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SmarterLabs

Improving Anticipation and Social Inclusion in Living Labs for Smart City Governance

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Project goals

The project aims at developing a Living Lab approach to deal with two major risks to successful implementation of smart transport technologies: unforeseen barriers to large-scale change of socio-technical systems and exclusion of social groups not matching the required 'smart citizen' profile.

Retrospective analyses and action research in Living Lab experiments will be performed in Bellinzona, Brussels, Graz and Maastricht.

(Goals did not change respect to the original project description)

Summary

The 'Smart City Living Lab' is an emerging approach in European cities. It brings together citizens, policymakers, businesses, and researchers to test smart, ICT-based solutions to urban problems in real-life contexts. However, solutions that 'work' in the particular reality of a Living Lab may not be adopted at a large scale. Urban infrastructure is interwoven with the daily lives of citizens and therefore difficult to change, and large groups may not even have access to ICT-based solutions.

The SmarterLabs project develops a novel approach that anticipate major risks of a smart technology innovation (resistance to change, exclusion of social groups) and performs action research in Living Lab activities in four cities: Bellinzona, Brussels, Graz and Maastricht. By explicitly addressing anticipated barriers and incorporating groups at risk of exclusion in the Living Lab experiment, the chances of successful uptake of the end result are enhanced.

Large-scale adoption of smart, low-carbon transport and mobility technologies will result in reduced fossil energy use and reduced emissions of greenhouse gases. In addition, improved social inclusion will be of particular value to the citizens and NGOs representing citizen interests, as the novel approach explicitly aims to involve citizens not matching the usual 'smart citizen' profile as participants in Living Lab experiments, allowing them to influence the innovation process.

For all European cities with Smart City initiatives, the projects delivers generic implementation guidelines for Smart City Living Labs on how to address barriers to upscaling that may stem from resistance to large-scale change in socio-technical systems and from people being excluded (in direct or indirect way). By giving special attention to anticipation of possible resistance and social exclusion in the form of Living Labs, the results of Smart City initiatives (now and in the future) are expected to become better scalable and more robust in terms of value creation for a wide range of stakeholders.

Work undertaken and findings obtained

Activities have been performed according to the SmarterLabs work programme presented in the ENSCC full proposal: we concluded WP3 activities, kept working on WP4 and started working on WP5. Besides this, project management (WP1) and communication activities (WP6) have been regularly held.

Two general project meetings and one dissemination workshop were held in 2017:

- general project meeting: Bellinzona (CH), March 29-31 2017;
- general project meeting and dissemination workshop: Helsinki (FL), October 25-27 2107.

The following sections provide a summary of the activities we performed throughout the year 2017.

WP2 "Literature review and Research methodology project"

No activities have been performed in 2017 on WP2, since they had already concluded in 2016. The result of WP2 activities (one final report including both *D2.1 Report on research methodology WP2* and *D2.2 Report on literature review WP2* indicated in the project proposal) is available online on the

SmarterLabs project website, in the "Publications and results section" (https://smarterlabs.uni-graz.at/en/publications-results/).

WP3 "Retrospective analysis on urban mobility governance"

Activities within WP3 were mainly performed in 2016, when an advanced draft of the "*D3.1 Report on retrospective analysis urban mobility governance WP3"* deliverable had been developed.

Elaboration of such a deliverable has been performed under responsibility of the University of Graz (WP3 leader); as for the other project work packages, however, all the academic partners were involved in co-designing its outline and contents. In particular, main contributions developed by the Swiss partners are those presented in Chapter 2, summarizing the retrospective analysis related to past urban and mobility transformation processes in the Bellinzona area.

The analysis we performed considered primary and secondary sources and also included interviews with the key actors involved in each case study. The case studies we selected for the retrospective analysis are the following ones:

- *Agglomeration plan for the Bellinzona area (PAB2 and PAB3):* analysis of the governance processes behind the elaboration of the Plan for the Bellinzona urban agglomeration. The analysis considers the two versions of such agglomeration plans, elaborated for Bellinzona since 2011. Special insight has been dedicated to analysing the evolution of the urban bike-sharing system, initially proposed by PAB2, and then replaced by a radically different measure aimed at offering citizens long-term bicycle rental facilities (the "Ricicletta" project).
- *Mobility plans for schools*: an example of a successful bottom-up local process to stimulate individual behaviour change; replication of such an approach to other geographic contexts and different scales encountered however some barriers, which were investigated;
- *Transformation of the Prato Carasso area*: an example of failure of Municipal plan for a large-scale urban transformation, mainly due to the lack of proper involvement of the key actors and interests among the population.

Discussion on an advanced draft version of deliverable D3.1 has taken place during the third project meeting held in Bellinzona, when we performed a cross analysis of the retrospective analyses that had been performed in each case study. The major outcome of such a process was the identification of a set of key constraints that are found to affect social inclusion and up-scaling, together with possible ways to anticipate them. Such a list of constraints and ways to anticipate them was included the conclusions of *D3.1* and has been used as a reference to guide WP4 activities.

Since such a table encompasses in an intuitive and simple way all the results from W2 (Literature review) and WP3 (Retrospective analysis) activities, we include it here. The full D3.1 deliverable is available online on the SmarterLabs project website, in the "Publications and results section" (https://smarterlabs.uni-graz.at/en/publications-results/).

Table 1 Types of constraints on upscaling and social inclusion in Living Labs and ways to anticipate them.

		Typical constraints in Living Labs	Ways to anticipate constraints in Living Labs
Upscaling – related to Living Lab	#1	**Limited representativeness of users in LL[8]** *Design, conditions and results of pilot projects are of only limited applicability to new projects. Generated knowledge is very much related to the context of the LL only. Resulting limited potential to apply the results of the pilot projects to a larger scale.*	• Include future users[8] • Include diverse groups of relevant stakeholders
	#2	**Limited learning[8]** *No explicit monitoring of lessons learned in the pilot. Lack of comprehensive knowledge – no single actor has an overview of all options, mechanisms and impacts. Hence no transfer of learnings to future users.*	• Develop explicit learning strategy[8] including both single- and double loop learning[9]
	#3	**Poor timing[8]** *Conditions change during the course of the LL so that by the time the pilot is finished, the policy climate no longer supports the adoption of the innovation. This is also reflected in a lack of urgency to change existing practices.*	• Maintain flexibility in the pilot so that it can be adjusted to developments that may arise[8]
	#4	**Wait-and-see attitude[8]** *LL is run as a routine project with no special strategy dedicated to diffusion of results during and after the pilot. Either upscaling effects are expected to occur by themselves or strategies to enhance the diffusion of knowledge and learning are put into place after the pilot ended.*	• Include upscaling strategy at beginning of LL project[8]
Upscaling – related to context	#5	**The outcomes of the LL do not find consensus beyond LL participants[10]** *Not enough support or no political majority for LL results. Decision makers are not familiar with or open to methodology of co-design approaches.*	• Develop vision in participatory way (emphasizing 'the common')[11] • Make explicit what is contextual and what is not
	#6	**Lack of institutionalization of the LL results[8] and fragmented institutional arrangements with expert-driven way of thinking and powerful lobbies[12, 13]** *Lacking cooperation between different parties involved (e.g. city departments) and no clear distribution of responsibility. Decision makers are not familiar with or open to methodology of co-design approaches.*	• Foster transparency and collaboration between administrative units • Include future users/relevant stakeholders (incl. policymakers) • Carry out multiple (successful) pilots to convince urban planners (and other future users) • Include citizen participation in city policy (e.g. guidelines)
	#7	**'Sticky' urban assemblage (infrastructural/ technical, legal, financial, spatial, social etc.)[12]** *Obduracy of urban assemblage; e.g. persisting infrastructure, long-term contracts, legal 'lock-ins'.*	• Scale jumping of local actors[13] • Develop vision in participatory way (emphasizing 'the common')[11] • Focus on behavioral measures that trigger structural change[14]

		Typical constraints in Living Labs	Ways to anticipate constraints in Living Labs
Social Inclusion	#8	**Rely on (professional) experts in decisive moments** *Aversion of interactions with stakeholders that might add complexity to the policy development process. Hence, too little interaction between decision makers and stakeholders.*	• Include future users[8] and diverse groups of relevant stakeholders • Give voice and responsibility to professional experts, citizens and civil society organizations
	#9	**Reproducing existing power structure inside of LL (exclusion *in* the lab)** *LL setup and applied methods are not neutral and unbiased. Marginalized groups are not sufficiently included or their opinions are not taken into consideration seriously.*	• Assess existing power structure (stakeholder analysis) and identify coping strategies • Include diverse groups of relevant stakeholders incl. marginalized groups • Apply inclusive participatory methods in LL
	#10	**Neglecting effects outside project locality** *Due to focus on LL, effects on its boundaries or neighboring areas might be neglected or forgotten (e.g. decrease of cars in one district shifts traffic to other).*	• Consider cross-scale effects (situation analysis)
	#11	**Limited inclusion of target groups and/or marginalized citizen groups (exclusion *from* the lab)[8]** *Too little attention to needs of marginalized groups, already in the setup of the LL. No appropriate selection of methods to foster broad participation.*	• Include diverse groups of relevant stakeholders incl. marginalized groups • Include future users[8] • Requirements analysis • Cooperation with NGOs and citizen groups
	#12	**No proper distribution of information about LL activities** *Information is not provided appropriately to reach all stakeholder groups. This concerns media releases timely enough, in clear language (incl. translations), via various channels and multiplicators etc.*	• Follow dissemination and communication strategy tailored to specific goals and local conditions (time, channels, language etc.)
	#13	**Uneven or biased 'playing field' of LL events** *LL does not have full support of city government or is only alibi activity. Decision makers are not present at LL events or do not show real commitment. Methods are not tailored to all LL participants.*	• Apply suitable methods tailored to specific goals and target groups • Ensure unbiased and neutral locations (e.g. accessible to everybody) and facilitators • Demonstrate real commitment by LL organizers

Sources: Retrospective cases as presented in D3.1; Additional literature: [8] Vreugdenhil et al. 2010; [9] Brown et al. 2003; [10] Hommels 2005; [11] Dellenbaugh et al. 2015; [12] Banister et al. 2011; [13] Smith 1996; [14] Schwanen et al. 2012

WP4 "Action research in smart Living Lab experiments"

Activities in WP4 are being developed under responsibility of the University of Maastricht. In this WP, however, project partners have more room to move independently, in order to follow and support the specific needs of the living lab activities developed by each City partner. Unifying elements lye in fact in the type of problems that will be taken into account (barriers to inclusion, difficulties in up-scaling and other specific barriers related to each case study, as emerged from literature review and retrospective analysis), while specific case studies face quite different urban and mobility transformation processes.

Building on the outcome of the WP2 and WP3 analyses, a methodology to develop action research in the Bellinzona living lab had already been created in late 2016, together with the related time schedule

(Figure 1). All the Swiss partners, including non-academic ones (City of Bellinzona and Provelo Ticino), had an active role in defining such a methodology and contributed to fine-tuning themes and contents of the Bellinzona living lab.

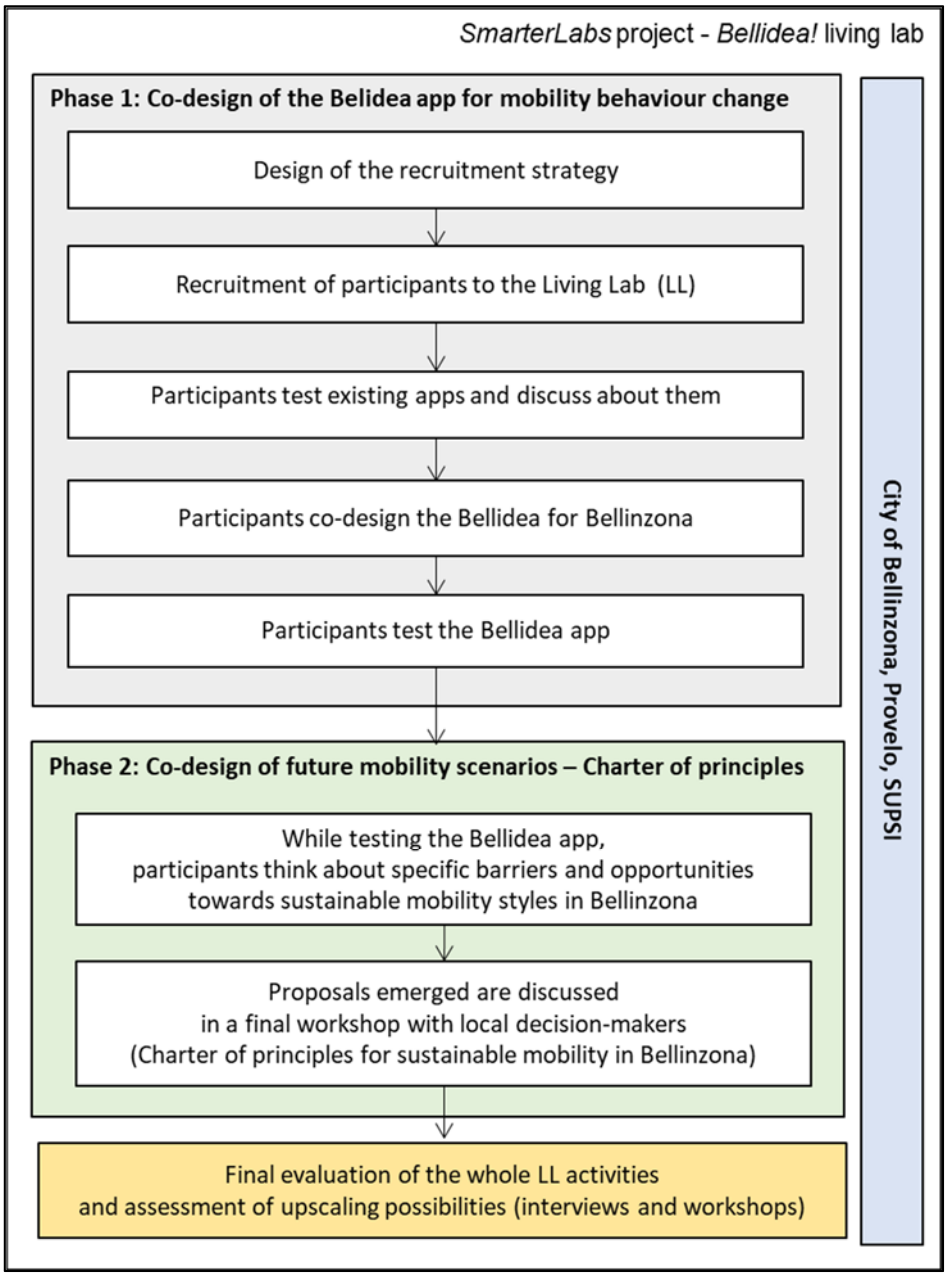

Figure 1 Activities envisioned for the Bellidea living lab.

Focus of the Bellinzona living lab was put in co-designing the smartphone app targeting individual behaviour change. The living lab and the resulting app have been named “Bellidea”, with a wordplay referring to the name of the city, Bellinzona, and the Italian words “bell’idea”, which mean “good idea”. Analysis of literature on living lab experiments highlighted in fact the importance of co-design and learning elements as success factors to reduce barriers to later large-scale adoption at the municipal level, after conclusion of the living lab.

Also, we explicitly introduced an additional phase in living lab activities, aimed at widening discussion from the app to the specific Bellinzona context: once they have developed the Bellidea app, participants to the living lab will be stimulated to reflect on their mobility habits, on possible alternatives to car use

available to them, on opportunities to be strengthened and critical factors to be removed, from a system perspective. In such a context, we will engage them in a workshop aimed at co-creating the “Charter of principles for sustainable mobility in the Bellinzona area”. This will allow the Bellidea living lab to develop bottom-up, participatory elements for future mobility scenarios, opening-up to policy-making and governance approaches for the Bellinzona area.

The final activity we plan to perform, at the very end of the Bellidea living lab process, is assessing its effectiveness, by involving all the citizens and institutions we interacted with: we will perform a final survey, targeting all the living lab participants, and we will also perform a series of semi-structured interviews, targeting city managers and civil servants in Bellinzona and the main stakeholders related to mobility in the region. Through the interviews, we will learn about how they perceived the whole Belildea process and especially investigate possibilities to replicate the same approach for future decision-making processes in Bellinzona, not only within the mobility sector but also in other fields.

Activities performed in 2017 mainly refer to Phase 1: on January, 24 2017 a press release was launched, inviting all the interested citizens to join the Bellidea living lab. All the material produced to support the recruitment campaign (claim, logo, flyer) was made available on the Bellidea website, which was created on purpose (www.bellidea.ch). By exploiting the website, the press release and the Bellidea flyer, in the month of February all the Swiss project partners worked together to recruit participants, by exploiting their personal contacts and addressing stakeholders and related associations and institutions. The recruitment campaign aimed at recruiting citizens living, working or studying in Bellinzona, and at inviting them to take part in six monthly meetings to co-design with us the Bellidea app.

As a results, overall 46 citizens answered our public call to join the Bellidea living lab. So far, we have organized five meetings: one a month from March to May, and then another one in November 2017. After a start with around 35 participants, in the following meetings the number of participants decreased, stabilizing to around 15 persons (see Figure 2). This is typical of activities requiring voluntary engagement over a long period of time and was definitely expected. Our challenge is now to keep the interest high in the small set of participants who followed us through the five meetings performed so far.

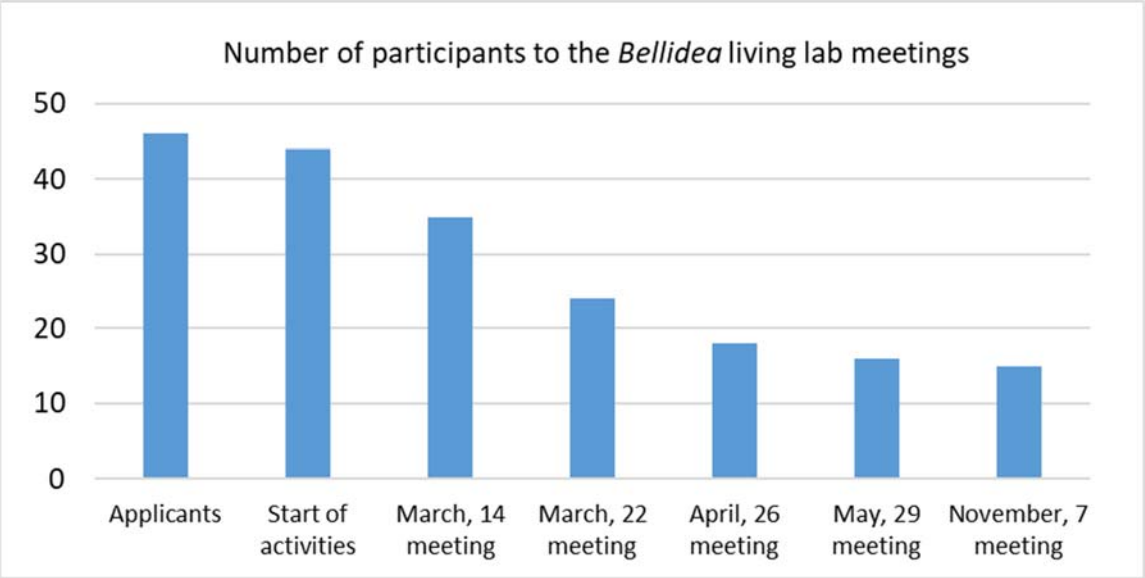

Figure 2 Evolution oft he number of participants to the Bellidea living lab meetings.

A short description of the activities we performed during each meeting is presented in the Bellidea website – News section (http://www.bellidea.ch/news/). All the materials produced to support and stimulate discussion in the meetings and the related outcome are available on the same website in the “documents” section (http://www.bellidea.ch/documenti/). Since the website is mainly used as a reference point for the living lab participants, all the material is made available only in the Italian language.

Here we provide a selection of pictures taken during the living lab meetings (Figure 3), just to give an idea of the type of meetings we organized and how we stimulated interaction with and within the participants: though we were discussing of an app, that is a virtual element, activities were always were concrete and mainly paper-based.

Figure 4 shows the result of such activities, namely a selection of the Bellidea app screenshots, as they were co-designed with the citizens (Annex III instead reports the full set of screenshots we developed). The Bellidea app invites users to collect points, which can be redeemed for prizes (discounts on energy bills, local stores, public transport). Points are based on the weekly percentage of travelling time by public transport, bicycle or walking. Since real prizes are offered, detection of the mode of transport is crucial: requesting users for a validation, as in many mobility tracking apps, would leave room for cheating. Though, current automatic detection capability is limited, with peaks in detection accuracy only reaching 75% of trips. Participants to the lab opted for avoiding validation as much as possible, accepting the risk of not attributing points to users who deserve them, if detection is wrong. In such a framework, based on previous work we had already performed in partnership, we involved a group of researchers of SUPSI-IDSIA, with the aim of develop improved algorithms for the automatic detection of the means of transport (funding of the SUPSI-IDSIA research group was guaranteed by SCCER Mobility funding, offered by SUPSI-ISAAC). Thanks to the improved algorithms that are specifically being developed for Bellidea, the need for validation of a user's trips will definitely be reduced: a short training period will require validation for all trips, providing no points; then, validation will only be asked when the estimated likelihood of the mode of transport falls below a certain threshold.

To engage as much citizens as possible, participants to the Bellidea living lab also suggested to introduce community prizes as well. As a result, besides individual eco-feedback and individual mobility-related challenges, the Bellidea app will also include collective goals for change: in some periods of the year, with the support of a public communication campaign, the app will launch the «Tuttinsieme» («All together») community challenges, such as fro example «This month, let's use the bicycle for at least 20% of our overall travelling time». If app users achieve such challenges, the whole community gets prizes, such as for example a discount on public transport season tickets for all the citizens.

As indicated in more detail in Section "Evaluation 2017 and Outlook 2018", in June 2017 the City of Bellinzona formally approved funding for the realisation of the app. Therefore, in the last meeting held in 2017 (month of November), participants to the Bellidea living lab could start testing the very first prototype of the app. So far, only mobility tracking activities are available, but new functionalities will continuously be made available every week, as it is typical in app development processes, and living lab participants will receive a notification whenever an updated version is available. To support such activities and favour effective testing of the prototype and discussion among the project participants, both an online error notification form (https://goo.gl/forms/CnlmZ946WCYublMr1) and a discussion forum (http://www.bellidea.ch/forum/) have been created and living lab participants have been stimulated to regularly interact with them.

Figure 3 A selection of pictures taken during the Bellidea meetings.

Figure 4 A selection of the Bellidea screenshots developed with the citizens. The Bellidea app favours both individual engagement (by means of individual statitics, challenges and related points), but also promotes community level challenges, with the «Tuttinsieme» activities, launched a couple of times throughout the year.

The final activity performed in 2017 for WP4 refers to the development of a set of information sheets/posters aimed at provoking common citizens and raising their awareness on bicycle use. A selection of clichés about cycling and using the bicycle as an everyday means of transport was made, and for each of them an information sheet/poster was created, which explains why the cliché cannot be trusted, by referring to data or real life experiences made elsewhere in the world. Such a material is supposed to enrich discussion during Phase 2 activities, when participants will be stimulated to reflect on their own mobility patterns, and to think of what would be needed to change them, by addressing the current barriers to behaviour change. Such information sheets specifically focus on the bicycle, which was identified as one of the best options for sustainable mobility in the Bellinzona area. Therefore, they were mainly developed by the project partner Provelo Ticino. Overall, twelve information sheets/posters were created: Figure 5 shows a selection of them, while Annex IV reports all of them.

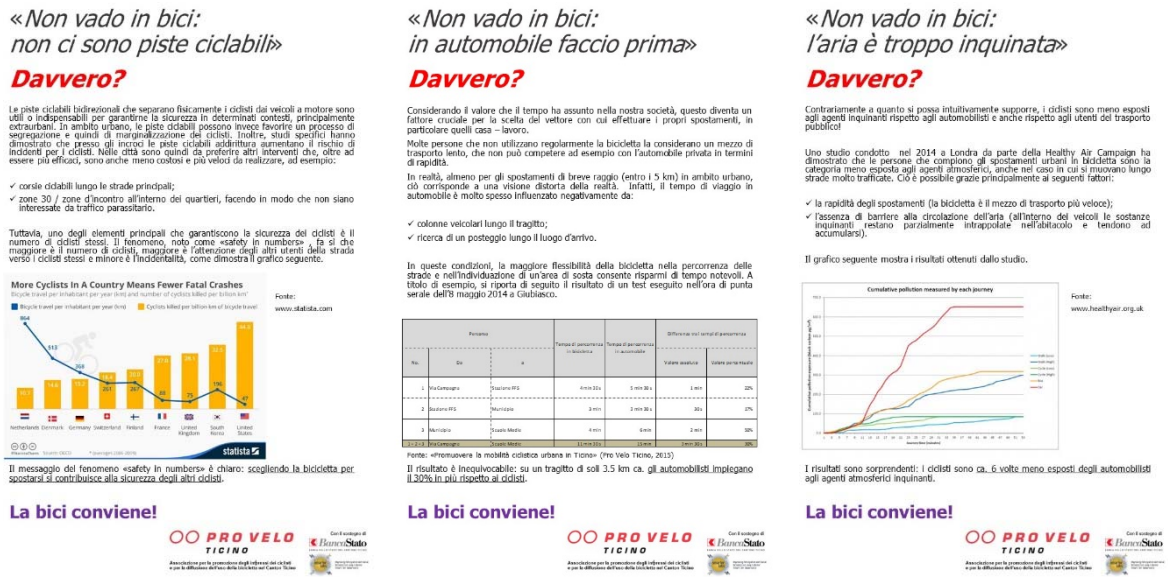

Figure 5 A selection of information sheets/posters created to support discussion on the barriers to the diffusion of the bicycle as an everyday means of transport.

WP5 "Synthesis, guidelines and briefs for 'smarter' Living Labs"

SUPSI is the project partner responsible for WP5 activities. They have not formally started yet, since the elaboration of the SmarterLabs guidelines for instance requires having concluded field activities in WP4. However, preliminary discussions among the project partners have already taken place, regarding the general structure of both the guidelines and the related policy and practitioner brief documents envisioned by the project proposal. For the time being, they will probably follow the structure of the constraints and related ways to anticipate them, that are presented in

Table 1. During the first project meeting planned for Spring 2018, an advanced discussion regarding WP5 and the related guidelines will be performed.

WP6 "External advice and dissemination"

External advice and dissemination activities are co-developed by the Universities of Maastricht and Graz. They are in fact responsible for the management and update of the project website (www.smarterlabs.eu) and the related Facebook page (www.facebook.com/smarterlabs). They also are responsible for the organization of the project dissemination workshops. The first dissemination meeting was organized in Helsinki in October 2017, and a brief description of the activities performed is presented in section "International cooperation".

National cooperation

The SmarterLabs project involves three Swiss partners: the Institute for Applied Sustainability to the Built Environment at SUPSI, the City of Bellinzona and the association Provelo Ticino. These partners have been actively collaborating since the beginning of the project with the common goal of designing goals, scope and main characteristics of the Bellidea living lab in the Bellinzona area.

Activities performed within WP4 (The Bellidea living lab) have been widely advertised in Canton Ticino, with the aim of stimulating citizens either living or working in Bellinzona to join the Bellidea living lab. Therefore, local press, radio and television provided a good coverage of the project goals and activities.

The Bellidea living lab was also presented with a poster at the 2017 SCCER Mobility Conference, held in Zurich on September 15, 2017. The poster is available as Annex II and at http://www.sccer-mobility.ch/p_supporting_measures/Annual-Conferences/AC2017/.

Finally, an oral presentation of the Bellidea living lab was also given at the "MobLab Mobility Conference" (www.moblab-conference.ch), held in Bellinzona on November 15, 2017, and organized by the competence centre for sustainable mobility and railways innovation (msfi).

International cooperation

The SmarterLabs project is an ERA-NET "ENSCC" project, therefore international cooperation is among its core goals. Fruitful cooperation channels have been opened with the academic partners participating in the project, favouring a cross-fertilization of approaches, theoretical frameworks, methodologies and applied tools. This will definitely enrich both practical activities developed in the living labs and will also allow to get a broader comprehension of the phenomena of barriers and social exclusion and how to overcome them. Besides interaction at the academic level, also cooperation between cities and local NGOs has been effectively activated, thanks to the participation of civil servants and NGOs representatives to the project meetings held in 2017. In March 2017, a meeting was held in Bellinzona-Lugano (CH), while in October 2017 a meeting was held in Helsinki (FL).

The meeting in Bellinzona-Lugano (March, 29-31 2017) was directly organized by the Swiss project partners. The first day was dedicated to a visit of the City, particularly aimed at highlighting places and areas that either are good practice examples of how the City faced mobility problems, or are critical examples of urban areas still affected by mobility problems. The city visit was organized in the fashion of a bicycle guided tour through the city: an hands-on experience allowing meeting participants to directly and personally experience local mobility problems and opportunities. During the visit, the project partners City of Bellinzona and Provelo Ticino had the opportunity to also show their premises, introduce their projects and discuss with the meeting participants about their ongoing activities. Also, representatives of the SOS-Ticino association were invited to present their "Ricicletta" project, which was analysed as a success story within the WP3 retrospective analysis. The other two days of the meeting were instead held in SUPSI premises at Campus Trevano and were mainly dedicated ad discussion between the project partners about past and future project activities, opportunities and difficulties encountered.

The meeting in Helsinki (October, 25-27 2017) was instead organized by the University of Maastricht, with the direct support of the president of the European Network of Living Labs (ENOLL http://www.openlivinglabs.eu/), professor Tuija Hirvikovski of the Laurea University of Applied Sciences, and of the Helsinki Living Lab - Forum Virium Helsinki (https://forumvirium.fi/en/), a local organisation supporting the creation and development of living lab initiatives in Helsinki, especially in the field of smart cities. In particular, collaboration with such institutions resulted in the organization of the first "SmarterLabs Dissemination Workshop" in Helsinki, during which the SmarterLabs approaches towards social inclusion and upscaling in living lab processes were discussed and compared with the approaches by Helsinki practitioners involved in Forum Virium and ENOLL living labs in the region of Helsinki.

A summary of activities performed during such meetings is available in the news section in the SmarterLabs project's website (https://smarterlabs.uni-graz.at/de/neuigkeiten/).

Evaluation 2017 and outlook for 2018

Throughout the year 2017 the SmarterLabs project partners kept collaborating in an intense and fruitful way, both at the national level (within the WP4 Bellidea living lab) and at the international level (within activities related to the other project work packages). Project partners kept their initial enthusiasm and commitment to project activities, which are essential elements in a cooperation consortium. Differences among case studies and competences of the project partners, which at first might have been considered as a limitation, soon revealed to be an opportunity to get a wider, deeper and more diverse insight on smart urban transformations in the mobility sector.

Assessment of milestones achievement, as indicated in the ENSCC project proposal, shows the project is generally on time, with the year 2017 mainly being dedicated to performing action research in each city's living lab (WP4).

Regarding specific activities of the Swiss project partners, in early 2017 we started the communication campaign to recruit participants to the Bellidea living lab, by releasing the advertising material that we had developed by the end of 2016. We managed to recruit a number of fourty-six citizens participating in the first meeting of the Bellidea living lab, held on March, 14 2017. In the following four living lab meetings we held, we developed the main concept of the Bellidea app, created its screenshots, identified the rewarding mechanics and identified a preliminary list of prizes. By the end of May 2017, all such material was available. This allowed us to convince the City of Bellinzona to actually fund concrete development of the app, thus moving from its paper design to its digital version. Participation to the SmarterLabs project had in fact been approved in 2015 by the former municipality of Bellinzona, before the municipal aggregation took place, and with a different body of municipal decision-makers. Therefore, though already decided by the previous municipality, funding of the Bellidea app by the new municipality of Bellinzona could not be totally taken for granted. However, the new city decision-makers kept supporting the Bellidea project and approved funding for the computer development of the Bellidea app. The only problem we encountered was that getting the formal funding decision by the City of Bellinzona took a bit more time than expected: their official decision to fund the Bellidea app development arrived in late June 2017, a couple of months later that initially expected. Such a delay implied we could not develop the app during the Summer months, as initially planned. Instead, app development started in September 2017, and is now expected to last until February 2018. Consequently, activities with the Bellidea participants (activities in the living lab) have been postponed of a few months: a meeting has been performed at the start of November 2017, with the presentation of the first components of the Bellidea app prototype (the mobility tracking part, based on the Moves app). In January 2018 a further meeting is planned, for the discussion of the full prototype of the Bellidea app. Finally, another meeting will take place in Spring 2017, when the Bellidea app will be offered to the whole Bellinzona population, and the "Charter of principles for sustainable mobility" in Bellinzona will be co-created. After that, a final survey of the effectiveness of the Bellidea approach will be made, by directly targeting the Bellidea participants. Also, a few final interviews will allow to assess overall effectiveness of the approach from the point of view of the City (both decision-makers and civil servants), and the stakeholders actively involved in the process.

This plan implies a slight delay respect to the original plan of activities for the Swiss partners, which envisioned closure of the living lab activities by the end of March 2018. Though, it will not affect in any way the global SmarterLabs plan, according to whom all activities in the WP4 living labs need to be closed by the start of Summer 2018. Therefore, the second part of the year 2018 will be dedicated to assessing results of the action research in WP4 living labs, performing a cross-site analysis, and starting to draft the final SmarterLabs guidelines on how to design living lab processes so that they can anticipate barriers on social inclusion and facilitate later project upscaling (WP5).

References

All references are indicated in the documents presented as Annexes.

Appendix

Annex I – Deliverable D3.1 Report on retrospective analysis of urban mobility governance WP3

Annex II – Poster presented at the 2017 SCCER Mobility Conference: “Bellidea - A living lab to co-design a smartphone app promoting sustainable individual mobility patterns”

Annex III – Screenshots of the Bellidea app (in Italian)

Annex IV – Information sheets/posters to favour diffusion of bicycle use, to support discussion during the final workshop for the “Co-creation of the Charter of principles for sustainable mobility in Bellinzona” (in Italian)