learning that was initiated by an URB@Exp researcher at the end of 2014. Such a process considers the organizational structure of the Arena as an experiment per se, and aimed at harvesting learnings regarding ways to organize the Arena in the second period. At first, the process focused on hands-on collaborative mappings with the researchers and the lab team, but later the steering group members and different participants were also sporadically involved. Topics changed over time, e.g. from considering the Platform as an urban lab and how it relates to other lab-like initiatives in the city, to possible new organizational models for the Arena, to collaborative learning from experiments by discussing details of selected specific innovation processes/projects, to the importance and style of storytelling, the platform as a playground, etc.

One of the sessions focused specifically on using the previous experience as a basis to design a process model to support innovation processes in the second period. This was done by having images on the table and writing additional notes about the recurring activities and innovation projects and reflecting upon and across these. The key elements were: ‘Doing’, ‘One’s own economic sphere of action’, ‘Openness towards those involved in Knowledge Alliances’, recognition of the ‘Characteristics and qualities of the modes of operation’ and the ‘Result’, but also the need for ‘an arsenal of playful methods’ and ‘Clarity of the Process’. The session was mostly spent on jointly sketching a possible process model. This model was largely inspired by a design-process model called ‘fuzzy-front-end’ and was based on
an exploratory open-ended and inclusive starting phase, where innovators could freely experiment and propose ideas, after which some ideas would successively be selected and supported for further development. The visualization of this process (labelled the ‘spaghetti model’) was then included in the logo of the Arena.

This initial rough model for the process was then further refined by structuring it into 5 steps/phases, and was discussed during another reflective session involving the Arena manager and researchers. The latter were to some extent sceptical about the phase divisions of the model. The session focused on questions such as: Who formulates the challenges (to be addressed in the first step)? Which criteria (to qualify for further steps)? Smaller interventions, prototypes and experiments also in early phases?

As an outcome, arrows connecting back the last step to the first one were added, to mark the iterative nature of the process and the importance of integrating learning from the innovation processes/experiments back into the initial phase when challenges are formulated.

Design Principles
How to experiment all the way

Experimenting
- Look at each process and activity not just as a matter of developing, testing and/or implementing a possible solution for a specific issue, but rather as opportunities to collaboratively learn about the specific issue at stake and how it might be addressed together with different actors. Carefully design a learning strategy and ways to address participation.
- Be upfront with involved parties, politicians and funding bodies about the importance of failure as an opportunity for learning. Discuss and negotiate space for failure in each process.
- Consider in what phase of the process you are, in order to decide on the format of the experiments.
- Initiating experiments are characterized by a rather open-ended and unstructured form. They focus on exploring different possible perspectives on the issue at stake.
- Maturing experiments stabilize or challenge the ongoing work and knowledge production process. They involve reflecting and harvesting learnings from other experiments. They should provide tools and structures to support shared reflection and learning.
- Finalizing experiments condense key insights and approaches. They are usually more structured and present clear evaluation goals.

Long-term perspective on creating relationships (i.e. infrastructuring)
- Before starting up each process, consider which actors are relevant in relation to the issue. Remember also to try and include marginal and/or opposing voices.
Consider how processes and activities can favour the creation of strong relationships among participants. Support participants in assuming co-ownership of the process by involving them in designing and staging the process.

Consider providing participants with skills and competences to continue experimenting on their own after the process is concluded.

Support participants in reflecting on and planning how they might take the process and its results forward.

**Visualizing and materializing for collaboration**

Consider how the experiment can include more hands-on activities that can provide different ways to jointly explore and consider the issue at stake. Such activities might range from writing down key words and sketching concepts to implementing interventions in public spaces, from building small prototypes based on ideas and concepts to collaboratively organizing public events.
MAXIMIZING LEARNING

The diversity and challenges of learning in urban labs

It sounds like stating the obvious: urban labs are there to experiment and learn. Yet urban labs sometimes only start to think about the issue of learning long after the lab has been established. And even when learning has been identified from the outset as an important activity, the ‘who’, ‘what’, ‘how’ and ‘why’ are often still not clear. Important questions to consider are who should learn about which issues, for what purpose, and how the learning process should be organized. This guideline provides suggestions for ways to maximize learning outcomes in urban labs.
Maximizing learning

Diversity in learning
Learning is the process of acquiring new, or modifying existing, knowledge, skills or attitudes. Learning may lead to behavioural change, but this is not necessarily included in the definition of learning. Learning enables individuals or groups to respond to changing conditions and new challenges. In urban labs, novel responses are developed and tested, and serve as the primary source and focus of learning.

As straightforward as this may seem, the reality is much more complex because there are many different types of learning, which vary as to the ‘why’, ‘what’, ‘who’ and ‘how’ of learning. ‘Why’ refers to the overall purpose of the learning process, the desired outcome. ‘What’ refers to the changes in knowledge, skills or attitudes, which in turn are broad categories in themselves. Knowledge includes aspects like beliefs about the cause of a problem, or understanding other people’s viewpoints, while skills include the ability to perform practical tasks, as well as the ability to engage others. Attitude particularly covers a wide range of elements, and a change in attitude may be the result of changes in assumptions, viewpoints, motivations or preferences, but also in reflectivity, trust or respect. ‘Who’ refers to the different individuals who learn, but can also refer to groups in the case of collective learning. With regard to ‘how’, a broad distinction can be made between learning as an intentional activity, based on, for example, experiments or dialogue, and non-intentional, emergent learning, based on experiences one has during activities with another purpose.

Urban labs differ in their overall purpose and approach, and involve a variety of actors carrying out a wide range of activities. As a consequence, many different types of learning can be observed in urban labs. This guideline focuses on types of learning that are directly connected with the main purpose and function of urban labs, taking place within the context of the lab. Dissemination of lessons from labs to a wider, external audience is not considered here, although this may well involve a variety of learning processes. Our overview of main types of learning is structured along the lines of the distinction between the ‘why and what’, ‘who’, and ‘how’ of learning in urban labs.

‘Why and what’?
Urban labs are established to find effective, innovative responses to complex urban challenges (see GUIDELINE 1). A major aim of learning in these labs will therefore be finding these responses, learning about ‘what works and what does not’. This type of learning may take place at the level of individual experiments, involving the design, development and/or testing of specific novel approaches, or at the level of the lab, across multiple experiments. Another major aim is often the urban lab itself, learning how it can best be organized and deployed. Both these broad aims of learning will spark a multitude of more specific learning questions, mostly concerned with acquiring new knowledge, and sometimes with new skills or changing attitudes. A useful distinction here is that between ‘single-loop’ and ‘double-loop’ learning, introduced in the 1970s by the organizational scientists Chris Argyris and Donald Schön1. In the case of single-loop learning, the problem is predefined and the goals are set. Learning focuses on finding the best solution by trying various options; the problem definition and goals are not questioned but may be further refined. In double-loop learning, the search for solutions leads to questioning the original problem definition and goals, and involves changes not only in knowledge about the problem and possible solutions, but also in the participants’ attitude towards the problem and solutions, including the underlying assumptions, preferences, etc. (see GUIDELINE 1). In addition to the two major aims of learning about new responses to urban challenges and the functioning of the urban lab, participants in the learning processes may also have their individual aims, such as personal development.
when it concerns collective, double-loop types of learning resulting in a convergence of the participants’ perspectives on the problem, possible solutions and their own roles and responsibilities.

‘How’?
Obviously, the focus in this guideline is on learning as an intentional activity, although urban labs should always leave room for and pay attention to relevant lessons from emergent learning. Since urban labs typically involve activities to design and/or test novel approaches, they lend themselves well to ‘experiential’ types of learning. According to David Kolb, the father of the experiential learning theory, feedback from actual experiences plays a major role in how we learn. Learning occurs when the information obtained from these experiences changes our (often implicit) conceptualization of reality. Therefore, the experiments in urban labs can be major sources of intentional learning when combined with explicit reflection. Joint reflection and dialogue with actors having different perspectives will help to learn from experiments with counter-intuitive results and to ‘see’ the more distant consequences of certain solution options or the less concrete information from ‘thought experiments’.

Stories about learning
The lab stories in this guideline illustrate how varied learning in urban labs can be with respect to ‘why and what’, ‘who’ and ‘how’. In the lab story from Malmö below, about ‘Exploring future libraries’, the focus of learning was initially on finding a solution to a predefined problem, translated into a set of questions. The lab practitioners (researchers) supported a joint learning process of librarians, library managers and policy-makers, based on collective reflection on previous experiences as well as on-going local development projects. Besides sparking many more follow-up questions, the process also led to more fundamental questions about the values underlying the initial framing of the problem and the possible solutions. At another level, the lab practitioners
learned about the best ways to organize such learning process, in particular who to involve as participants, in view of further dissemination and implementation of new insights.

The lab story from Maastricht is also about the way lab practitioners learn how to conduct experiments with other actors. However, as the overall goal of M-LAB was to develop and test new, co-creative approaches to urban development, the lessons learned were also relevant at that level: it is not only the commitment of participating actors which is important, but also the support they have from the wider group they represent.

Lab Stories from the cities of Malmö, Maastricht

Below, two lab stories reflect upon different experiences with learning by urban labs. The story from Malmö shows how ‘reflection-in-action’ can be combined with ‘reflection-on-action’ in order to ask deeper questions about the future role of public libraries. The story from Maastricht underlines the potential of learning from failure.

Exploring the future libraries of Malmö
This story was written by an URB@Exp researcher, with comments from a regional policy-maker working on library development.

The process was set up to learn more about the way libraries could strengthen their functionality as important nodes for local neighbourhood development, and how librarians could initiate exploratory and iterative projects involving different ways to engage citizens. Questions that we aimed to work on included:

How do librarians engage with citizens today? How could new forms of engagement be developed? How could a more experimental and iterative approach be integrated in the librarians’ everyday work? What kind of support would be needed from management?

To answer these questions, it was crucial to bring together people who were involved in the everyday operational work (librarians) as well as people involved in strategy development (library managers and regional policy-makers). It was also considered important to involve multiple libraries, to support learning across sites, and to involve two librarians from each library, to allow them to share reflections with each other on a daily basis.

The learning format consisted of practice-based interventions, explorations and reflections at local libraries (‘reflection-in action’), but also of regular moments of joint reflection on previous experiences and knowledge sharing between librarians, library managers, researchers and policy-makers (‘reflection-on-action’). The librarians’ on-going local development projects acted as the basis and input for the learning process.

Insights were captured during monthly seminars where all the participants discussed and shared their experiences. It became clear that the process, besides providing answers to the initial questions, also elicited new, emerging issues such as: How can librarians sustain and keep up exploratory work for a longer period? How can they anchor more open-ended and ‘fuzzy’ processes (which are hard to describe) among colleagues? How can they balance adhering to tradition and going beyond current practice when initiating change? How can citizens be invited to initiate and take ownership of activities and the continuous development of the library? How can librarians work outside the library when they engage in collaborative processes?

As regards the notion of double-loop learning, the policy-makers stated that this helped them to collaboratively re-think what kind of values libraries produce. All groups, librarians, managers and policy-makers, also expressed that the process had led to a rethinking about the standards for the way a public servant should work. Instead of being very goal-oriented, it is actually possible to work in a more open-ended and exploratory way.

Regarding the opportunity to share and disseminate insights (and possibly also affect governance structures) the process seemed partly successful, at least in that the policy-makers integrated some learnings from the process into their new 5-year strategy documents. Another factor that might affect the opportunities to continue this work in the future was that the library managers participated in the process and had to clearly articulate how they could support the librarians. Follow-up meetings with managers and librarians have been planned, and a document has been compiled presenting the core learnings and practical approaches. This document will be disseminated in the library network in the region. However, one factor that might limit the opportunity to share and disseminate insights, and especially the impact on governance, is that all libraries depend not only on regional and national policy documents, but also on their local municipality and their local policies (which were not involved in the process).
The co-creation of a sustainable energy project at a school in Maastricht
This story was written by the Maastricht-LAB coordinator.

In the first period of M-LAB, an experiment was conducted about sustainable energy. Although we addressed the theme ourselves, we immediately stated that we wanted to cooperate with local organizations which had enough ‘energy’ to cooperate with us. To this end, we approached a local secondary school which had shown sustainability ambitions in the past: they had participated in an open call by the provincial government to apply for grants to make their school more energy-neutral. This seemed a perfect partner to work with and to create an exemplary project for the city.

M-LAB organized several multidisciplinary workshops with the director of the school, municipal policy-makers and three external experts. Together we agreed on a sustainability approach focusing on (1) making the building more energy-neutral, (2) implementing sustainability in theory and practice within the school’s curriculum, and (3) community building in the network of the school (parents, neighbourhood, businesses, other educational institutions). We also agreed that the school’s director, as the participant with final responsibility for the project, would work on a final project plan.

After the holidays, the director of the school announced that he had accepted another job at a different school, so he could no longer work on the project. We as M-LAB offered to write the project plan ourselves, so other employees or teachers of the school could implement it together with us. But after the director had spoken to his staff, he concluded that there was not enough organizational support for the project. M-LAB decided to end the project, since one of the key requirements for starting it was that M-LAB would not take final responsibility for the project.

The first thing we learned from this was that the willingness of an initiator, and sometimes the organizational support of the institution represented by initiator, is crucial for the continuity of a project. And secondly we learned that it is crucial to clearly state at the beginning of a project the expectations and roles of the participants, especially when experimenting with co-creative methods and aspects of transdisciplinary participation. As it was, it was not fully clear whether M-LAB or the school was the actual initiator of the plan.
Design Principles
How to maximize learning

Identifying aims and participants
• First identify the major aims of learning: what is the learning expected to contribute to the overall purpose and functioning of the lab? What are the intended outcomes?
• Carefully select the participants in a learning process: given the major learning aims, who should participate and why? And at which level (lab or individual experiments)?

Formulating goals and designing a structure
• Jointly formulate learning goals: involve all selected participants in the formulation of the learning goals, which should have a direct relation to the major aims of learning. This may start out as a very open process, with inputs from all participants, but should result in only a handful of learning goals. Too many learning goals make a structured approach impossible to implement effectively.
• Design the structure of the learning process: plan a sequence of ‘sources of new information’ (e.g., experiments, actions, inputs from external experts) and joint reflection sessions. Reflection should not be organized only at the end, but also during the course of an experiment or project. This allows for timely adjustment of plans.

Capturing the lessons learned: planning & budget
• Record the learning process and capture the lessons learned: each reflection session should produce a ‘learning report’ describing what has been learned. The jointly formulated learning goals must provide the structure and focus here, but always check for important lessons derived from unplanned, emergent learning.

• Allow time for learning in the overall planning, and reserve some budget for professional facilitation: the time and facilitation skills required for joint learning processes are generally seriously underestimated. However, without sufficient investments, learning is unlikely to produce worthwhile results.
GUIDELINE 7
CREATING PUBLIC VALUE
Creating Public Value

Assessing and distributing public values
The ultimate objective of urban labs is to function as an innovative form of urban governance, supporting the co-creation of public values, often in contexts of complex urban challenges. These public values may take the form of economic, social and environmental benefits, in both the public and private spheres. It is a basic precondition to ensure the legitimacy of urban labs that they render transparent: (1) the participation of and investments by heterogeneous interests and stakeholders, (2) the monitoring and measurement of various kinds of public value generated through lab activities, and (3) the way these benefits are distributed. Some public values, investments, costs and benefits are more easily monitored and measured than others. While there can be no definitive solution as to how assessment and distribution should be carried out, it is important to address issues surrounding the harvesting of results produced by urban labs. This needs to be done above all to secure just and fair distribution of co-created public values, but also to secure legitimacy and the trust of engaged stakeholders and the wider community.
Harvesting results

Urban labs are vehicles of urban governance for the production of public values, which can take a wide variety of substantial forms, including the benefits of the process itself, for instance in enhancing communication and understanding between participants. Successful urban labs are those that manage to co-produce public values and distributing them fairly. It is consequently of great importance to assess the qualities and quantities of public values produced, as well as their distribution across all parties concerned.\(^1\)

Evaluations must be contextually relevant

Our case studies have shown that the wide range of issues that can be addressed in and through urban labs makes them ill-suited for uniform, inflexible evaluation templates. The intended outcomes of a lab may include material results, as in Maastricht-LAB, or be geared toward ‘softer’ and less quantitative processes, as in several of the Malmö labs. Hence, harvesting results can be a fundamentally varied process, depending on the specific values and aims used to guide the experimentation. As was briefly mentioned in GUIDELINE 1, we therefore wish to emphasize the importance of communicating, both internally and externally, what each participant considers to be a successful outcome.

Some results from the labs included in the present study even suggest that the very term ‘success’ might be more of a hindrance than a help, as it suggests tangible solutions and may lead to ‘the solutionist trap’. This can diminish the notion of having a license to fail, thereby inducing participants to avoid more experimental ideas. It is also not uncommon for experiments to have unintended, but not unwelcome, outcomes. The lab story from the City of Graz below, which describes some of the outcomes of testing guidelines for citizen participation, shows that the experiment did not spur the further use of guidelines within the municipal administration, but rather made civil servants more aware and more practically engaged with the very issue of public participation itself. Had the experiment employed pre-fixed evaluation criteria for ‘creating guideline-based modes of working’, the experiment would have to be deemed a failure and fundamental values would have been lost or obscured.

Public value

While many urban labs fall under the broad category of social innovation, it is not uncommon for labs to include more concrete and tangible elements, such as urban sustainability innovations or experimentations relating to the so-called ‘green economy’. While physical and monetary outcomes may be easier to monitor and measure, issues still remain regarding the way these benefits are used and distributed throughout society. A key concept here, and one often used in relation to the practice of urban labs, is that of public value. As mentioned in GUIDELINE 1, the emergence of public value is rooted in criticisms of the ‘new public management’ approach. Managing cities as if they were corporations has resulted in social and economic polarization and ‘democratic deficits’, so better models for urban governance have been sought.

As a key concept in urban governance, public value is relatively new.\(^2\) The process of co-creating values in dense urban environments, however, is as old as cities themselves. The issue at stake relates to collaborative efforts, not only in terms of monetary investments, but also investments of time and effort, as well as qualitative inputs essential to the values produced, be the services or goods or durable infrastructures. And it relates to the distribution of those public values that these collaborative efforts produce. These are partly accounted for in terms of flows of revenues (exchange values), for instance increased revenues for firms in and near the specific urban lab project, and partly in terms of concrete object-oriented use values, for instance refurbished public spaces or local services, enhanced education opportunities or recreational facilities.
To the extent that public values are rooted in place, there is a tendency for many of them to benefit property owners. Historically, city governments have utilized a number of land policy instruments (e.g. municipal site leaseholds) and taxation to ensure that a reasonable share of those public values that are not created directly for property owners are channelled to the common municipal economy. An effective way to secure common access to and the sharing of public values co-created by urban labs is to include elements of expanding urban commons in the very design and agenda of the lab (see GUIDELINE 2).

**Labwashing**

Tensions between powerful property owners and large financial investors on the one hand and citizens seeking specific forms of urban use values on the other hand, with municipal government often in between, tend to complicate what wishful thinking might otherwise see as harmonious win-win processes of public value creation. There is a risk inherent to urban labs that they turn into co-opted instruments, which appear to be innovative practices fostering democratic governance, while actually achieving little in terms of shifting the status quo of ‘business as usual’ in urban development. This is the meaning of ‘labwashing’. Urban labs need to navigate through the process by means of a balancing act. If powerful actors are allowed to determine the agenda and the process, and capture most of the co-created public value from lab activities, the lab can be criticized for ‘labwashing’. On the other hand, swinging too far in the other direction runs the risk of alienating critical stakeholders and diminishing the relevance of the lab.

**Social capital**

An important public value produced in urban labs is the formation of social capital. Several of the labs have emphasized that the most beneficial outcomes are not related to practical achievements as such, but rather to collaborative learning (see GUIDELINE 6). Reflective practice and mutual learning are two of the central elements of urban labs. However, the learning outcomes of urban experimentation are to be regarded as results of a potentially highly structured and strategic process.

---

Lab Stories
from the cities of Graz and Antwerp

The following two stories provide examples of what kind of values can be generated by urban labs and how they can be measured.

Practical experiences with testing the guidelines for citizen participation in Graz

This story was written by the Head of the Department for Citizen Participation, City of Graz

As the responsible civil servant I was curious to see how the decision on ‘Guidelines for Citizen Participation in Projects of the City’ would influence the administration’s daily routine. Representatives of the administration were just as much involved in the cooperative development of these guidelines for the institutionalization of citizen participation as were citizens and politicians. In workshops, meetings and management games, a special point was made of generating results that yielded something positive for all people concerned. Despite all this, there was some apprehension that the specifications in the guidelines might cause an amount of extra work that the administration could not cope with, and that, generally, too much might be expected from the city administration. During the first two years of the guidelines being applied, these fears were not confirmed. So far, colleagues have in the main always told me that the guidelines provide clear structures and specifications that are all suitable for daily use and that are perceived as being helpful. What was mentioned, for example, was that the specification for setting up participation concepts was not seen as an additional obstacle but was perceived to be of assistance in the preparation of participation processes with regard to both context and organization. The prerequisite is, however, that colleagues do not feel left with a predefined template to be filled in, but that we set out together to draw up the concept.

I have gained the impression that, instead of generating unrealistic expectations towards the local administration, the guidelines for citizen participation offer opportunities for and approaches to clarification and communication. These may concern, for example, the things that can be discussed in the participation process, or reasons why they cannot be discussed any longer. If this is clearly worked out in a participation process and communicated in the process, this yields very realistic expectations by all people who become involved in the process.

There was no sudden hype breaking out after the introduction of the guidelines; participation processes do not spring up like mushrooms, and no top-down decreed ‘particitainment’ has occurred. Rather, I have the impres-
sion that the guidelines have caused greater sensitivity in the field of citizen participation, and that dealing with the topic of citizen participation is now done in a more differentiated and considered way.

Assessing the impact of Citylab2050 in Antwerp
This story was written by an URB@Exp researcher

Citylab2050 started in 2013. In the period from 2013 to 2015, the Citylab focused on building a network, stimulating cross-pollination between various actors, setting up experiments and communicating all these activities externally in order to attract new stakeholders. Halfway through 2015, the municipal organization considered it necessary to evaluate Citylab2050, in terms of network deployment, organizational structure, experiments and the added value for participants provided by the lab activities. This first screening tried to make the results of the first phase more tangible. The conclusion was that the Citylab2050 was promising, but that it needed to focus its activities more, and that the idea of a learning network needed to receive more attention. The Citylab2050 then focused more explicitly on innovation, backed up by a ‘theory of change’ functioning as a learning tool (see also the lab story in GUIDELINE 6).

From 2015 to 2016, the Citylab project team jointly developed such a ‘theory of change’, together with a set of indicators to measure the progress of the lab with the help of this theory. Towards the end of 2016, several people involved in the Citylab organization expressed the wish to have better tools to assess its impact. Both within and outside the municipal organization, a transparent impact assessment would contribute to the legitimacy of the lab, and justify its prolongation. Such an assessment can be useful in view of the 2018 municipal elections, but also in the quest for new partners.

The Citylab2050 project team further explored the idea of an impact assessment and came across an approach called ‘outcome harvesting’. This approach is used, for instance, to assess development aid projects. In the light of available capacity, time and budget, the team decided to set up the ‘outcome harvesting’ for the Citylab2050 in a pragmatic way and to focus it on one of the thematic trajectories: Fashion Flows.

The Fashion Flows trajectory was set up in 2014 and its activity is declining considerably in 2017 – not in terms of collaborations and experiments, but in terms of process activities organized by the Citylab2050. The entire trajectory is now being mapped by constructing a process flow chart of all steps that have been taken (at the level of meetings, workshops, events, bilateral contacts, etc.), reconstructing who has been involved when and how, and which outputs and outcomes these steps have delivered. The results of this process flow are supplemented with interviews with persons directly involved...
(partners of a trajectory, people who set up and/or were involved in experiments, people form the municipal organization who have been involved in one way or another). The outcomes of this screening are compared with the hypotheses of the ‘theory of change’. In a synthesis workshop, the project team will discuss the results and possible consequences with all the interviewees. Afterwards, the results of the outcome harvesting of the Fashion Flow trajectory will be shared with all the stakeholders involved in the Citylab2050 at a strategic level (e.g. the core team) in order to reflect on the overall impact of the lab and its functioning.

Design Principles
How to assess and distribute public values

Assessing achievements
• Address the questions ‘Who is to assess? When and how?’ early in the process.
• The large range of values and aims guiding lab activities give reason to be cautious about using uniform, inflexible evaluation templates.
• Assessing achievements can be a fundamentally varied process, depending on what participants consider successful outcomes. These need to be made explicit and assessment needs to be transparent.

Distributing the harvest of public values
• Make an effort to secure fair and just distribution of the public values co-created in the lab activities. This needs to be acknowledged and addressed already in the process of aligning purposes and agendas.
• Including innovative practices of commoning in the design and process of lab activities may be one way to counteract ongoing privatizations of urban spaces, while facilitating fair distribution of co-created public values.

Avoid ‘labwashing’
• The same inclusiveness emphasized in aligning purposes must be carried over into the assessment of achievements and distribution of co-created public values. This facilitates fair distribution while avoiding legitimate criticism of ‘labwashing’, i.e. business as usual under the guise of an ‘innovative’ lab.

Social capital
• The values of collaborative learning may be difficult to assess, but must be sufficiently recognized. This formation of social capital should be one important motivation for continuing to practice urban governance through urban labs.
GUIDELINE 8
CONTINUING LABBING
CONTINUING LABBING

Integrating lab lessons into urban governance structures

Urban labs can be implemented for a variety of operational terms, ranging from short periods to long-term orientations. Irrespective of their lifespan, it is crucial that labs disseminate and anchor the acquired knowledge through internal and external storytelling. The continuation of a lab makes it possible not just to carry on experimenting with innovative solutions, processes and actor constellations, but also to improve collaboration with knowledge centres and like-minded movements. Additionally, the implementation of internal training and education opportunities strengthens the lab practitioner’s social and personal skills to perform effectively in realizing the lab’s goals and missions. When the lab’s lifespan as pre-defined in its operation model has expired, the question arises what to do with the knowledge and experiences gained. Basically, four scenarios for future development routes of urban labs are imaginable: continuation, expansion, replication, and integration of lab principles into urban governance structures.
Continuing Labbing

Most urban labs are implemented as temporary organizations with operational times ranging from 1-5 years. Short-term strategies for urban labs can offer the advantage of allowing the actors involved to focus on priority actions in relation to the thematic focus of the lab, including experimenting with alternative operation models or creative stakeholder participation processes. Urban labs with durations of more than 5 years offer the benefit of allowing actors to improve the organizational setup of the lab (including teambuilding, working methods, financial structure and personal skills), building trust among stakeholders, establishing reliable networks and ensuring the sustainability of thematic goals, by, e.g., fostering behavioural change or raising awareness. Nevertheless, the lifespan of an urban lab does not depend only on such content-related aspects, but also on the individual operation model. If the urban lab is (partly or wholly) reliant on funding programmes, subsidies or donations from public or private institutions, the results of evaluation or monitoring processes commonly decide on the continuation or termination of the lab. Therefore, labs with diversified funding structures can act more independently also regarding questions about their own run-time (see GUIDELINE 4).

Disseminating and anchoring lab lessons through storytelling

Looking at some of the more practical achievements of the URB@Exp labs, it is clear that several core results echo across cities and experiments. One of the recurring and fundamental outcomes is the importance of storytelling. Irrespective of the lab’s operational term, it is crucial that lab practitioners disseminate and anchor the knowledge they obtain about thematic and organizational topics through internal and external storytelling, as a means of sharing and interpreting the experiences gained. The internal use of narrative discourses can help to influence management decisions, unify the group and influence collective reasoning processes. By collectively constructing narrative discourses, a lab team acquires a common understanding of past experiences, present strategies and future plans. Storytelling is an effective method for communicating complex information and for supporting the interpretation of other types of evidence, such as results of statistical analysis or theoretical models. Collectively constructing stories involves organizing information and perceptions into a sequence that implies cause and effect, while also harmonizing various viewpoints to deepen a joint understanding. In this way, an internal narrative discourse can also be an important method for resolving conflicts, addressing issues and facing challenges. External storytelling in the form of speech, writing and visual communication is a powerful tool in the professional dissemination of lessons learned, as narration supports the transformation of experiences and knowledge into influence and action. At a purely practical level, harvesting results of urban labs can therefore be a matter of collecting stories, examples of which can be seen throughout these guidelines in the form of ‘lab stories’. The storytelling may be rewarding in itself, a value appropriated and shared by the storyteller. And it may be considered a public value owing to its function in learning and guiding future urban lab activities.

Cooperating with knowledge centres and like-minded initiatives

Strategic alliances with university and research institutions play a major role in open innovation approaches, as they have the potential to foster social learning processes as well as meaningful social engagement. Moreover, they can help to achieve participation in decision making and agenda setting. Therefore, urban labs with long-term orientation should aim to cooperate with research institutions in order to foster societal learning, participation and empowerment. Moreover, urban labs should also try to connect with like-minded initiatives and local activists to increase the momentum towards implementing transformative practices for sustainable
and innovative methodologies, as well as networking and sharing information about funding opportunities for societal change processes. This enables support for the development of more interactive public administrations that learn from their actions and from feedback received from civil society.

Exploring options for sustaining urban labs
When the lifespan of a lab as pre-defined in its operation model has expired, the question arises what to do with the knowledge and experiences obtained. If the urban lab is regarded as a suitable instrument for experimenting with new solutions, processes and actor constellations, then should the lab or its activities and methodologies continue in the same or a different way? Another option would be to integrate solutions, ideas, methods or processes tested or developed in labs into urban governance structures, in order to improve the city’s abilities to cope with complex change dynamics. This brings up the question of how to foster a culture of participation with active stakeholders that are willing to join forces to implement strategic practices for social transformation. Based on these considerations, the following scenarios explore alternatives for future development routes of urban labs:

- **Continuation of the lab:**
  This scenario implies that the lab and its activities continue as set out in the original operation model, without major changes to its organizational structure. It is also possible that the lab continues while its function and core activities shift over time (see the lab stories from Maastricht and Malmö). In both cases it is essential to keep developing and applying suitable internal evaluation methodologies to support the lab’s practices, instead of accepting that they are subjected to inflexible assessments from external parties judging the impact of the lab’s innovation efforts. Evaluation procedures other than focus group conversations or answering questionnaires have the potential to help connect ideas, stakeholders and outcomes of innovation processes. This enables the flow
of feedback, knowledge and experiences between individuals, groups and institutions to be improved, which in turn has positive effects on the lab’s innovation potential².

• **Expansion of the lab:**
This potential development path of an urban lab focuses on growth in terms of increased staffing and financial resources that enable the extension of the thematic focus and/or lab activities. This would result in a major adjustment of the original operation model. Hence, the organizational structure of the urban lab has to be adjusted to fit new goals, target groups and (financial) responsibilities.

• **Replication of the lab:**
If the urban lab is positioned as a hybrid organization that connects society with government institutions, it may be worth considering to replicate the lab in other institutional settings. Typically, urban labs that act as boundary organizations have close ties to specific administrative units based on their thematic focus (see **GUIDELINE 3**). The transfer of lab principles and working procedures to other municipal departments and stakeholder networks could support the division of responsibilities amongst urban actors. Such an innovative organizational change from within has the potential to reduce the general dependence on public institutions in favour of more balanced networks with improved abilities to cope with disturbances and change processes³.

• **Integration of the lab:**
The embedding of lab principles, practices and knowledges into urban governance structures would imply a permanent behaviour change in the administration of cities (see the story from Maastricht). The integration of lab characteristics into urban development would favour the scaling of improved process designs and sustainable ethics, instead of solutions⁴. Instead of hierarchically organized administrative units, networked governance systems would share power and use synergy effects between stakeholders. Such new ways of operating beyond inflexible top-down institutions would involve the establishment of governance structures that are more receptive to experimentation and failures. Instead of implementing rigid blueprint plans, urban development would move to more flexible and risk-tolerant co-design approaches that regard change dynamics not as a crisis but as a new opportunity. Moreover, such an organizational change would imply a behavioural shift away from favouring privatization towards an orientation to transparency and commons, as well as from implementing control mechanisms to mutual trust and empowerment and from a profit orientation to purposeful actions to create public value.

---

3. ibid.
4. ibid.
Lab Stories from the cities of Maastricht and Malmö

The following lab stories from Maastricht and Malmö provide insight into specific aspects of the question of continuing an urban lab and its activities.

Urban labs: temporary vehicles for change or permanent platforms for learning and experimenting?
This story was written by an URB@Exp researcher, based on interviews with the M-LAB team

In 2012, Maastricht-LAB was established as an explicitly temporary vehicle to experiment with concrete projects in order to explore new urban development processes in a changing socio-economic context. For a period of two years, lessons were to be learned about new approaches, and translated into recommendations for the municipal authorities and other organizations involved. The projects were initiated by the municipality and led by the M-LAB coordinators, in close collaboration with various local partners.

In evaluating these first two years, the M-LAB team concluded that two years was too short to reach the ambitious goal of a transition towards new forms of urban development, including new ways of thinking, working and organizing urban development challenges. Looking back, this seems obvious. No one can produce definitive answers to such difficult questions within a mere two years. Nevertheless, we did learn important lessons. One of them was that there are a lot of bottom-up urban development initiatives in the city that could use support from the municipality to realize their full potential.

In 2014, M-LAB started a second period, taking on and experimenting with the role of facilitator for three years. M-LAB became an open platform for co-creative urban development, and external initiators could submit project proposals. If accepted, projects leaders of M-LAB became partners to the initiators, focusing on facilitating and learning about the project, on developing a co-creative working method and on the role of local government in such processes. In addition, an open network of ‘citymakers’ was established, for people who did not want to start a project (immediately) but wanted to contribute to projects and activities of M-LAB.
After the evaluation of this second phase with several external partners and civil servants and policy-makers involved, M-LAB concluded that it had grown into a trusted player in the urban governance landscape of Maastricht, to work on several urban projects. As a facilitator, it had proved its value for small-scale, experimental projects in the city. At the same time, efforts to translate M-LAB lessons into recommendations for the municipal administration have become more permanent.

In 2017, M-LAB entered a third phase, once more having slightly adjusted its role. M-LAB continues to work with external project initiators, but there will also be room again for projects initiated by the municipal authorities. A strategic agenda will help the M-LAB team to focus learning processes at a thematic level and proactively search for interesting partners, projects and coalitions. ‘Creative hubs’ will be one of these topics, as decided by the city council (with M-LAB acting as a facilitator of the creation of creative hubs).

Last but not least, another vehicle has been established to disseminate and implement M-LAB’s operational mode across the municipal Department of Spatial Planning, a so-called ‘test bed’. So while the third period of M-LAB will end after three years, principles emerging from the lab are being integrated more permanently within the Department of Spatial Planning. The ‘M-LAB mode of working’ is becoming a reference for process facilitation in a collaborative setting with external partners. A framework is being developed to explicitly describe three modes of operation within the municipal apparatus: (1) blue (‘local government as a machinery’; standardized processes and a controlling role); (2) green (‘new public management’; public-private partnerships with a strong directing role of the municipality); and (3) yellow (‘public value creation’; co-creation processes, new coalitions and a role for collaborators/partners like M-LAB). The next step will be to raise awareness within the Department of Spatial Planning of this framework and the increasing importance of this ‘yellow’ mode of operation, before implementing a comprehensive set of actions and organizational changes.

One question we cannot answer right now is if M-LAB will still exist in 2020. The municipality decided to postpone a decision on this issue and evaluate in 2019 whether the function and role of M-LAB are still necessary. There are arguments for and against both: continuing or ending M-LAB. Is it a problem that M-LAB becomes more and more an institution in itself? Does it hamper the necessary organizational change in the municipal organization? Or should M-LAB become a permanent platform for the city, to secure sufficient room for experimentation in Maastricht? We do not yet have a definite answer…

Co-ownership to overcome crises and ensure long-term sustainability of lab activities and their outcomes in Malmö

This story was written by an URB@Exp researcher, based on interviews with actors and field notes from the meetings and activities at ReTuren.
Co-ownership played a central role in facing difficulties and crises at ReTuren. For example, conflicts with some users were addressed in collaboration with local actors. Shared strategies were also developed to deal with drug-dealing activities happening outside the ReTuren premises.

Co-ownership has also been important in ensuring the long-term sustainability of ReTuren. Ten months after its start, and after an intense period of recurrent incidents in the area, the municipal waste handling organization decided to terminate the pilot project, because operating it was too demanding for the organization and too far from their core competences. The people involved in ReTuren and those living in the area quickly responded to this decision. Citizens protested against the decision and the actors involved quickly mobilized to find possible solutions.

People from the area put up signs outside the premises asking for the continuation of ReTuren (see picture). They expressed their frustration and asked for further explanations on social media. Their comments highlighted that ReTuren was a service appreciated by the community not only for the possibility to dispose of waste, but also because it contributed to a more sustainable and clean neighbourhood. They stated that they were tired of temporary projects that ‘just come in and use our neighbourhood as a test site’. They signed a petition that was sent to the mayor of Malmö. Citizens’ voices reached the politician overseeing the waste handling organization, who publically stated on different occasions that ReTuren had to continue.

The involved partners mobilized as well, particularly local civil servants. In a meeting organized by the municipal waste handling organization right after the closure of ReTuren, all partners expressed that they un-
understood the reasons behind the decision, but they were surprised that the organization had not consulted them to see if some alternative solutions could be found. The managers of the waste handling organization said that despite the engagement of different actors on the ground, they felt alone in bearing the overall and formal responsibility for ReTuren. At that meeting, the local district authorities proposed to take over the main responsibility for ReTuren and invite the partners to find a short-term collaborative solution to reopen ReTuren as soon as possible. A few weeks later ReTuren reopened, though with shorter opening hours. While the waste-handling department took care of waste disposal, the local authorities took responsibility for the people working on the premises, and citizens were involved in operating the service for exchanging goods and in the workshop. At the same time, a number of meetings including local civil servants, representatives of the waste handling department, researchers and the makerspace have been organized to develop a new and long-term concept for ReTuren, with a clear focus on close collaboration among the partners and formal distribution of responsibility and ownership among them.

Design Principles
How to continue labbing

Disseminate and anchor lab lessons through storytelling
- Establish an internal narrative discourse that supports management decisions, unifies the lab team and fosters collective reasoning processes.
- Cultivate a close dialogue with external stakeholders to transform the lab’s experiences and knowledge into influence and action.

Cooperate with knowledge centres and like-minded initiatives
- Establish cooperation with like-minded movements at local, regional, national and transnational levels to increase the momentum towards implementing transformative practices.
- Foster strategic alliances with universities and research institutions, as they have the potential to boost social learning processes as well as meaningful social engagement.

Build capacity to cope with complex change dynamics
- Establish conditions that allow lab practitioners to react to change as well as to evaluate and address crucial questions.
- Foster external capacity building, including partnership development, exchange of knowledge, skills and innovative methodologies, as well as networking and sharing information about funding opportunities for societal change processes.
Explore options to sustain the urban lab

- In case of a continuation of the lab, consider if there is a need to adapt the original operation model to changed organizational circumstances.
- Continuing labs should think about establishing suitable internal evaluation methodologies to support the lab’s practices.
- Examine whether it is possible to transfer lab principles and working procedures to other communal departments and stakeholder networks.
- Consider integrating solutions, ideas, methods or processes tested or developed in the lab into urban governance structures.

The end of labs or the labification of everything?

In recent years, we have witnessed a mushrooming of ‘urban labs’ in our cities. But is it a phenomenon we need to reckon with in the future? Or is it a temporary buzz that is over before it even matured?

Calling whatever you are working on an ‘urban lab’ makes it sound experimental and unconventional. We suggest a somewhat more restricted use of the term. And urban labs should at least aspire to work towards the design goals presented in this booklet. This is not to say that some urban labs are not real urban labs. We just want to suggest that urban labs can fulfil a useful function if used in an explicit and reflective way. They are certainly not a remedy for each and every challenge cities may face.

‘Urban labs’, then, is just a name, and says little about its content. Making it a useful practice is a completely different story. And it is precisely these practices that might be the most valuable outcomes of urban labs, inspiring similar approaches even if the name should go out of fashion. The design principles presented at the end of each guideline in this booklet can be regarded as lab principles to be experimented with in other contexts.

Future work with these lab principles could help to identify best practices in three areas that have proved to be still problematic: guiding learning to achieve collective learning processes; collaboratively monitoring multiple public value creation efforts as a part of the process; and enhancing our understanding of the possibilities for urban labs to mature and become institutionalized.

In the end, urban labs are just as much contested as most things in life: different people want to achieve different things with an urban lab (which brings us right back to GUIDELINE 1). It is up to users to shape and transform them into spaces where collaboration, experimentation and learning can thrive.
This booklet of guidelines is an outcome of the URB@Exp project funded by JPI Urban Europe.
ALIGNING AGENDAS

FOSTERING PLURALITY

FINDING A POSITION

BUILDING THE ORGANIZATION

EXPERIMENTING ALL THE WAY

MAXIMIZING LEARNING

CREATING PUBLIC VALUE

CONTINUING LABBING