Market Place
of the European Innovation Partnership on
Smart Cities and Communities

Principles and enablers for citizen engagement: the experience from the European Innovation Partnership on Smart Cities and Communities

Action Cluster: Citizen Focus
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1. EXECUTIVE SUMMARY

Integrated, Innovative Citizens

Cities will always face unforeseen events – from natural disasters to economic crises. They are living organisms, and their physical infrastructure is in a constant state of deterioration and rebirth. Citizens must be valued for their crucial part in this ecosystem. No matter how intelligent the technology and how automated the interactions with it, a city will never run like a Swiss watch, nor will it necessarily be an attractive place to live. The existence of citizens is perhaps one of the only constants in cities as they evolve in new and yet-unimagined ways. Building solutions with the evolving needs and nature of citizens at the heart – and driving this change - will create an adaptable foundation on which to shape the future of cities.

The multitude of challenges facing European cities directly impact the citizens who live there. At the same time, citizens are contributors to urban issues, through their behavior and demography. They are also a crucial component in solutions, offering immense aggregate power from their behavioral change, education, participation and empowerment. .

Citizen Focus in Support of the EIP

The European Innovation Partnership on Smart Cities and Communities (EIP-SCC) brings together cities, industry and citizens to improve urban life through more sustainable integrated solutions. This includes applied innovation, better planning, a more participatory approach, higher energy efficiency, better transport solutions, intelligent use of Information and Communication Technologies (ICT), etc.

The 'Citizen Focus' action cluster is about civil society, industries and different layers of government **working together with citizens** to realize public interests at the intersection of ICT, mobility and energy in an urban environment. The cluster consists of initiatives across Europe working to ensure cities are inclusive of their citizens by:

▸ **Enabling citizens** with the tools and opportunities to create and problem-solve and
▸ **Facilitating conversation** between stakeholders, so citizens' voices are not only heard, but instrumental in designing solutions.

Goals of this document

As a unique format bringing together different industries and sectors in Europe, the EIP-SCC provides an extensive knowledge base of current and innovative projects to help further the discussion on how to best create inclusive European cities.

We aim to share the knowledge generated in the EIP for all city stakeholders such as **integrated urban projects (e.g. from other clusters), policy, civil society, industry and academia** in order to:

▸ **Facilitate integration** with other clusters, projects, cities and beyond by making the clusters' experiences and commitments more transparent

▶ **Aid the replication** of good projects, techniques and concepts by sharing experiences and best practices created by this large body of projects and experts

▶ **Raise key issues and questions** that need to be considered for cities to become inclusive.

This is in line with the Responsible Research and Innovation (RRI)[1] frameworks which the EC has been promoting and integrating into its scientific research programming initiatives such as Horizon2020. Responsible Research and Innovation refers to the collective, inclusive and system-wide approach aiming at a full integration of societal issues and needs into research and innovation activities, in order to minimize and avoid contested innovations and fully respond to diverse existing needs in complex contexts. Public and multi-stakeholder engagement is one of the pillars of the RRI approach.

Principles and enablers for citizen engagement

The Citizen Focus Action Cluster has identified a list of principles and enablers for citizen engagement that can be applied to smart city and other projects. These can be viewed as general guidelines drawn from the wide spectrum of projects and engagement tactics represented by the Citizen Focus Action Cluster and the EIP.

▶ **Simple | Aim to facilitate understanding and usage**.
Aim to catch attention, facilitate understanding, appropriation and usage. Overcome technical and bureaucratic language barriers between policy makers/implementers, technologists and citizens.

▶ **Reciprocal | 'Give for getting' to create fair and lasting relationships**.
Reciprocity is about giving for getting. Whether quality content, energy bill savings, profit, data or attention – citizens must be incentivized with concrete benefits in exchange for their time, effort, money or behavioral change.

▶ **Participative, balanced with representative | Understand benefits and limits of approaches**
Though citizen engagement is about encouraging participation, not every citizen can be involved in every decision. A participative approach must be reconciled with a representative one. There are several considerations for when and how to do so.

▶ **Inclusive | Ensure solutions that are representative of the whole population**.
To engage effectively with citizens, one needs to ensure that solutions are endorsed by the entire population, not only the digitally savvy. Different approaches are needed to address the various needs of citizens' various needs, including those of women, migrants, people in poverty, older people, and other social groups. This must be organically embedded from the beginning.

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[1] European Commission. EUR 25766 - Options for Strengthening Responsible Research and Innovation. Luxembourg: Publications Office of the European Union

▶ **Push approach not pull | Go where people are instead of assuming they will come to you**.

To involve people, and in particular specific demographic groups, cities need to go where the people are. Traditional consultations assume that the people will go the assigned place assigned (either physically or virtually), citiy projects need to go where the people are really. These may be unusual locations where public administration rarely go.

▶ **Online – Offline balanced interventions | Understand benefits and limits of different settings**.

Online apps and platforms can be immensely useful to engage citizens and collect input. Face-to-face and group interaction is likewise valuable for driving discussion and co-creating solutions, particularly with non-digitally savvy groups. Online and offline approaches also come with different expectations that must be considered. There are many examples of both used for diverse ends.

▶ **Consciousness of privacy and rights | Build trust for citizens right from the start**.

Privacy and rights are issues that often come up after a project or organization has already crossed perceived lines. Several commitments present methods and indicators to safeguard rights in the city. It is essential to build trust from the start with the involved groups by explaining what the applied rules are.

▶ **Conscious of citizens' feelings | Understand the feelings that flow on or under the surface**.

Though seemingly obvious, it can be easy to neglect the human side of situations. Often reasons for adoption or dislike of new initiatives may boil down to perception and emotion. By understanding citizens' feelings towards problems and projects, officials and consortia can better create solutions that truly fit and accommodate legitimate concerns and feelings.

▶ **Change-enablers with city stakeholders | Make the municipality a partner**.

Depending on the state of thinking at city offices, education among stakeholders may be necessary in order to gain buy-in and support from the city. This may be the natural result of early project development or a dedicated initiative. Additionally, working closely with different stakeholders, including public private partnerships, can help achieve engagement goals.

▶ **Wallet-savvy | Use citizens' own funds in Smart ways that benefit citizens**.

The collective power of people extends from ideas and input all the way to cash. By leveraging citizens' pockets in various ways – that generate value for citizens - smart city projects can be realized.

2. METHODOLOGY

The following information was gathered over the 2014-2015 year following the launch of the Action Cluster in October 2014. Input comes from Action Cluster members, the broader EIP, as well as round table discussions from our February 11th 2015 meeting and from three additional cluster meetings, namely:

- Lab4Ctiy, an open data and mobility roundtable, February 26, 2015 in Istanbul
- The STIR Foundation Citizen Engagement seminar, March 17, 2015 in Eindhoven
- 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015 in Brussels

The insights in this document were contributed by Action Cluster and EIP members from February to May 2015. It was compiled and edited by: Ashley Metz, Action Cluster Lead and Sherpa representing Nokia, Anne Deltour, European Commission, Mario Conci, Cluster Manager, Gustavo Orozco, Action Cluster Co-Lead and Sherpa representing Barcelona City Council and Maria Galindo, Sherpa representing Barcelona City Council.

We thank the leaders and members of the following commitments for their very useful input:

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3. PRINCIPLES AND ENABLERS FOR CITIZEN ENGAGEMENT

As a result of our cluster meetings, discussions and phone and online collaboration, we have identified a list of principles and enablers for citizen engagement that can be applied to smart city and other projects. These can be viewed as general guidelines drawn from the wide spectrum of projects and engagement tactics represented by the Citizen Focus Action Cluster:

▸ Simple | Aim to facilitate understanding and usage

▸ Reciprocal | 'Give for getting' to create fair and lasting relationships

▸ Participative, balanced with representative | Understand benefits and limits of approaches

▸ Inclusiveness | Ensure solutions that are representative of the whole population

▸ Push approach not pull | Go where people are instead of assuming they will come to you

▸ Online – Offline balanced interventions | Understand benefits and limits of different settings

▸ Conscious of privacy and rights | Build trust from the start

▸ Conscious of citizens' emotions |Understand the feelings that flow on or under the surface

▸ Change-enablers with city stakeholders | Make the municipality a partner

▸ Wallet-savvy | Use citizens' own funds in smart ways that benefit citizens

The following section illustrates these principles with examples from the EIP.

3.1 SIMPLE

"Aim to facilitate understanding and usage"

Aim to catch attention, facilitate understanding, appropriation and usage. Overcome technical and bureaucratic language barriers between policy makers/implementers, technologists and citizens.

Problems facing cities can be complicated, but the actions needed to be taken or the messages to be understood need not be. Messages, interfaces, apps or products that are clear and easy to use achieve the most adoption and success. Within citizen engagement, participation and co-design methods, a commonly reported challenge is related to bridging and actually translating professional and technical jargon into a language that can be easily understood and that people can connect to their daily lives and problems. Vice versa, the ability to grasp the complexity implied in voices and concerns expressed by citizens and to transfer it back into urban policy planning as well as technological research and design is also crucial: it can be, and often is, performed by citizens themselves but also requires good listening, and an orientation towards systemic thinking, on the part of city governments officers and researchers.

Messaging

A simple call to action or clear point can make the difference between citizens engaging or acting or not. *Nexthamburg*, a 'Citizens engagement platform' with offline and online components, stressed the importance of clear messages for getting through to the target audience[2]. The programme currently consists of two parts: "My smart neighborhood": *Stadtmacher* (City-maker), which aims at supporting citizens in turning their ideas into

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[2] Roundtable discussion at EIP Meeting February 11, 2015, Brussels

concrete urban projects and *Zero City*, aimed at creating visions for a self-sustaining city and tools to bring them to life. At the basis of both projects are citizens, their knowledge and ideas, which can be uncovered only if initial questions are communicated clearly. In this case, answers serve also for understanding the audience, in particular their needs of and expectations from technology.

Similarly, *iAmbiente*, a collaborative online platform about sustainable cities, noted that if citizens didn't understand or were not interested in their content, engagement would drop[3]. Messages needed to be clear and interesting.

Interfaces

The same is true of interfaces**.** *Oracle's City Platform* is designed in such a way that citizens don't need to understand the organization of government offices in order to obtain the service they are looking for.**[4]** *Energy Run Vaasa*, an interactive educational game, also noted the need for easy-to-use interfaces that lower the barrier for anyone to participate. For the same reason, *Fupol* has developed its social media component for citizen engagement. Knowing that many citizens are already using social media, *Fupol* enables the use of existing channels for engagement with other smart-city stakeholders – eliminating the need for citizens to join another purpose-built platform[5].

In an age where attention is at a premium, when users have to work to use your product, service, app, it is less likely they will make the extra effort. Whether engaging citizens with online or offline projects, the goal is to make sure everyone understands and is able to take action.

3.2 RECIPROCAL

"'Give for getting' to create fair and lasting relationships"

Reciprocity is about giving for getting. Whether quality content, energy bill savings, profit, data, education or attention – citizens must be incentivized with concrete benefits in exchange for their time, effort, money or behavioral change.

Updated, valuable content to keep engagement high

For example, *Nexthamburg* ensures photos from events are posted the next day, articles circulated through its Facebook page reflect ongoing urban debates and re-launches their website every two years to ensure citizens get fresh, up-to-date content in exchange for their time and energy. *iAmbiente* is a platform that relies on the interests of its viewers. They try to educate and engage citizens, but to do so, they know they must also entertain and provide valuable information. Their website hosts videos and other engaging content. This has proved to work: they have over 42,200 followers on social media and 2,000 daily website visits[6].

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[3] Roundtable discussion at EIP Meeting February 11, 2015, Brussels
[4] http://www.oracle.com/us/industries/public-sector/national-local-government/city-platform/index.html
[5] Peter Sonntagbauer, Cellent AG + FUPOL Project, Commitment 7593: https://eu-smartcities.eu/commitment/7593
[6] Aguas de Alicante, i-ambiente cities, Commitment 152: https://eu-smartcities.eu/commitment/152

A car… to drive behavioral change

A mobility commitment that aims to increase the adoption of electric vehicles is taking another approach to reciprocity and simplicity. *Prodintec*'s own electric vehicle is available for staff to use as a company vehicle. In exchange for spurring behavioral change, the company offers employees an actual car to use. They've also created a tool that allows employees to check the availability of the car and to book it. It's also placed in the regular parking lot with its own charging point – effectively making it as easy as possible – and fun - for employees to try it themselves and drive behavioral change from the inside.[7]

3.3 PARTICIPATIVE, BALANCED WITH REPRESENTATIVE

"Understand benefits and limits of approaches"

Though citizen engagement is about encouraging participation, not every citizen can be involved in every decision. A participative approach must be reconciled with a representative one. There are several considerations for when and how to do so and examples of successful approaches.

Losing (some) control

Firstly, it can be hard to relinquish control. For some organizations such as *Agua di Alicante*, which runs the iAmbiente platform, opening up a more participative approach is a new and uncertain experience. They were nervous at first, but after opening their portal, they learned more about engaging people and became more comfortable with it.

Manage expectations and be clear on the scope of participation

Other organizations, such as civil authorities, perceive that public participation is more a one-way communication to share already made plans rather than to actively engage citizens. Organizations should be clear about the extent to which they want to open for input and manage expectations. They may wish to source ideas, to validate ideas and get feedback, as a source of reporting, or as agents to change behavior.

An example of a participative and representative method is the smart postcard (pictured below), developed by *SiTI – Higher Institute on Territorial Systems for Innovation*, in the metropolitan area of Turin. The smart postcard invites citizens to fill in predefined fields for suggestions about the 'future city' and actions needed to get there.[8] The city can ask specific questions for input, then harvest ideas from a wide range of contributors, while retaining control over next steps. Results from the pilot have already been used to create a vision document outlining aspects of the city and the main actors responsible.

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[7] PRODINTEC, Commitment 7665: https://eu-smartcities.eu/commitment/7665
[8] Comune di Moncalieri, Commitment 7474: https://eu-smartcities.eu/commitment/7474

FIG. 1. SMART POSTCARD*: TITLE PAGE AND BACKWARD*

Co- project planning and participatory budgeting

From ideas to solve known problems to co-creating a public budget, citizens can be integrated as partners and given a role into deliberative processes. For example, in 2014, *the City of Paris* hosted a vote on which projects to fund with 20M Euro. They received 41,000 votes, 60% online and 40% through traditional ballot boxes. In the Comune Faenza, the *Opla Project*, an initiative financed by the regional government to allow citizens of Faenza to select, through a free vote, five administrative actions to be realized with the financial support of the Municipality[9]. Similarly, the *Mayor Covenant of Unione della Romagna Faentina* has shared the Sustainable Energy Action plan for all citizens to express personally or through on-line communication, their opinion about the actions and suggest alternatives[10].

Citizens the main actors of urban regeneration

Remourban lighthouse project, Valladolid, developed a model for citizen engagement in the context of urban regeneration "Citizens central to transformation". Its model turns citizens into active actors of the sustainable renovation of the city. The challenge: "*Ensure that citizens are informed, motivated to act responsibly, proactive, participative or even co-create*". The model includes indicators to reinforce the "**CITY AUDIT**" standards.

The project advocates a distributed approach for cities by empowering citizen interaction on a hyper-local level, via social networking (facebook, linked in, tweeter and youtube). This view is rooted in structuring participation and technologies to enhance and encourage cooperation, engagement and social exchange. The urban citizens participation platform, allows citizens to evaluate the effectiveness of the urban transformation local planning, all single projects have been posted on the different social networks. Before the submission the citizen can send inputs to improve the project performance. In addition, after the project finalization the citizens have the option to evaluate its usefulness and benefit.[11]

Educating citizens about participation

Education and transparency about project plans are also needed for effective participation. Organizations or city officials looking to engage citizens should be clear about the extent of the input desired. They must also know who will make the final decision and be transparent about it. Additionally, citizens need to be educated on various components of an issue so their input can be meaningful. The complexity of cause and effect is not

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[9] Guiliano Borghi – Comune Faenza; N
[10] Giuliano Borghi, Comune Faenza; no commitment noted
[11] Presentation at the 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015, Brussels

always immediately apparent when discussing issues that relate to one's home and community. In complex situations, people need to understand how their needs impact on others[12].

3.4 INCLUSIVENESS

"Ensure solutions that are representative of the whole population"

To engage effectively with citizens, one needs to ensure that solutions are endorsed by the entire population, not only the digitally savvy. Different approaches are needed to address citizens' various needs, including those of women, migrants, people in poverty, the elederly, and other social groups. This must be organically embedded from the beginning.

Women

The *European Centre for Women and Technology* (ECWT) reports that, against all statistical evidence to the contrary, there is an increasing and widespread belief that gender inequality is no longer an issue. Gender inequalities are still structurally embedded in society. For example, women represent more than half of the urban population, but they are often in the minority in citizen engagement initiatives. There is also a widespread gender imbalance in urban governance, which reinforces structural inequalities.

As over half of urban residents, women are already vitally important to cities. Gender is a difference that crosscuts other inequalities: a woman may also be an older person, a migrant or a person with disabilities. Therefore, it is of utmost importance to include this dimension in citizens' engagement both as a quantitative indicator (ratio of M/F involved) and as a qualitative (meaning that gender inequalities implied in the contents at stake have been addressed and that representatives from women's civil society organizations involved).

In practical terms, the commitment *Gender and Diversity for Smart Cities*[13] led by ECWT is elaborating and disseminating tools for urban stakeholders to mainstream a gender perspective into social urban innovation and smart city initiatives. Among them, the Gender and Social Innovation in Cities Tookit[14] is already available (released within the FP7 SeiSMiC Project), providing facts and figures and a checklist with indicators about how to ensure that a gender perspective is taken into account across all steps of design, implementation and evaluation. Several good practices from cities across Europe and beyond are presented, such as new ICT- crowdsourcing platforms to counteract gender-based violence and the integration of a gender perspective into the design of Info Mobility applications.

The elderly

The number of people in the EU aged 65 or over is set to nearly double, from 85 million in 2008 to 151 million in 2060. At the same time, 80% of older people in developed countries already live in urban areas. Both demographic shift and urbanisation are therefore major changes our societies are facing. According to the World Health Organisation (WHO) in its Global guide on Age-Friendly Cities, physical and social environments are key determinants of whether people can remain healthy, independent and autonomous long into their old age. They

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[12] Roundtable discussion at EIP Meeting February 11, 2015, Brussels
[13] https://eu-smartcities.eu/commitment/7570
[14] Sangiuliano, M. (2014). Gender and Social Innovation in cities. The SeiSMiC Gender Action Plan and Toolkit. European Centre for Women and Technology within the SEiSMIC FP7 Project. (Downloadable on line)

should be able to compensate for physical and social changes associated with ageing; prevent inhabitants from becoming dependent and cater for the needs and preferences of their inhabitants by becoming more adaptive, inclusive and supportive for all citizens.To help cities, WHO has developed guidelines on how to involve older citizens in the evaluation and monitoring of local policies and initiatives. According to WHO, in order to be age-friendly a city should target the 8 domains: 1) Transportation; 2) Housing; 3) Social participation; 4) Respect and social inclusion; 5) Civic participation and employment; 6) Communication and information; 7) Community support and health services; 8) Oudtdoor spaces and buildings.

Digital exclusion is a common issue when consulting older citizens. Initiatives to reach them must therefore combine online and offline consultation (focus groups, individual interviews, etc.), and give particular attention to those who are the most excluded citizens, i.e. those who are frail, dependent, isolated and/or socially excluded and should be empowered to participate through their carers and volunteers.

As mentioned above, all citizens should be given the chance to engage when remodeling one's city into a smart one, and figures prove that the proportion of older citizens is growing and thus their opinion, needs, expectations towards what a smart city is, need to be taken into account. The commitment submitted by *AGE Platform Europe*, CEMR and Polibienestar on behalf of the AFE-INNOVNET Thematic Network on innovation for age-friendly environments, aims at supporting cities that are working on adapting their environments to their ageing population, and at bridging initiatives to create smart and age-friendly cities in Europe[15].

Understanding different demographics

Understanding citizens from different demographics is key to including them in service design. The *Municipality of Ipswich* (UK) developed a persona tool to help the team understand the needs of different groups. First, they created a smart city vision through a highly inclusive process, which involved:

- A high level steering group drawn from local authorities, local retail and ICT businesses, University Campus Suffolk, the health service and the transport sector
- A major town hall meeting involving representatives from all walks of life
- Interviews with a wide range of organizations representing different sectors of society
- Four half day workshops with stakeholders

Next, they created eight user case studies based on their stakeholder engagement, each with a specific persona profile. The personas were designed to cover a wide range of ages, employment status, income and ethnic groups. The eight personas were then narrowed down to three user case studies: a frail 82 year old living alone; a sole-trader plumbing business; and a 13 year-old child. For example, the first of these profiled a day in the life of 82 year old Sally who travels into Smart Ipswich to do some shopping and meet her daughter for lunch[16].

Similarly, the Institute of Biomechanics of Valencia, is conducting a dedicated project called *SIMON* in Madrid, Lisbon and Parma to understand the mobility needs of impaired citizens, including navigation and others such as e-payment. It will allow users to plan trips seamlessly combining public and private modes and stay up to date on incidents affecting their journey. They are investigating: access-right management for parking areas and public

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[15] AGE Platform Europe, Commitment 6901: https://eu-smartcities.eu/commitment/6901
[16] Chris Tuppen, Advancing Sustainability Lt.d advancingsustainability.com

transport, navigation and mobility assistance, the booking of reserved parking spots and information on the status (occupied or free) of the parking spaces, management of urban barriers –i.e. bollards – to limit access to certain areas of the city –e.g. pedestrian zones, whilst granting access to users with reduced mobility[17]. A common European Disable Badge will be used as access right token to specific parking lots and public transport. SIMON will experiment with two kinds of badges: a physical one, based on a contactless smartcard; and a virtual one, based on the exchange of certificates with mobile phones.[18] To achieve the goal of a fully accessible system, the team has created a user group made up of different associations of people with disabilities and elderly, who are participating in all the processes of system definition and design. The user group has helped define the functional characteristics of the system as well as its accessibility and usability requirements. They have also helped develop use cases and scenarios to help design the system. After an initial proposal was drafted from the project team, they again held discussion groups with disabled users to validate the proposal and prioritize tasks. The team is now working on pilots with approximately 5,000 users in real conditions.

3.5 PUSH APPROACH NOT PULL

"Go where people are instead of assuming they will come to you"

To involve people, and in particular specific demographic groups, cities need to go where those people are. Instead of a pull approach where a traditional consultation assumes that the people will go the place assigned to be (either physically or virtually) to engage citizens, cities projects need to go where the people are really. These maybe unusual locations for public administration to go.

Finding people in the real world

Nexthamburg stressed the importance of 'following the people' in when organizing offline events. It can be easier to find stakeholders where they normally are, at a shopping mall on a Saturday afternoon, than attracting them to an unknown location[19]. This likewise applies online – sometimes it's easier to use existing channels like Facebook, where citizens already are, rather than trying to get them to spend time on a dedicated platform, as described in principle 1) 'Simple', done by FUPOL.

In another example, managers of the *Knowlewest media project* in Bristol[20], focused the 3D printing activity around tattooing which was of interest to the involved community. The whole project build the activity around the tattoo and scaled it up to the production of manufactured design articles based on the results of a tattoo design competition conducted in the community.

For the energy commitment *ENACE*, this took a different form. Their target audience consists of building professionals with specific training in energy efficiency and savings: architects and industrial engineers. To reach them, they organize public events, open online databases, attend related conferences, participate in social media and publish material online. Their events are also open to the public to engage wider audiences on energy saving and costs and they offer training for citizens to learn cost-optimal behavior[21]. Similarly, the City of Groningen,

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[17] Institute of Biomechanics of Valencia, Commitment 1332: https://eu-smartcities.eu/commitment/1332
[18] http://simon-project.eu/

[19] Roundtable discussion at EIP Meeting February 11, 2015, Brussels
[20] Presentation at the 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015, Brussels
[21] ENACE, Commitment 6336: https://eu-smartcities.eu/commitment/6336

along with other local municipalities, has created an energy desk to provide homeowners with insights into energy usage and to suggest energy saving measures – a one-stop-shop for related information[22].

3.6 ONLINE – OFFLINE BALANCED INTERVENTIONS

"Understand benefits and limits of different settings"

Online apps and platforms can be immensely useful to engage citizens and collect input. Face-to-face and group interaction is likewise valuable for driving discussion and co-creating solutions, particularly with non-digitally savvy groups. Online and offline approaches also come with different expectations that must be considered. There are many examples of both used for diverse ends. The nature of the online and offline interaction is very different. Online information enables the quick sharing of an important amount of content and enables swift short reactions. Reactivity and a playful approach (Likes, emoticons, pictures, tweets) are expected in the online world.

Offline approaches are necessary to reach less digitally-savvy groups such as the elderly or less educated citizens that might not be otherwise included.[23] Offline engagement also allows face-to-face discussions, sharing of feelings and perception, the building of trust, impressions, making a sense of community, sympathy and empathy, as well as co-creation and solution building

Examples of online and offline mix

FUPOL, which features social media as well as other online based tools has included offline participation as a standard component in its overall methodology.

Similarly, *Nexthamburg*, which includes an online platform, also organizes events such as Future Camps, expert checks, idea speed dating sessions and more. This reached 2,000 people within two days – a number that can be tough to reach online in a similar timeframe.[24]

Innovagritech uses a mixed model of integrating e-learning and in-class training courses and notes the importance of combining ICT tools with direct meetings, workshops, ateliers, seminars and other collaborative and open dissemination activities in order to reach concrete solutions.[25]

A unique example of online/offline interaction is from a commitment in the Sustainable Districts and Built Environment Action Cluster. The consortia organized 14 sessions over four months, reaching over 600 people in Eindhoven. One of the coordinators is *VPRO*, a national television channel that runs a 50-minute show program called Backlight, a future affairs show that, "focuses on our globalized world in which societies, economies and cultures seek a new equilibrium."[26] The *Municipality of Águeda* has also launched its own online TV station, ÁguedaTV, covering social services, environment, local government and other topics, in addition to serving as a place to promote social players[27].

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[22] Smart Energy City Groningen, Commitment 2418: https://eu-smartcities.eu/commitment/2418
[23] Peter Sonntagbauer, Cellent AG + FUPOL Project, Commitment 7593: https://eu-smartcities.eu/commitment/7593
[24] Nexthamburg, Commitment 5305: https://eu-smartcities.eu/commitment/5305
[25] Innovagritech Srl, Commitment 7695: https://eu-smartcities.eu/commitment/7695
[26] Sustainable Cooperative Brabant,, Commitment 7692: https://eu-smartcities.eu/commitment/7692
[27] The Municipality of Agueda, Commitment: 7764: https://eu-smartcities.eu/commitment/7764

Online examples: apps and platforms

Apps and platforms provide an online method for citizen engagement. FUPOL provides a web-based service for cities and municipalities to connect with citizens through social media. Tools include a Community Feedback Platform that enables officials to solicit feedback from citizens on particular questions as well as tools to understand citizen sentiment by aggregating and analyzing social media posts and data visualization. It has already expanded to seven countries[28]. *SmartAppCity* combines city services such as bus schedules, traffic cameras, alerts, news, events, open pharmacies, gas stations, ability to report incidents, tourist information, street guide, shopping, weather forecast, WiFi zones and more on its own platform[29]. Uniquely, this app works in a framework of public-private partnership, where city councils open their data to citizens and city shops and businesses offer products and services, which ideally find their market more easily with the app.

The *Camara Municipality* has also launched an incident and suggestion reporting app, "A Minha Terra" (My Land) that's integrated with the municipality's information system. Another platform, also mentioned above, is iAmbiente, an open and collaborative platform that aims to become the meeting point for smart city professionals, companies and administrations.[30] Similarly, the *TRIANGULUM lighthouse project* provides apps and a website to crowdsource garbage information. Therefore, the city's waste collection management team is able to tailor collection routes in accordance with neighborhood needs, avoiding unnecessary waste collection routes. This smart solution empowers the citizen contribute directly to improving city energy efficiency, while reducing the CO_2 emissions in their neighborhood.[31]

Offline examples: labs and innovation spaces

There are many existing labs and innovation spaces, inside and beyond the EIP, as well as networks of labs, including The European Network of Living Labs (ENOLL), which has 140 members and Fablabs, which have 450 labs worldwide, with over half of them located in Europe. Such spaces take different shapes and sizes and often have online components as well, but all aim to increase civic participation and innovation to drive smarter cities. A few unique examples from Living Labs follow.

Labs both online and off

A prominent example is the STIR Foundation's network of *STIR Hubs*, which promote triple '*i*' Entrepreneurship: inspiration, innovation and implementation. A STIR HUB connects cities and entrepreneurs or other projects through videoconferencing, webinar and skype sessions. The virtual hub, coordinated from Eindhoven, focuses on a given smart city topic and gathers related innovations from across Europe. Local hub managers across Europe further spread ideas and discussion through consultancy and further local meetings[32].

Labs for digital manufacturing

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[28] Peter Sonntagbauer, Cellent AG + FUPOL Project, Commitment 7593: https://eu-smartcities.eu/commitment/7593
[29] Get-App, Commitment 148: https://eu-smartcities.eu/commitment/148
[30] Aguas de Alicante, i-ambiente cities, Commitment 152: https://eu-smartcities.eu/commitment/152
[31] Presentation at the 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015, Brussels
[32] STIR Foundation, Commitment 4822: https://eu-smartcities.eu/commitment/4822

The *BCN Athenaeums and Fab Labs* are a citizen engagement initiative that uses public and private rooms equipped with machines for manufacturing. It is also a place where people meet, discuss, create bonds and share their concerns. These co-creation spaces bring digital manufacturing closer to the citizens to support projects with a social return. Currently, there are two public Athenaeums and the city administration foresees the setting up of eleven one per each district. Athenaeums are not only a facility, where people have access to 3D printers; the strategy is focused in a collaborative system of the interactive co-work between the neighbors.[33]

Labs for engendering digital inclusion

The commitment, Gender and Diversity for Smart Cities,[34] led by the European Centre for Women and Technology take engendering digital start up ecosystems as one of its pillars and has been promoting with several partners the *WeHubs* H2020 project funded within the StartUP Europe Framework. Led by EBN, WeHubs aims at creating the First European Network of Women Web Entrepreneurs and making start up ecosystems more women friendly to increase the ratio of women in digital businesses which is currently only 19%. WeHubs will promote several actions and services both targeting business women in digital sectors and organizations which offer support services to entrepreneurs and among other events it will run an ideas competition in 2016 targeting young women and awarding them for the best mobile app idea in the following categories: e- education & learning, e- health, smart work, smart mobility, smart and gender aware leisure & socialization, prevention and contrast to gender based violence & harassment.

Labs for discussing rural and urban topics

Bari Smart City/Innovagritech Srl[35] promotes the use of labs for discussing bi-directional issues between rural areas and their urban counterparts, such as sustainable agriculture and the links between food and waste production and movement (see the figure below).
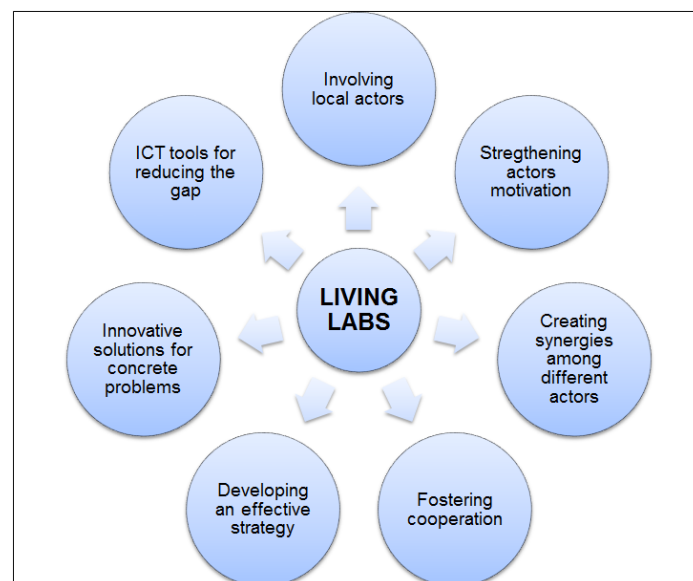

FIG. 2. THE LIVING LABS CONCEPT TO STRENGTHEN AND ORGANIZE RURAL-URBAN PARTNERSHIPS

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[33] BCN Ateneus Labs, Commitment 6605: https://eu-smartcities.eu/commitment/6605
[34] https://eu-smartcities.eu/commitment/7570
[35] Bari Smart City/Innovagritech Srl, Commitment 7695: https://eu-smartcities.eu/commitment/7695

This approach has been based on cooperation between actors and the search for concrete solutions. Since in living labs users influence the final design of products through close cooperation with the company; living lab users are considered as co-producers and co-creators of the innovative product and/or prototype developed. This can therefore reinforce motivation and synergies within the rural-urban partnership, especially through the proactive role that users have to adopt in living labs and that can help the motivation building. Consequently a living labs approach consolidates the development of a shared strategy and objectives between different actors. To this extent, a living lab approach, someway similarly to the urban-rural partnerships, is aimed to involve a heterogeneous mix of users in the development stages of products and prototypes.

In addition, the use of technology in real life contexts promoted by the living labs concept represents an effective way for linking the different spatial types that compose urban-rural partnerships. Finally the creation, validation, and testing of new services, business ideas, markets and technologies in real-life-contexts is a characteristic of living labs that can be applied to urban-rural partnerships as they are strongly focused on finding innovative solutions for concrete problems.

Labs for city data visualization

The *FH Potsdam's Urban Complexity Lab*[36] is an interdisciplinary research space at the intersection between information visualization and urban transformation. The lab explores the potential of visualization to reveal and encourage change, and is currently investigating mobility behavior. The lab is an unconventional environment because of its special blend of research expertise, its unique atmosphere as a physical place, and the aspiration to grow a community of visualization researchers. Within Potsdam University of Applied Sciences, the Urban Complexity Lab is a research space between the Department of Design and the Institute for Urban Futures. Located in the main building on the campus in Potsdam, the lab space can be thought of as a mix between co-working office and research lab bringing together researchers of varying background and students with particular interest in visualization design. Current projects involve the development of new visualization techniques to analyze emotion in social media, urban mobility patterns, and cultural collections. With a specific interest in big data and smart cities, the vision is to develop a responsible approach towards data and study innovative methods of interactive visualization to make sense of complex datasets.

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[36] Nokia and FH Potsdam, Commitment 5465: https://eu-smartcities.eu/commitment/5465

FIG. 3. THE LAB'S EXPLORATION OF MOBILITY DATA PRODUCED TIME-TO-TRAVEL, OR ISOSCOPE MAPS.

Labs for culture

BAAM! LTD Social Enterprise is creating an Urban Cultural Center in Milan. [37]- a complex of over 5,500 metres^2 with two theatres, three movie theatres, rehearsal studios, exhibition spaces, artistic co-working, residences for creators, bistro and bookshop.The Urban Center will represent a multifunctional complex for experimenting and creating artistic performances through crosscutting disciplines (theatre, music, visual, cinema, dance, artcrafts). Together with the Urban Center, they will open a non-formal education and training space " Cascina Torrette di Trenno" in an old farmhouse (Cascina) very close the main building. The Cascina will offer further 1,700 m^2 indoor/outdoor spaces to co-create an artistic and social Living Lab open and inclusive for the neighborhood.

The team is presently experimenting with several community based projects within the area, ranging from a Hip Hop school, to the creation of a children's Parliament, to a "Talent Show" for unemployed youngsters. They will open a free summer season in a public garden to give neighbors the opportunity to experience activities and performances in public spaces.

Smart Urban Labs

The *EU project TRANSFORM*[38] ensures the coordination of six Smart Urban Labs (SUL), in each participant cities (Amsterdam, Copenhagen, Genoa, Wien, Hamburg and Lyon). Six SULs are transforming their way of creating new, smart and sustainable energy systems. Their experience is shared, in particular, their working methods. The ILS - Intensive Lab Sessions - is a way of working tested by the Transform cities. It is a method to work together with all stakeholders in a city district to find solutions for complex energy challenges. The result of an ILS appears in an Implementation Plan. The methodology integrates top-down and bottom up approaches:

▸ top down: city leaders propose a SUL to local stakeholders
▸ bottom-up: local stakeholders are involved in ILS

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[37] BAAM!, Commitment 7764: https://eu-smartcities.eu/commitment/7764
[38] http://urbantransform.eu/

ILS in Genoa was two days of intensive workwhich included the Municipality, social and cultural local associations, the Italian Railways and other SMEs located in Genova. The Report of the ILS work was delivered to all participants. ILS in Genoa has reinforced the idea that the SUL is a district in which to invest resources both human and economic, and target EU Funds.

Labs for meeting

The *SMART Citizens Lab Waag Society* conducts research, workshops, training and consultancy on citizen engagement topics. Its lab is an open room for citizens, scientists, and designers to deal with themes ranging from air quality to the conditions of bathing water to noise pollution. In each session, the lab invites experts to tell the community more about the possibilities, impact, and relevance of citizens who take the measurement of local, environmental data into their own hands. [39]

Driving technology usage and entrepreneurship

Águeda is member of ENoLL with two active Living Labs: the *Lightning Living Lab and Águeda Living Lab* that is related to entrepreneurship promotion, companies' cooperation and citizens' participation. Both the Living labs count on a strong local SMEs participation. One of the major results from Águeda Living Lab is a modular and sustainable house project (named Águeda Concept). Águeda Living Lab has been supporting citizens, especially youth groups, and SMEs in working with new technologies such as Arduino and Raspeberry Pi. They also run a Local Business Incubator to drive entrepreneurship.

Beyond labs: Considering schools as sites of citizen engagement

Another method of engagement is through education and some Commitments in the Citizens Cluster revolve around it.

The Municipality of Águeda is running the project, *Escola Sustentável* which uses gamification techniques to educate youngsters in matters such as Sustainability[40]. To drive awareness of energy consumption and production, the *City of Vaasa* has created an interactive path that walks visitors along scenic routes, providing them with energy trivia, video and quizzes along the way[41]. Similarly, Sustainable Lifestyle Education (SLE), an educational program created by *ReiWei*, an NGO, aims to engage with citizens through schools. The NGO visited schools and spoke with students and parents around the world to understand the state of sustainability education. Their study concluded that while students learned about global warming and sustainability issues at school, they did not exhibit sustainable behavior in their lives. The SLE program aims to bridge this gap by providing schools with ready-made engaging activities that better educate students in ways that entice them to integrate learning with everyday life. In the game focused SLE-courses the students collect and receive data, carry out analyses, visualizations and argumentative discussions, make conclusions, set targets and predictions, where the local society is heading, compare it to similar societies, cities and municipals and document all the results for themselves and others to use for time- and region-specific comparisons.[42]

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[39] Presentation at the 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015, Brussels
[40] http://escolasustentavel.regiaosustentavel.pt/
[41] The City of Vaasa, Commitment 5479: https://eu-smartcities.eu/commitment/5479
[42] Rei Wei, Sustainable Lifestyle Education initiative, Commitment 1697: https://eu-smartcities.eu/commitment/1697

Offline example: Mapping together

Mare Nostrum, a EUR 4.32 million EU-funded project, is exploring new ways of protecting the Mediterranean coastline.[43] They aim to empower the local community to articulate their views about coastal resources and to instil a sense of ownership and responsibility for the coastline's management. Throughout the process, the project aims to build trust and to improve local decision making. A novelty of MN is the use of Public Participatory Geographic Information System (PPGIS), a tool that encourages people to think spatially and to create local perception maps of the desired future of their coastal zone. Beyond drawing maps, MN aims to foster the sharing of local/traditional knowledge and to promote debate on issues that are considered important.[44]

3.7 CONSCIOUS OF PRIVACY AND RIGHTS

"Build trust from the start"

Privacy and rights are issues that often come up after a project or organization has already crossed perceived lines. Two commitments present methods and indicators to safeguard rights in the city.

PRIPARE has a twofold mission: firstly to facilitate the application of a privacy and security-by-design methodology that will contribute to the advent of unhindered usage of Internet against disruptions, censorship and surveillance, support its practice by the ICT research community to prepare for industry practice and secondly to foster risk management culture through educational material targeted to a diversity of stakeholders. PRIPARE consists of a consortium of 11 partners with strong links with the privacy community (data protection authorities and policy makers, privacy advocacy organizations, technology, engineering). In order to prepare for the longer term adoption by industry, a representative advisory board will be set up. The project duration is 24 months[45].

The *'Safeguarding human rights in the city through urban systems intelligence'* project builds on The European Charter for the Safeguarding of Human Rights in the City, which was approved in 2000, to create indicators to measure the performance of European cities in safeguarding human rights. The team elaborated a set of 78

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[43] http://www.marenostrumproject.eu/dynamic.aspx?p=overview
[44] Municipality of Kavala, Mare Nostrum project, Commitment 6064: https://eu-smartcities.eu/commitment/6064
[45] PRIPARE, Commitment 7001: https://eu-smartcities.eu/commitment/7001

indicators measuring the 28 citizens' rights described in the European Charter and prepared a summary of the most essential indicators that would measure the Global Charter Agenda for the Safeguarding of Human Rights in the City, a more universal and basic version of the European Charter. Citizens are directly engaged at the beginning of the action/project by providing subjective evaluation (their perception) on the safeguarding of human rights in their city. These perceptions will be then contrasted with the objective values obtained from the indicators measuring the rights. Now, the team is sharing the indicators with standardization bodies, such as ISO, for the sake of the revision of sustainable smart cities and communities standards already in place, such as the ISO 37120. The project is able to measure the performance of cities in the provision of services and procedures that would safeguard citizens' rights. Pilots have been conducted in the City of Girona and tests are ongoing.[46]

Another project, the *IoT Lab,*[47] is an FP7 European research project researching the potential of crowdsourcing and crowdsensing combined with the Internet of Things. It is developing a crowdsourcing tool based on a privacy-by-design architecture. It enables immersive interactions with citizens in a smart city environment, where they can interact and share data, while ensuring the complete protection of their personal data.[48]

3.8 CONSCIOUS OF CITIZENS' FEELINGS

"Understand the feelings that flow on or under the surface"

Though seemingly obvious, it can be easy to neglect the human side of situations. Often the reasons for the adoption or dislike of new initiatives may boil down to perception, emotion or a disruption of hidden schemes. For example, some people would rather take their car than take public transport because they want to have a moment of peace with themselves. Additionally, tasks and activities may not always serve their most obvious goal. Bringing garbage cans outside may serve a social function for people to interact briefly with neighbors, a social mechanism that would be disrupted by an automated system. It is not only important to know how citizens feel toward problems and projects, but to observe them in action and identify underlying benefits or functions that can be supported by 'smarter' solutions.

By understanding the feelings citizens feel toward problems and projects, officials and consortia can better create solutions that are truly endorsed. Design research, which includes observing stakeholders while they interact in a real environment, can help uncover these insights.

PRODINTEC, leaders of a mobility initiative mentioned above, uses its cars as a way to gauge sentiment. *PRODINTEC*'s commitment itself aims to foster greater connection between citizens and stakeholders by the performance of citizen inclusion initiatives, such as the organization of visits from students to their facilities or the placement of their cars at events. As result, these activities provide an opportunity to check citizen feelings about electric cars, to gain their feedback about driving this type of car and to make them more familiar with this sustainable type of transport.[49]

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[46] Commitment 7353: https://eu-smartcities.eu/commitment/7353
[47] IoT Lab European research project: http://www.iotlab.eu
[48] Submission from Sebastian Ziegler, Director Mandat International and VP of IoT Forum
[49]PRODINTEC, Commitment 7665: https://eu-smartcities.eu/commitment/7665

3.9 CHANGE-ENABLERS WITH CITY STAKEHOLDERS

"Make the municipality a partner"

Depending on the state of thinking at city offices, education among stakeholders may be necessary in order to gain buy-in and support from the city. This may be the natural result of early project development or a dedicated initiative. Additionally, working closely with different stakeholders, including public private partnerships, can help achieve engagement goals.

At the same time, it is important to keep in mind that a municipality is not homogeneous: while the majority of city officials might stick to conventional approaches, there are always change-makers and people with innovative thinking among city officials. Thus, an important task for a participatory project is to identify such people and to connect with them, as they will become internal change agents in municipality, defending and promoting citizens' interests within their organizations, challenging the common mindsets of their colleagues with new examples, and changing the existing routines towards more innovation and participation. This is one strategy that Nexthamburg uses to make municipality a partner.[50]

Focus4AguedaCamaraMunicipal implemented an integrated administrative reform program for the way citizens and companies apply for licenses. The project benefited from full support from the Mayor and much stakeholder engagement, which the project team noted were critical for success. Results include improvement in citizen treatment and reduction in response time, which are helping support entrepreneurship and wealth creation through new companies.

In Barcelona, several dedicated initiatives driven by the government help facilitate and coordinate the other elements of their innovation ecosystem. The *Barcelona Institute of Technology* (BIT), is a municipal foundation, started in 2014, in order to generate and manage knowledge related to innovation in urban development. BIT encourages interaction between the City Council, industry, research and civil society to capitalize on Barcelona's know-how and apply it for the benefit of other cities and their citizens. As such, BIT establishes collaborations and alliances with universities, innovation and research centers, associations, companies and entrepreneurs to articulate and promote the economy of urban innovation. The institute promotes PPPs - alliances between entrepreneurs and industry with the participation of the City Council. It also reinforces the development of new business models for the sustainability of urban solutions. In addition, the BIT models have been sharing best practices and creating standards to scale up and replicate solutions.[51] Also, the *Catalonia Network of Urban Labs*, links labs across the region to serve as one point of contact for companies and councils. This helps link various stakeholders and make the value of cooperation clear. In this case, it is the city that's driving changes in thinking, providing companies access to public facilities and a space to test solutions in a real environment, and driving innovation by enabling industry to better link with citizens.[52]

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[50] Nexthamburg, Commitment 5305: https://eu-smartcities.eu/commitment/5305
[51] Roundtable discussion at EIP Meeting February 11, 2015, Brussels
[52] Presentation at the 'Why Labs?' Citizen Focus Action Cluster Workshop, April 15, 2015, Brussels

3.10 WALLET-SAVVY

"Use citizens' own funds in Smart ways that benefit citizens"

The collective power of people extends from ideas and input all the way to cash. By leveraging citizens' pockets in various ways – that generate value for citizens - smart city projects can be realized.

E-mobility charging franchise

Whereas other existing electric vehicle charging systems are based mainly on the occasional needs of potential EV users and have been installed and fully-funded by local authorities, one commitment from the Mobility cluster aims to offer the basic mechanical infrastructure needed for local entrepreneurs to become independent green transport service providers themselves. *Urban Resilience*[53] plans to create and essentially franchise a network of stations.

Crowdfunding

The *City of Groningen*, along with local municipalities, is facilitating solar panel collectives to green the energy consumption in the city. For example, in order to green the energy consumption of the football stadium in Groningen, the local soccer club, the energy company Essent and the municipality of Groningen initiated a crowdfunding initiative to be able to install a large number of solar panels on the large surface of the roof. The roof of the Euroborg stadium now houses over 1100 solar panels that are all owned by consumers that now generate 240.000 kWh of sustainable electricity a year, which is approximately 10 % of the energy needs of the club. The generated electricity is used by FC Groningen. The club pays a regular energy price for the consumption of the produced energy, which in turn is paid to the investors of the panels. This is their return on investment. Over a period of 24 years the owners receive between 2.5 and 4.5 percent return on their investment. After 24 years they receive their investment back, an amount of 550€.

Infrastructure collectives

The *CLUBEN* commitment involves clustering thousands of owners of flats and homes to create integrated groups of consumers capable of attracting large investors. We have several cases where the citizens' involvement is the driving factor and the enabler of value added service supply chains capable of generating resources to make cities and communities smarter[54].

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[53] URBAN RESILIENCE, Commitment 5575: https://eu-smartcities.eu/commitment/5575
[54] CLUBEN, Commitment 4347: https://eu-smartcities.eu/commitment/4347

4. CONCLUSION

The principles above summarize the work of the Citizen Focus Action Cluster to-date. They are derived from the cluster's collective hands-on experience, which provided an impressive number of diverse, innovative and original examples.

The commitments in the cluster share common characteristics. Notably, they move away from a traditional consultative approach towards a disruptive, non-conventional and pragmatic one. The examples in the EIP show how citizen engagement projects can both enable citizens with tools and opportunities to create and problem-solve as well as facilitate conversation between stakeholders, so citizens' voices are not only heard, but are instrumental in solution design.

This handbook shows that a citizen focus is a central element to the construction of a smart city project and must be thought through and embedded starting with the design phase. Additionally, it demonstrates *how* to do so. These principles for citizen engagement, as harvested from the experiences of the cluster, may serve to facilitate integration across the EIP and smart city projects, aid in the replication of good projects and raise issues and questions. Readers may apply this content to their own initiatives, identifying gaps in their own citizen engagement strategies and learning from this experience. We hope this document will prove useful to all readers in their efforts to ensure that the citizen is a vibrant, inclusive component of the smart city.

In the following section, you can find more detail from commitments which chose to be included.

5. CATALOGUE

This section presents more information for further reading. Although most commitments cover multiple topics, they are organized into main topics to aid readers.

5.1 ICT

5.1.1 I-AMBIENTE CITIES

Commitment: 152 i-ambiente cities		
Overview	**What do you most want to share with others and why?**	Real experiences and knowledge learned in our project.
	Who needs to hear what you have to say the most?	The proposed Commitment deals with the transversal objective of Knowledge Sharing and is focused on dissemination and exchange of ideas, expertise and news, and therefore citizens, cities, research institutions, etc. could be interested in it.
	What particular topic/area have you gained knowledge about through your project?	The proposed Commitment deals with the transversal objective of Knowledge Sharing and is focused on the dissemination and exchange of ideas, expertise and news and the communication and dissemination overall knowledge around cities, technology, etc.
	What vertical does your project target?	□ Mobility □ Energy □ Infrastructure □ ICT
	Project scope and explanation	Aguas de Alicante has led the innovative social platform called iambiente (www.i-ambiente.es) since 2013. It is an open and collaborative platform aiming to become a meeting point for the environment and Smart Cities' professionals, companies and administrations, from Europe and also Latin-America. Its main contents are based on the innovative triangle: Environment, Innovation and Smart Cities. Therefore, iambiente is based on an active and FREE community where knowledge, expert opinions and interesting news has taken it, in less than a year, to have over 42,200 followers on social network sites (@iambiente Dec'14) and over 2,000 daily visits on the web.
Results	**What are your achievements so far? How do you measure success?**	We do not measure specific gains, because every person is different. We only know that we are doing good and interesting work because our followers and readers are growing faster than we expected. Success is measured by the number of followers (Engagement), number of website visits, number of events in the "real world" that we participated/promoted.
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Our consortium is divided between 13 European partners of different sectors and expertise, and has a good geographic distribution of its members, with partners from Spain, France, Malta, Italy and UK.
	What has failed that can be shared to educate others?	You have to be patient with this kind of initiative.
	Could the work you do benefit from structural reforms? If so, what?	Perhaps, but we are more confident with small achievements.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	No
	What holds you back from doing what you're doing? What have you learned that can make a difference	You have to be committed and really believe in your project with all your forces.

Commitment: 152 i-ambiente cities	
in overcoming those barriers?	
Is your project economically sustainable?	Yes, of course. We have a small budget with two years of life.
What type of funding have you received? On a spectrum of Risk capital - > grants?	Private funding.

5.1.2 FUPOL

Project: FUPOL		
	What do you most want to share with others and why?	The results of the FUPOL Project www.fupol.eu FUPOL is an FP7 project, which has successfully developed products and has now started to exploit them on a worldwide scale. It provides a completely new approach to traditional politics building on major innovations such as multichannel social computing, crowd sourcing and simulation.
	Who needs to hear what you have to say the most?	▫ Decision Makers in Cities ▫ Potential business partners worldwide
	What particular topic/area have you gained knowledge about through your project?	▫ E-Governance ▫ Social Media in Smart Cities
Overview	What vertical does your project target?	▫ ICT
	Project scope and explanation	FUPOL is an FP7 project, which has successfully developed products and has now started to exploit them on a worldwide scale. It provides a completely new approach to traditional politics building on major innovations like multichannel social computing, crowd sourcing and simulation. FUPOL turnkey easy-to-use solution consists of software, guidelines, training material and consulting services. Using FUPOL has a lot of benefits for governments, citizens and businesses alike. It supports governments in: ▫ gaining a better understanding of the citizen's needs and businesses activities; ▫ getting direct feedback from all political stakeholders through multi-channel social network analysis based on the communication between politicians and citizens; ▫ predicting the impacts of policy measures leading to a more efficient implementation of government policies; ▫ taking better decisions based on forecasts regarding the potential impact of political decisions.
Results	What are your achievements so far? How do you measure success?	Through a comprehensive set of indicators covering: ▫ improvement in policy design ▫ citizen Involvement ▫ ICT Solution

Project: FUPOL		
Learning points	**What are your achievements so far? Innovation: what is new and different about your approach?**	We were able to demonstrate that by using the methods and tools, better urban policy decisions can be reached.
	Replication: in what ways has your project replicated?	The whole approach has been successfully tested in cities in Europe, China and Africa.
	What has been your experience with public/private/civil society partners?	In general, good. However, cities are slow to adopt new technologies and approaches.
	What has failed that can be shared to educate others?	Some approaches to motivate citizens to participate in decision making.
	Could the work you do benefit from structural reforms? If so, what?	Yes, from laws empowering citizens in Smart Cities to participate in decisions.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	An additional budget is required for the go to market worldwide requirement.
	Is your project economically sustainable?	Not yet, but it aims for this.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	Research funding FP7.

5.1.3 SMARTAPPCITY

Commitment: 148 - SmartAppCity		
Intro & Key points	**Two-sentence description including main location (s).**	App to add value to the city open-data, generating wealth and improving the quality of live. Implemented in several cities in Spain: Logroño, Jaén, Antequera, Arnedo, Lemoa, Las Tablas (City of Madrid)…
	What do you most want to share with others and why?	SmartAppCity is a successful case already implemented in several cities in Spain that shows that it is possible to implement (under a framework of public-private partnership) a tool economically viable and socially sustainable that: □ makes use of all the open data of the city; □ provides services, □ improves quality of life, and □ generates commercial revitalization.
	Who needs to hear what you have to say the most?	□ Decision Makers in Cities □ Potential business partners worldwide
	What particular topic/area have you gained knowledge about through your project?	□ Use of Open Data □ Civic Engagement / Citizen involvement □ Commercial Fostering □ Big Data Analysis □ Municipal Transparency
Overview	**What vertical does your project target?**	□ ICT

Commitment: 148 - SmartAppCity		
	Project scope and explanation	SmartAppCity also reports additional, non-financial, benefits to public authorities such as: improving the corporative brand of the municipality, bringing services directly to the citizens' pocket, rebranding the city as a smart city, boosting the commercial sector, improving the quality of life, expanding the city portfolio of services and solutions, creating new communication channel, getting closer the municipal activity, bringing more transparency, creating value information with existing data… The scope was to provide a tool with high usability, with accessibility for blind people that provides citizens' service, information of interest, municipal transparency, commercial fostering and citizen involvement. With a PPP framework that made it possible to provide a tool economically viable and socially sustainable. □ The data acquired value because they are shown through an app.
Results	**What are your achievements so far? How do you measure success?**	Through a comprehensive set of indicators covering: □ uses and downloads □ citizen Involvement The achievements show that the app has reached, in the current cities implemented, a huge number of downloads and daily uses. Also it has always an average of 3 to 5 star rating on the stores. Also, it motivates the citizens to send their suggestions and complaints to the City Administrators through the App.
	What are your achievements so far? Innovation: what is new and different about your approach?	Some of the innovation achievements of the solution are: □ massive data collection to analysis and projections of future behaviours; □ processing and analysis of current and geo-located information for making real-time decisions faster and lifelike; □ ability to hold specific applications and services with very broad uses, multi-sectorial and multi-platform; □ facilitating PPP, impacting positively on the platform life cycle, offering businesses and shops a broadcasting channel with high impact and institutional support; □ multiplatform (iOS, Android, Windows Phone…); □ multilanguage; □ easy and fast implementation for new cities; □ accessible to blind people.
	Replication: in what ways has your project replicated?	The whole approach has been successfully tested, implemented and replicated in several cities in Spain. Now, we will start with the replication in other countries.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	The SmartAppCity app is compatible with other solutions bringing a great opportunity for synergies.
Learning points	**What has been your experience with public/private/civil society partners?**	In general, good. However, cities and public administrations are slow to adopt new technologies and approaches.
	Could the work you do benefit from structural reforms? If so, what?	Yes, like other EIP initiatives, from laws empowering citizens in smart cities to participate in decisions.
	What holds you back from doing what you're doing? What have you learned that can make a difference	Additional effort is required to contact local providers to easily allow us to contact the local city councils.

Commitment: 148 - SmartAppCity

in overcoming those barriers?	
Is your project economically sustainable?	Yes, thanks to the city shops and business participation.
What type of funding have you received? On a spectrum of Risk capital - > grants?	No funding has been received to develop the SmartAppCity.

5.1.4 SMART CITIES FOR GENDER AND DIVERSITY

Commitment: 7570 - Smart Cities for Gender and Diversity		
Intro & Key points	**Two-sentence description including main location (s).**	Promoting inclusive, citizen centred approaches to smart cities' taking gender mainstreaming seriously into account, fostering a model of inclusive participation which, starting from gender, pays attention to multiple subjectivities and diversities. Involvement of 23 ECWT National Point of Contacts.
	What do you most want to share with others and why?	Cities cannot afford to waste women's creative talents as digital and social innovators. Civic engagement highly benefits from gender and diversity inclusive methods and approaches in order to fully meet citizens' needs when designing smart cities initiatives and technological solutions. We are ready to share: ▫ tools and methodologies for gender and diversity inclusive citizens' engagement methods delivered within FP7 Projects; ▫ new approaches to tackle gender related issues through social and digital innovation; ▫ best practices on Gender sensitive ICT design; ▫ tools and programs to support women entrepreneurs and founders in digital and social innovation sectors; ▫ tools to make support services to web entrepreneurship more women friendly.
	Who needs to hear what you have to say the most?	▫ Decision makers in Cities ▫ Smart Cities and Industry R&D departments ▫ Digital and Social innovation urban ecosystems
	What particular topic/area have you gained knowledge about through your project?	▫ Civic Engagement / Citizen involvement ▫ Participatory and gender centered ICT design ▫ Social Innovation ▫ Engendering digital start up ecosystem ▫ Fostering women's digital entrepreneurship
Overview	**What vertical area does your project target?**	▫ ICT
	Project scope and explanation	Beyond the usually highlighted problem of the gender digital divide, women bring different needs to transportation planning, due to different mobility patterns related to work-life needs, care, and time use. For similar reasons women have a key role in influencing households' consumption styles and they show more positive attitudes towards renewables and energy saving. Recently some very interesting experimental methodologies on gender sensitive urban planning and ICT design have been delivered but found only limited application. As only 19% of Digital businesses in the EU are led by women, an important triggering factor for gender equal smart communities is to increase the numbers of start ups run by women. Specific goals of the initiative aims at: ▫ establishing a broad partnership starting from the ECWT NPoCs to involve cities, NGOs and women's civil societies, ICT and green tech economy & industry representatives; ▫ mapping current urban innovations by analyzing them through a gender assessment methodology. Delivery and dissemination of one e-book on good practices for gender equal smart communities in Europe;

Commitment: 7570 - Smart Cities for Gender and Diversity

<table>
<tr>
<td rowspan="4">Results</td>
<td></td>
<td>

defining benchmarks/ indicators of gender oriented Sustainable Smart Cities. Sharing a common methodology from mutual learning activities;
promoting civic engagement initiatives and platforms with a strong participation of women aimed at collecting women's perspectives and needs on Sustainable Smart Cities. Integrating a gender dimension in existing and upcoming City Platforms;
using co-design and user-led ICT design methodologies with a strong gender and diversity orientation; training and offering role models to young girls on digital entrepreneurship and start ups.

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<tr>
<td>**What are your achievements so far? How do you measure success?**</td>
<td>We are currently mapping good practices mainly in the fields of social innovation for sustainable cities and inclusive urban digital startups ecosystems, in particular through:

gender mainstreaming actions in the SeiSMiC FP7 project within the JPI Urban Europe Framework. A Toolkit Gender in Urban Social Innovation was released and disseminated (SeiSMiC FP7);implementation of the WeHubs project (selected and approved within H2020/StartUp Europe), by the end of 2015 a gender sensitiveness and inclusivity Score Card targeting support services to digital entrepreneurs and start uppers and research from a comprehensive EU wide survey on needs and good practices;
participation and presentations at events and conferences in the COST Gender STE Action on Gender in Urban Planning, such as the International Engendering Cities Conference (Rome- 22 September 2014)

In addition to this, we managed to design some new projects and to submit them for H2020 calls for proposals: we took part in a Marie Curie Network application on gender in urban studies, with a specific WP dedicated to Smart Cities and coordinated a CAPS (Collective Awareness Platforms) proposal on innovative ways to deal with work life balance issues in urban neighborhoods.</td>
</tr>
<tr>
<td>**Innovation: what is new and different about your approach?**</td>
<td>It is the only initiative with an EU level scope on the issue of engendering smart cities.</td>
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<tr>
<td>**Integration: in what ways does your project overlap with other areas and initiatives of the EIP?**</td>
<td>Horizontal Priority Areas: Policy Regulation; Thematic Priority Area: Sustainable Urban Mobility and Sustainable Districts and Built environment (for its focus on energy efficiency) in particular.</td>
</tr>
<tr>
<td rowspan="3">Learning points</td>
<td>**What has been your experience with public/private/civil society partners?**</td>
<td>We found the greatest interest and availability to join our actions in Universities and NGOs and we are involving several cities in Europe. In cities, the main obstacle is definitely the prevailing sectorial approach, and the crystallization, often marginalization of gender equality policies. Discussions with several major ICT players and green-tech industry stakeholders are undergoing for possible sponsorship and joint actions. It is not easy to engage companies into experimenting new methods for ICT design, due to IPR concerns mainly</td>
</tr>
<tr>
<td>**Could the work you do benefit from structural reforms? If so, what?**</td>
<td>Yes, definitely would benefit from Open Government reform and from the overcoming of bureaucratic silos in public administration.</td>
</tr>
<tr>
<td>**What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?**</td>
<td>Resistances towards taking gender inequalities into consideration are still present together with biased opinions about gender equality as being already achieved in Europe. Extensively using updated facts and figures is important as well as integrating a gender perspective into broader issues related to urban innovation to show their broader potential in making the smart communities more inclusive and sustainable.</td>
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</table>

Commitment: 7570 - Smart Cities for Gender and Diversity

Is your project economically sustainable?	Sustainability is currently possible through both internal investment from the organization and EU funded projects. We are trying to further implement projects through industrial sponsorship. In a more mature phase, we plan to start up marketable services and technologies.
What type of funding have you received? On a spectrum of Risk capital - > grants?	Funding as partner within one FP7 SiS 2013 and one H2020 Project.

5.2 ENERGY

5.2.1 ENERGY RUN VASASA

Commitment: 5479 - Energy Run Vasasa

	What do you most want to share with others and why?	Knowledge regarding how to reach school children and citizens and in particular how to raise awareness about energy consumption and energy production. We want to share the value of putting the citizens first in all urban planning. It's important to involve citizens in matters that affect them directly, such as the use of resources. Being an active collaborator is an optimal way for human beings to learn and to consequently act upon knowledge. We also want to share best practices of how to design engaging, encouraging activities to this end, by the gamification of complex issues.
	Who needs to hear what you have to say the most?	Other cities, organisations, authorities and educational bodies dealing with these issues. Other content developers can also benefit from the lessons learned in the design process.
	What particular topic/area have you gained knowledge about through your project?	E.g. mechanisms, techniques, the understanding of citizens or other stakeholders? The importance of user-centered design, user testing, and consequently the understanding of the needs of various citizen groups. The importance of a coherent story and an optimal easy-to-use technology for the digital interface.
Overview	What vertical does your project target?	▫ Mobility ▫ Energy ▫ Infrastructure ▫ ICT
	Project scope and explanation	Vaasa EnergyRun is a project aimed at increasing awareness and educating about energy solutions and support Vaasa's image as an "energy city". Furthermore the project aims to encourage citizens and visitors to explore the city and its surroundings. The project also promotes physical activity. A path is built around the city, along scenic routes by the sea, the old parts, etc. The route is interspersed with checkpoints, where an Augmented Reality (AR) solution lets the participants explore their surroundings through videos and information. At each point, the Energy Ambassador (www.energialahettilas.fi) will pose a question related to the surroundings. For example, if the point is by the sea, the question could be about the Mervento wind power plant visible in Sundom, on the other side of the loch (i.e. "How many households are powered by that power plant if the wind speed is 8 m/s?"). By answering all the questions, the participants can receive a prize or cash for

Commitment: 5479 - Energy Run Vasasa

		correct answers for free coffees at partner cafés in the city, and so on. The aim is to be able to extend the path in the future, to add new points in other areas of the city that could be highlighted. We are aiming to introduce different levels for different users – school classes, tourists, people already knowledgeable about the energy industry, etc. **Timeline** December 2014-March 2015 Concept development April 2015- November 2015 Pilot case in schools December 2015- December 2017 Full scale roll-out of the Energy Run, including new target groups The project is currently at an initial level, where the need for this type of activity is documented and the concept development has started.
Results	**What are your achievements so far? How do you measure success?**	Success will be: When school children, citizens (and tourists) and businesses in our region are aware of the competences and possibilities of the energy cluster in the region and feel engaged with the activities of the cluster; when the level of knowledge of energy consumption among citizens is raised and turned into actions. (This will be measured in a general activity called "the Energy Battle"). The success can be measured by the number of schools and children participating (phase 1), the numbers of other citizens, and possible visitors participating. It can also be measured by the scope of activities in traditional and social media and through the numbers of companies involved. A very important factor of success is the opportunity to export the concept and raise awareness about the issues in other European cities/regions.
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	The collaboration with the city of Vaasa has been excellent, with constant dialogue and a common goal.

5.2.2 ENERGY URBAN RESILIENCE

Commitment: 5575 SUMOSU Stations Project

Intro & Key points	**Two-sentence description including main location (s).**	Urban Resilience's project (Barcelona) offers new technologies and expertise for local authorities to deal with the challenges of contemporary cities regarding sustainable mobility and power demands.
	What do you most want to share with others and why?	This project includes an integrated approach to sustainable mobility and smart grids management with the aim of effectively promoting electric transport networks in cities and, ultimately, facilitating their connection to the power grid.
	Who needs to hear what you have to say the most?	▫ Local, national and EU authorities working on urban planning, energy and mobility plans; ▫ Private sector related to renewable energies, green transport and power supply

Commitment: 5575 SUMOSU Stations Project		

		infrastructure;
		▫ Citizens concerned about pollution and traffic congestion in the city and willing to tackle these serious problems.
	What particular topic/area have you gained knowledge about through your project?	Effective, gradual and cost-efficient implementation and enhancement of smart power grids via a new EV charging infrastructure and a strategic and sustainable urban mobility plan.
Overview	**What vertical does your project target?**	Our project is **relevant to the three vertical domains** that the European Innovation Partnership on Smart Cities and Communities has identified: ▫ Sustainable Urban Mobility, ▫ Sustainable Districts, and ▫ Integrated Infrastructures.
	Project scope and explanation	The main goal of the proposal is to provide local authorities with an approach to deal with the most important challenges of contemporary cities regarding sustainable mobility and power demands. In order to do so, our plan involves the creation of a local network of income-generating charging stations which will offer: 1) a range of green transport support services to the local community: occasional EV charging for private users, e-car rental, battery exchanges for bus or taxi fleets; and 2) power storage provision to manage locally-produced electricity by net-metering *prosumers*- producer+consumer-.
Results	**What are your achievements so far? How do you measure success?**	**Achievements** up until now: ▫ support from academics in relevant subjects (engineers, urban planners); ▫ acknowledgment as a Smart City adviser and training provider to local adult education centers - workshops, internships offered to students; ▫ membership of local innovation hubs – ie *Innobaix;* ▫ invitation to publish articles in foreign e-mobility journals (France); ▫ invitations to present as key-note speakers to national and international conferences and Spanish universities (Amsterdam, Barcelona); ▫ participant of a governmental business delegation to Beijing. The **evaluation** of our project will be based, amongst others, on the following **criteria**: ▫ technical effectiveness and efficiency of the charging and battery replacement service provided by the stations; ▫ the ability to meet a 7-year repayment plan using income generated by the network's own economic activity; ▫ the ability to reduce traffic congestion in the city by promoting electric public transport, car rental and other sustainable public transport options; ▫ the contribution to the reduction of carbon emissions in a city; ▫ experiences from users (drivers and transport users); ▫ citizen demand for network expansion.
	Innovation: what is new and different about your approach?	A whole-system design including an enabling **infrastructure** to facilitate an effective transition to electric mobility and the enhancement of the smart grids at the same time.

Commitment: 5575 SUMOSU Stations Project		
Learning points	**Replication: in what ways has your project replicated?**	This is knowledge transfer proposal based on a **new and very easily replicable technology –infrastructure-** (technical reports, maps**) and an open system** (implementation guide) that allows: ▫ local manufacturers to participate in the production of its construction materials and assembly; ▫ ICT firms to bid to cover the software needs of every new network of stations; ▫ citizens and local authorities to gradually deploy and expand an on-demand network of locally produced energy storage and charging stations.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	As stated above, our project will have an impact on all the areas related to the EIP. On top of being an example of **infrastructure** which aims **to respond to both transport and energy demands in the city in an integrated manner**, the implementation of a network of SUMOSU stations will definitely contribute to: ▫ supporting and enhancing **sustainable urban mobility** plans in a city, by providing EV charging points for private users and public transport as well as offering other green transport services, ie. e-car rental or e-taxi; ▫ promoting **smart buildings** by encouraging private households and consumers to become green power producers; ▫ enhancing existing **power grids** by developing a more distributed, flexible and resilient electrical network.
	Partnerships **What has been your experience with public/private/civil society partners?**	▫ **Civil society** is very aware of environmental problems and urban challenges but is also open to bottom-up solutions such as ours when they can try them. However, this connection is not always favoured due to private interests. ▫ **Private sector** is interested in the proposal, especially those working with renewable energies and smart grids. However, they rarely feel ready to be involved unless there is already some sort of explicit support by the local authorities. ▫ **Public partners** are key agents in order to implement this project, since it requires some urban planning to a certain extent and a strong commitment from local authorities to promote sustainable mobility. However, up until now, we have faced some problems which are outlined in the sections below.
	What has failed that can be shared to educate others?	Up until now, with regards to public authorities, we have faced: 1) a **general lack of an integrated vision** to the current environmental and urban challenges. For instance, local experts in the sustainable mobility do not often understand the benefits and strategic importance of the project from a smart grid-management point of view and vice versa.; 2) **a short-term approach**, which prevents local authorities from committing to a project which requires a minimum of 7-10 years to consolidate and be fully operational.
	Could the work you do benefit from structural reforms? If so, what?	Not sure, at times it seems more like a question of mindset. There are already some European measures in place which try to promote acquisition of innovative technologies among local authorities. However, at least in the Spanish context, there is very little awareness of it and a lack of awareness in this respect, since public acquisition has always been associated to public bids, results and specific requirements. However, it will certainly help if the EU provided **some guidance, expertise or training for local authorities to assess urban projects and mobility plans from an integrated approach** to facilitate communication and understanding between

Commitment: 5575 SUMOSU Stations Project

		different agents.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	The long-term outcome of the project is to enable an effective transition to sustainable mobility and a distributed power production mode, so there are a few strategic aspects to bear in mind.
		□ The emergence of a new energy market and, therefore, a new business agent which will a) buy and store both off-peak energy surplus and locally produced electricity; and b) provide a reliable and income-generating network of charging stations to support public electric transport services operating in cities.
		□ The empowerment of electricity consumers by allowing them to become electricity producers will endanger the monopoly of certain power supply companies in some countries.
		□ Many local authorities are reluctant to publicly admit, due to potential political costs, that most existing EV charging infrastructures nowadays are largely publicly subsidized and are till far from being financially cost-efficient. Therefore, new proposals are not always welcomed.
		□ A transition towards a low-carbon transport paradigm will jeopardize oil-centered economies and businesses.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	Public authority support/ commitment/involvement, as explained above.
	Is your project economically sustainable?	Yes. At an initial stage, stations will generate sufficient income by charging mainly local authorities and private transport businesses for the provision of a charging or battery replacement service in the city to support their e-vehicles and transport fleets.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	Small private investors only to fund the international protection of the innovative infrastructure.

5.2.3 EMPORIUM

Commitment: 5305 - EMPORIUM

Intro & Key points	**Two-sentence description including main location (s).**	Emporium is a solar energy, zero-emission and material saving building concept. A warm water storage container and heat collectors provide the space heating and hot water supply, and a cold water storage container and cool collectors deliver the space cooling and cooling source for the refrigerator.
	What do you most want to share with others and why?	The aim of contacting citizen platforms is on the one hand to explore their (local) energy network company contact and on the other hand to give a citizen based focus to their local authorities. This guarantees a professional partnership with energy experts, and a citizen engagement with a bottom up approach for public money investment.
	Who needs to hear what you have to say the most?	Energy network companies seem to be a good launching partner. My experience with construction companies is that they struggle with the Emporium engineering and implementation process, and are mainly interested to come to the table at Emporium interested parties to co-claim new building sites.

Commitment: 5305 - EMPORIUM		
Overview	**What particular topic/area have you gained knowledge about through your project?**	- Seasonal storage - Exergy strategy - Funding model
	What vertical does your project target?	Energy
	Project scope and explanation	In the Netherlands some building site (science park) owners show their interest to involve their test (knowledge) institute and housing (students) corporation to launch a project.
Results	**What are your achievements so far? How do you measure success?**	
	Innovation: what is new and different about your approach?	Seasonal storage with low exergy losses, and no energy losses.
	Replication: in what ways has your project replicated?	From low-rise individual dwellings to high-rise housing blocks.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	- Business Models, Finance and Procurement - Citizen Focus - Sustainable Districts and Built Environment
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Citizen engagement supports a bottom up approach for public money investment. Citizen platforms could facilitate this approach. Energy network company canvas sessions show that consumers are the first adopters. The Emporium concept implementation can start on a small-scale basis such as two houses for example. Citizens can give focus to different stakeholders within local authorities. My experience is that the departmental structure of a municipal organizations, and its competing interests and focus, create an internal barrier which can be settled by an external focus of locals and citizens for example.
	What has failed that can be shared to educate others?	
	Could the work you do benefit from structural reforms? If so, what?	Today's energy sector is in transition and funding barriers, such as the financial characteristics of required investments and innovations, are as important as the development of the sustainable technologies itself. The financial tool, which is discussed already with financial experts such as the European Investment Bank, is a financial entity (1% bank) that borrows money to Triple A status state grid companies, both financing and reducing the investments interests and risks and the innovation costs and fees.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	On the process side there is an organizational need to learn-to-deliver, and on the technical side there is an improvement need to measure the storage temperature stratification for example.

Commitment: 5305 - EMPORIUM	
Is your project economically sustainable?	Suppliers to produce the Emporium technology, assessed by a Dutch energy network company, are organized and available. The Emporium costs are seasonal energy storage costs and vacuum tube solar collector costs, and calculated by these suppliers.
What type of funding have you received? On a spectrum of Risk capital - > grants?	Emporium assessments and TRNSYS simulations by Dutch research institutes and engineering companies, co-financed by the Dutch government, are gathered in technical reports which can be shared with professionals.

5.3 REGIONAL COMMUNITY ENGAGEMENT

5.3.1 MUNICIPALITY OF KAVALA/MARE NOSTRUM PROJECT

Commitment: 6064 - Municipality of Kavala/Mare Nostrum Project		
Intro & Key points	**Two-sentence description including main location (s).**	Use of tradition and innovation to help coastal communities manage in sustainable way their most valuable natural asset, their coastal zone. The MN projects involves several Mediterranean cities, Kavala and Alexandroupoli from the Eastern Macedonia-Thrace region in Greece, Haifa in Israel, Aqaba in Jordan, Valencia in Spain and the Grand Harbor cities in Malta.
	What do you most want to share with others and why?	Ways to collect data and information for and with local communities, link urban development with sustainability, create a solid knowledge base in order to contribute to building a resilient city.
	Who needs to hear what you have to say the most?	▫ Other cities, national authorities, the EU and possibly the involved private sector
	What particular topic/area have you gained knowledge about through your project?	Activities are under way but have already a very good idea of opportunities and challenges in terms of developing a reliable and sustainable mechanism.
Overview	**What vertical does your project target?**	▫ Other(improve decision making at local level, involve citizens in planning process, increase accessibility to data relevant to Coastal Zone Management)
	Project scope and explanation	The core of the initiative is the Mare Nostrum which aims to help bridge the policy-implementation gap between existing Integrated Coastal Zone Management (ICZM) tools and their actual effect on the ground. Mare Nostrum's ultimate objective is to improve the socio-economic and the environmental sustainability of the Mediterranean coastline while increasing its resilience to natural and man-made hazards. The project identifies local impediments to implementation and leverages insights gathered from local successes into improved policy-making. The project's methodology seeks to achieve more effective Integrated Coastal Zone Management (ICZM) through the generation of a dialogue between numerous and diverse stakeholders. Social and geopolitical impacts of the project will include: ▫ enhanced public awareness of coastline management issues; ▫ increased accessibility of spatial planning data; ▫ enhanced dialogue between competing interest groups;

Commitment: 6064 - Municipality of Kavala/Mare Nostrum Project

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<td rowspan="4">Results</td>
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a more engaged and empowered citizenry;
the encouragement of conflict mitigation and intercultural dialogue.

Mare Nostrum seeks to achieve a gradual improvement in the effectiveness of instruments for integrated spatial planning and coastline management and improve dialogue and cooperation across national borders in partner countries.
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<td>**What are your achievements so far? How do you measure success?**</td>
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Mare Nostrum's main output is a Toolkit of Alternative Legal-Institutional Policy Instruments. Rather than the usual "best practices" approach, this toolkit will be developed "bottom-up." The tool kit will include an assessment of impediments to implementation, and methods of gradually overcoming them.

Locally appropriate policies will be applied in several participating municipalities and disseminated across EU and Mediterranean countries. A web-based participatory GIS tool will be developed. This tool will contain local planning and environmental data designed to solicit citizen input and encourage collaborative planning and transparency, along with a multilingual website designed to facilitate communication between the partner organizations while communicating information about the project to the general public.

A model environmental observatory in Kavala, Greece, envisioned as a technical centre for monitoring environmental quality and collecting data on socioeconomic and institutional change, to be extended beyond the scope of the current project.
A preliminary draft of supra-national legislation will be designed for Mediterranean countries, partially based on the knowledge and experience gained creating the Toolkit.
An assessment on the feasibility of establishing a Mediterranean Integrated Coastal Zone Management (ICZM) Action Forum, which will interface with related international groups in order to facilitate continued evolution of the project beyond its 3-year timeline, which ends in December 2015.

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<td>**Innovation: what is new and different about your approach?**</td>
<td>Creation of the CZM Observatory that will serve as hub to inform citizens, receive feedback and foster collaboration between local authorities, private sector and knowledge carriers.</td>
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<tr>
<td>**Integration: in what ways does your project overlap with other areas and initiatives of the EIP?**</td>
<td>Mostly in citizen involvement and multi-level/multi-sectorial cooperation</td>
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<tr>
<td rowspan="5">Learning points</td>
<td>**Partnerships**
What has been your experience with public/private/civil society partners?</td>
<td>Need to explain and demonstrate value.</td>
</tr>
<tr>
<td>**What has failed that can be shared to educate others?**</td>
<td>"Working in silos"</td>
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<tr>
<td>**Could the work you do benefit from structural reforms? If so, what?**</td>
<td>Probably the adoption of measures based on the eco-system approach or the circular economy can help but I am not sure that they qualify as structural reforms.</td>
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<tr>
<td>**What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?**</td>
<td>That is not yet a real issue in our case.</td>
</tr>
<tr>
<td>**Is your project economically**</td>
<td>Probably</td>
</tr>
</table>

Commitment: 6064 - Municipality of Kavala/Mare Nostrum Project

sustainable?	
What type of funding have you received? On a spectrum of Risk capital - > grants?	Grant funding

5.3.2 BESCANÇON

Commitment: 4816 - Besançon

Intro & Key points	What do you most want to share with others and why?	We need to share experiences about citizen involving, specially through : □ e-education, □ labs, and □ new use of e-technology as serious games and social networks. Our project is clearly linked to « Citizen Focus » in the area of Planoise and belongs to «projects that facilitate a conversation between stakeholders, where citizens' voices are not only heard, but instrumental in solution design, allowing for better results and creating faster and more targeted improvements.
	Who needs to hear what you have to say the most?	What we want to say to political and education actors is we can't develop Smart Cities without e-citizens. Our message is addressed to everyone is aware of major position of culture and education in order to develop empowerment and build a competitive society.
	What particular topic/area have you gained knowledge about through your project?	Our scope is to build a large mobilization around our regeneration urban project. We want to offer digital tools and knowledge to the inhabitants of Planoise so that they can participate in the project of urban renovation, but also improve the scholarly involvement of the children, and become more empowered. Our project needs a good understanding of citizens' behaviours and needs.
Overview	What vertical does your project target?	□ ICT □ E-education □ E-business □ Culture □ Social
	Project scope and explanation	We want to develop many projects in order to train citizens of Planoise to be e-citizens. □ Create a digital cooperative, with a fab lab. (2016) □ Group numerous services in a digital office of services to the public, to welcome and help the population to use the digital platforms, e-administration and e-services of companies.(2016) □ Create a serious game around the urban renovation of Planoise linked with collaborative internet platform for the exchange of services between citizens (2015) □ Allow every child of the district to use the digital tools throughout his or her schooling (2013-2019 and practice e-inclusion and train the parents in the uses of the digital agenda. (2015-2016)
Results	What are your achievements so far? How do you measure success?	The evaluation of our project will be based, amongst others, on the following criteria: □ the number of digital productions created by inhabitants by using the project; □ the number of jobs in digital activities created within Planoise district;

Commitment: 4816 - Besançon		
		- the results of scholarship in the area of Planoise, as compared to other areas of the metropolitan area; - the number of parents using digital tools for following up the their children's education.
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Many projects are envisaged with private partners, local and national companies. Most are very interested as long as they consider that the smart city and the use of digital ways open possibilities of development important. They are ready to put a lot into experiences such as those described.
	What has failed that can be shared to educate others?	We are at the beginning of the process; it is too early to define.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	Numerous digital systems are spreading thanks to big data. We are very attentive to the privacy rights of individuals and make sure that citizens have control of property rights.
	Is your project economically sustainable?	It is mainly a public project which will have effects on economic development. Several subjects nevertheless already have a private economic model, in particular serious games.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	At the moment, projects are led with the participation of companies and sponsorship, and we hope for subsidies.

5.3.3 BAAM!

Commitment: 7764 - BAAM! (in partnership with Fondazione Housing Sociale)		
Intro & Key points	**Two-sentence description including main location (s).**	Creation of an Urban Cultural Centre in Milan Working on three main pillars: - Social inclusion - Urban regeneration - Cultural innovation
	What do you most want to share with others and why?	Partnership opportunities, best practices, strategic funding opportunities and lobbying. We would like to become a Stir Hub for citizen engagement and social experimentation.
	Who needs to hear what you have to say the most?	- Marginalised social groups - Cultural and creative industries - Institutions - Impact investors - For profit CSR departments
	What particular topic/area have you gained knowledge about through your project?	- Social needs in suburban areas - Cultural and creative innovation for social empowerment - Urban regeneration - Open ICT and social innovation - Sharing economy
Overview	**What vertical does your project target?**	- Infrastructure - ICT - Other: Cultural production; temporary housing; People as active citizens, economic actors and new public for the cultural sector
	Project scope and explanation	BAAM! LTD Social Enterprise is creating an Urban Cultural Centre in Milan. A complex of over 5,500 m^2 with two theatres, three movie theatres, rehearsal studios, exhibition spaces, artistic co-working, residences for creators, bistro and bookshop. The Urban Center will represent a multifunctional complex for experimenting and creating artistic performances through crosscutting disciplines (theatre, music, visual, cinema, dance, arts and crafts). Together with the Urban Center we will open a non-formal education and training space "Là Centrale" in an old farmhouse (Cascina) very close to the main building. The Cascina will offer further 1,700 m^2 indoor/outdoor spaces to co-create an artistic and social Living Lab open and inclusive for the neighbourhood. BAAM! will be at the same time a cultural Think Tank and an experimentation ground. A project where public, private, profit and non-profit will redefine governance in culture. **BAAM! is a cultural project** that is taking primarily into account the role of culture for capacity building and social integration. Urban regeneration, smart cities/smart communities, cultural rights and open participation are the main elements we work on to determine a social impact. We believe that Milan, as one of the more attractive cities in Europe, must rethink public spaces and cultural attraction starting by redefining suburbs and imagining a more multi-centred urban geography. Financially we want to subvert normal cash inflow for a cultural centre. More private social investment and soft venture capital, better use of structural funds for

Commitment: 7764 - BAAM! (in partnership with Fondazione Housing Sociale)

Results		the creative sector and less economic support by local and national institutions. We are drawing a new line in the cultural industry, not only for the city of Milan, but for the entire cultural sector in Italy. BAAM! is a unique experiment in times of crises. A group of more than 10 young professionals in transversal fields (arts, project management, communication, business administration, architecture, sociology etc.) are running this experiment with enthusiasm and determination. Culture is more than just performances and leisure, culture is employment, growth, human realization and a safer future.
	What are your achievements so far? How do you measure success?	We are presently working to create an integrated project in which culture, urban regeneration, social inclusion and innovation can be combined following EU smart cities, ERDF, ESF and direct funding guidelines with a quadruple helix approach and a private impact investment risk integration. Level of information, transparency, accountability, involvement, economic sustainability.
	Innovation: what is new and different about your approach?	We are using cultural activities as a driving force to implement urban regeneration, social inclusion with a 4P (public, private, people partnership) approach.
	Replication: in what ways has your project replicated?	We are defining a method to foster social and urban development in suburban city areas and public spaces starting from cultural initiatives.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	Our project is a hybrid approach among performing arts, sociology, urban planning and community empowerment. This means that we look at smart cities with a community based approach (e.g. Brainport Eindhoven).
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Our partnership building exemplifies the 4P approach (public, private, people partnership) that we believe to be the only redefinition of social responsibility among stakeholders and diversified interest groups that can foster socioeconomic growth.
	What has failed that can be shared to educate others?	Generally speaking, Italy failed in the use of structural funds in the 2007-2013 period, specifically in the creation of integrated projects that aim to foster inclusion, economic growth and innovative services for citizens.
	Could the work you do benefit from structural reforms? If so, what?	A new approach to the Cultural Creative Industry sector in Horizon 2020, structural funds and social experimentation programmes. Our activities are perfectly in line with the smart cities guidelines, but not necessarily with the funding opportunities.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	We are working on a social use of Big Data. Our cultural centre will manage a vast amount of private data and information. How can we analyse and use these figures in a non-commercial and market oriented approach? Open Data, integrated ICT services, multi-platforms and IoT fundamental topics for smart cities and citizens focus.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	Financial architecture and fund raising are the main issue for a Social Enterprise that wants to work on public spaces with a low profit approach. Sustainability is of course the main challenge for enterprises that cannot guarantee a high Return on Investment for investors.
	Is your project economically sustainable?	Yes
	What type of funding have you received? On a spectrum of Risk capital - > grants?	We are in a bootstrapping phase in which private capital has been used for the start-up and kick-off of the enterprise. Our forecast is to mix private resources, EU direct and indirect grants, impact investment and income from core activities and services provided. We have received several small contributions from private

Commitment: 7764 - BAAM! (in partnership with Fondazione Housing Sociale)	
	donors for specific territorial projects. (e.g. Fondazione Cariplo).

5.3.4 MUNICIPALITY OF LAMIA/CITYSDK PROJECT

Commitment: 7002 - Municipality of Lamia/CitySDK Project		
Intro & Key points	**Two-sentence description including main location (s).**	The transfer of Smart City applications from one city to another city is challenging. There is a lack of unified backend technologies, a lack of innovative end-user services and no unified markets beyond single cities. CitySDK worked on these obstacles. It created a Smart City Application Ecosystem through large-scale demand-driven City Pilots that package and align key smart city significant application areas (Tourism, Mobility, Participation) to an open source service developer toolkit. The main cities involved are Helsinki, Barcelona, Lisbon, Manchester, Amsterdam, Rome, Istanbul and Lamia.
	What do you most want to share with others and why?	There were three Pilots, jointly produced in eight cities: Smart Participation, Smart Mobility and Smart Tourism. In each of these the focusing use-cases are those specific to European citizens or travelers to European cities. For example, public transport assistance, wide-reach e-Participation services or multi-city smart phone tourism apps.
	Who needs to hear what you have to say the most?	- Developers - Cities' ICT Departments and CIOs - Regional Development Organizations - Relevant Academia - Relevant Media - Net opinion leaders - Policy Development and cities' non-ICT decision-makers
	What particular topic/area have you gained knowledge about through your project?	- Linked Open data - Open source - Lightweight API approach – no new heavy server setups, existing backend systems must be used: "No New Platforms Please- CIO" - Developer - driven ecosystems - Adding additional value to the service developers development processes on domains that are typically seen "work-intense" or "bureaucratic" by the SME developers, like the exact implementation nuances of the security, privacy and accessibility regulations of new technologies - Create incentives for the adoption - Adoption by the SME Developer Community
Overview	**What vertical does your project target?**	- Smart Mobility - Smart Tourism - Smart Participation
	Project scope and explanation	CitySDK produced a wide array of pan-European smart city service Pilots in the partner cities. The Pilots were in the domains of smart mobility, smart participation and smart tourism. The Pilots involved a large number of citizens using the Pilots in their daily lives. A combination of city- and demand-driven piloting, and a large amount of partners' relevant existing services, interfaces, software, practices and standards are the key enablers for this broad approach. For effectiveness within the project, but even more so for the impact beyond the project, Pilots packaged selected existing assets and project Pilot deliverables into a

Commitment: 7002 - Municipality of Lamia/CitySDK Project

		shared, uniform, joint, open source *Service Development Kit* – CitySDK. CitySDK enhances the between-city transfer and innovation, and development capability of the Smart City Applications. The CitySDK created an open innovation ecosystem where the cities' infrastructure acts as an enabling innovation platform.

During the project a vast number of citizens and developers engaged, especially SMEs, to further exploit the CitySDK. The project also created a number of societal and technical enablers, opportunity and value demonstrations – a thriving developer community - for its further valorization. With this approach the project aimed for a very high impact to cost ratio, working towards a single market for the European Smart City Applications.

The strategic project objective was:

to create a Smart City Application Ecosystem through large-scale demand driven City Pilots that package and align key smart city application areas to an open source service developer toolkit.

The operational project objectives were:

1. to have a large number of end-users in cross-border Pilots employing the open CitySDK;

2. to use innovative and effective citizen involvement in the open co innovation, co-design and colocalisation processes; and

3. to engage a large number of new developers, especially SMEs, to further exploit the CitySDK and the Pilot infrastructures far beyond the actual Pilot use-cases.

Results

What are your achievements so far? How do you measure success?

The project objectives addressed the expected impact as follows. The project objectives were:

1. to have a large number of end-users in cross-border Pilots employing the open CitySDK, which addressed the following issues:

- □ - *"Stimulating a wave of open platforms populated by diverse internet-based applications and services"*;
- □ *"Broad exploitation of best practices in "smart cities" across borders going beyond pure exchange of experience"*;
- □ *"Offering opportunities for advanced wireless technologies, addressing digital divided"*.

2. to use innovative and effective citizen involvement in the open co-innovation, co-design and co-localisation processes, which addressed the following issues:

- □ *"Reinforcing the role of the user/citizen in the innovation lifecycle, facilitating technological and also social innovation;*

3. **to engage a large number of new developers, especially SMEs, to further exploit the CitySDK and the Pilot infrastructures far beyond the actual Pilot use-cases,** which addressed the following issues:

- □ *"Improving capacities for SMEs to develop, validate and integrate new ideas and rapidly scale-up for their services and products"*;

"Wider uptake of innovation ecosystem in smart cities through networking and sharing of experiences in planning and implementing "smart" cities concepts".

Commitment: 7002 - Municipality of Lamia/CitySDK Project

	Innovation: what is new and different about your approach?	The project addressed open innovation and user-driven innovation with three threads: **Thread 1: Lead Users/Start-ups as Innovators,** where the open innovation ecosystem consisted of regional SMEs- and citizen-developers of digital services, exploiting the cities' open data and open infrastructure platforms. **Thread 2: Citizens as Co-innovators and Co-designers,** where the open innovation ecosystem consisted of citizens and civil servants (city personnel/service owners) facilitated by the project to co-innovate and co-design the smart city applications based on the SDK as a starting point, in an open-ended way. Citizens could ideate, propose and vote on the innovations. **Thread 3: Citizens as service testers, co-localisers and evaluators,** where the innovations validated, localized or "socially re-purposed" by the citizens testing the Pilots prior to, or after the replication Pilot launched. All Pilots included end-user testing and assessment. Formal living labs have been used where relevant technology structures were in place. For "mature enough" internet- and smart phone –based applications however the best living labs for this purpose are the commercial App Stores and the internet/mobile sites of the cities and the media Partners that covered full target population and provided direct wider piloting and up-take mechanism.
	Replication: in what ways has your project replicated?	*"Broad exploitation of best practices in "smart cities" across borders going beyond pure exchange of experience",* where the project aimed to very pragmatic best and next practice and technology transfer between the cities through the Lead Pilot – replication Pilot –method, and codification and documentation of these best practices into the CitySDK final deliverable for other cities to exploit. The Project Partners foresaw the actual technology-oriented Pilot replication to be a more meaningful best practice cross-border transfer than for example. only discussing of Pilot experiences in a joint seminar. The sharing of best practices and experiences becomes very concrete, process oriented, and documented, and also transferable beyond the Project Partners. *"Wider uptake of innovation ecosystem in smart cities through networking and sharing of experiences in planning and implementing "smart" cities concepts",* where the CitySDK ecosystem platform deliverable, based on the open unified interfaces and developer networks and infrastructures, as well as lessons learned from the Lead Pilot – replication Pilot process, is a pragmatic means to transfer the innovation ecosystem easily from one city to another. The consortium foresaw the project to contribute substantially to the creation of single market for the European Smart City Applications, which was a major component of the unified European Smart City concept.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	Integration work had been foreseen in most of the Pilots. The integration work consisted of making the existing cities' backend systems compatible with the joint CitySDK interface specifications. For most Pilots this meant either adjusting the previous open interfaces, or creating new, cloud computing –based open interfaces to existing closed back-end systems. Also, for effectiveness, in some cities this work had been done at the client-end of the CitySDK developer package. The integration work took place in two steps: first with joint interfaces, assets and objectives for all Partners. Then, in a second phase, where the city-specific integration work made by each of the cities in the specific domain and system.

Commitment: 7002 - Municipality of Lamia/CitySDK Project	
Partnerships **What has been your experience with public/private/civil society partners?**	*The aim "Enable 'public-private partnerships with people",* which was the very focus in Pilots where public and private jointly provided the end-user service and also in activities where the private SMEs innovate and validate their public infrastructure – relying onadded value services through the existing smart phone market channels (e.g. Apple, Android App Stores).
What has failed that can be shared to educate others?	▫ Unsuccessful interoperability ▫ The core platforms did not fit the city's technical environments ▫ The alignment of regional services was not feasible for scaling up applications ▫ The new developers were not engaged –e.g. did not show up in DevCamps, AppChallenges ▫ A single Pilot was not able to produce end user quality service ▫ Critical consortium changes, defaulting Partners, non performing Partners
Could the work you do benefit from structural reforms? If so, what?	The two main obstacles for Smart City Applications transfer from a city to another are lack of software tools and lack of mental mindset that would allow for this transfer. CitySDK aims to provide these both starting from the SME developer perspective. CitySDK is not a software platform. It is the unifying - missing – parts between various smart city software/hardware platforms and the end-user application developers – *"whatever the Developers need to get pan-European Smart City Applications created easily"* – in this sense it is a socio-technological ecosystem platform with a software unification approach. From this point of view someone could see it as actions that could be taken as structural reforms.
Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	The Project Pilots were based on existing platforms under operation. All these Pilots already complied with relevant regulations on privacy and security. None of the implementations and extensions of the project involved additional risks not covered with the design phase of those platforms. Specific laws to be complied to depend on the Member State, but typically are derivatives of Directive 95/46. As the Pilots and the prior services are operated by the city and municipality Partners, the security, privacy as well as inclusiveness and accessibility had in most cases been evaluated to comply with the national legislation and best practices. These issues were also re-addressed during the Pilot due to the same legislation. For example, in some cities, there had been an obligation for some Pilot services to make a public claim on how the personnel records are stored and used and how information security is managed in these activities. Importantly, this is also area where the best practices in the Pilots in the Partner cities were transferred from one Pilot city to another, in a codified, technological format of the CitySDK. This meant for example a template document of this public claim of use of personal information and the specific way the software interface had been designed to comply with the legislation.
What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	Lessons have been learned that can make a difference in the future: ▫ strategic analysis, direct engagement of developers; ▫ better engagement strategy has to be planned; ▫ cloud computing solutions, Server consolidation, Virtualization, SaaS model, Technical workarounds emulating the interfaces; ▫ focused distribution of co-production and user involvement and user validation studies.
Is your project economically	Technology-wise, the technological selections to the CitySDK are such that its

The label "Learning points" appears vertically in the leftmost column.

Commitment: 7002 - Municipality of Lamia/CitySDK Project

	sustainable?	viability follows those of the today's normal Internet service technologies. A small lean forward in some technology areas might provide a small advantage for the lifespan compared to market-driven application developments. The basic selections however (HTML, HTML5, LOD, XML, HTTP, etc.) are such that all technology roadmaps see them as core components of the future Internet (including the European Future Internet).
		To some extent, the interoperability de-facto and official standards are forming in many of these domains. CitySDK wishes to contribute to this standardisation process.
		Additionally, the long-term viability of the CitySDK depends on its wider deployment and use. However, the developer communities in the Partner cities were already active and with planned target values the Partner cities only would be able support the long term viability of the CitySDK even should no other new city up-take it ever. Also it is of commercial interest of some private Project Partners to exploit the CitySDK widely in their clientele.
		Moreover, the project is designed in such a way that all Pilots and Partners contribute to deliverables for wider deployment and use after the project ends. All activities and deliverables of the project are designed against this goal. Also the Pilots themselves designed against this goal: to have high demonstrative and citizen/developer engagement value.
		The open source CitySDK, the main deliverable of the project, where the prior assets and the Pilots' results are packaged, is the main tool for wider deployment and use.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	EC funded.

5.4 LABS & INNOVATION SPACES

Commitment: 5465 - Urban Complexity Lab

Intro & Key points	**Description**	Interdisciplinary space between students, researchers and designers focused at the intersection of user interface design, visualization and social interaction.
	What do you most want to share with others and why?	We develop cutting edge techniques for seeing and exploring data. These techniques can be useful for scholars, policymakers, and citizens.
	Who needs to hear what you have to say the most?	▫ Researchers ▫ Policy makers ▫ Citizens
	What particular topic/area have you gained knowledge about through your project?	▫ Interface and visualization design ▫ Mobility patterns
Overview	**What vertical does your project target?**	▫ ICT & Mobility

Commitment: 5465 - Urban Complexity Lab	
Project scope and explanation	A research lab developing novel visualization techniques especially in the context of urban change. With the growing recognition of data to inform public and personal decision making, there is a great need to develop visualization techniques that represent complex and comprehensive datasets in a insightful, yet accessible manner.
Innovation: what is new and different about your approach?	The blend of researchers is both technological as well as cultural, we involve researchers and students, and the research lab itself is deliberatively conceived as a social space.
What type of funding have you received? On a spectrum of Risk capital - > grants?	□ public research funding (BMBF) □ support from Nokia/HERE

5.4.1 NEXT HAMBURG

Commitment: 5305 - NEXTHAMBURG		
Intro & Key points	**What do you most want to share with others and why?**	Knowledge and experience of engaging citizens in urban development, in particular: ▫ methodology of urbanistic crowdsourcing that Nexthamburg have been developing since 2009 and applied in other German cities as well as internationally (consequently growing into The Next Network); ▫ our learning from more than 15 years experience in traditional public participation approach through professional activities in a planning bureau Urbanista. We want to share this knowledge since it is crucial for the transition to sustainable and inclusive urban development, in particular, the smart city with a focus on citizens.
	Who needs to hear what you have to say the most?	Any actor working or planning to work on citizens' engagement: city authorities, NGOs, grassroot organisations, private organisations investing in corporate social responsibility.
	What particular topic/area have you gained knowledge about through your project?	▫ mechanisms of attracting and working with citizens, especially young and middle aged citizens - who are often under-represented in traditional public participation processes - through online and offline activities; ▫ mechanisms of interaction and partnership-building between diverse actors of urban development: public institutions, NGOs, private sector, foundations; ▫ the use of Internet and social media to foster collective intelligence; ▫ Future Visioning approach to urban development; ▫ knowledge about specific topics in urban development, e.g. urban sustainability, mobility, etc.
Overview	**What vertical does your project target?**	▫ Mobility ▫ Energy ▫ Infrastructure ▫ ICT
	Project scope and explanation	"My smart neighbourhood" aims at bringing together citizens (and their needs in urban smartness) and technologies (and their capacity to satisfy the citizens' needs and expectations). Two projects are meant to be stepping stones for "My smart neighbourhood": Stadtmacher (City-maker) and Zero City. Stadtmacher's mission is to provide support to citizens in turning their ideas about the city into concrete projects. For this, an online platform as well as a permanent "citizens' planning bureau" have been created to enable citizens to raise necessary resources: money (through crowd-funding), urban expertise, political acceptance and legal know-how. Currently, Stadtmacher is conceptualised and is going to be launched in January 2015. Zero City is aimed at creating scenarios for a sustainable city of the future and bringing the scenarios into practice. Concrete questions are: What a Zero City can look like, and what are the daily routines of people in such a city? What are the opportunities, what are the limitations? What is possible already now and what challenges need to be overcome in the future? The aim is to create comprehensive scenarios that could be tested through living labs and prototyping. At the moment, Zero City is at the stage of having three scenarios developed by experts in sustainable urban development and de-growth economy together with citizens through several workshops in different settings.

Commitment: 5305 - NEXTHAMBURG		

		The two projects – Stadtmacher and Zero City - will give provide input for the conceptualisation and concretisation of "My smart neighbourhood". The timeline depends on the arrangement of resources, necessary for the project.
Results	**What are your achievements so far? How do you measure success?**	Nexthamburg created an independent platform for citizens' discussions about urban development in Hamburg, giving a neutral space for topics and ideas that could not be discussed before. Moreover, Nexthamburg works as a source of information about urban issues, providing access to knowledge that was not accessible for ordinary citizens before (because of the fragmentation and dispersal of information and its highly professionalised language). According to research on the Nexthamburg community, the citizens' think tank stimulated collaborative innovation between citizens. Participants pointed out the increase in their knowledge and awareness about on-going urban processes after several years of Nexthamburg activities. Measuring success: the extent of citizens' engagement: the number of participants in the offline events and online dialogues, the number of ideas and feedback on ideas, the loyalty of participants; the dynamics of development in citizens' knowledge and awareness: quality of ideas and comments, elaboration on topics; the Continuity between ideas, topics and projects;the level of partners' satisfaction (in case of partner projects).
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Nexthamburg sees partnership as one of the essential points for citizens' engagement, since it enables synergies to be created while at the same time guaranteeing independence. That is why diverse partnerships were created in Germany as well as in other countries with such organisations as: Foundations (Zeit Stiftung, Bosch Stiftung, Koerber Stiftung); City authorities (Hamburg Harburg and Bergedorf municipalities, city of Kassel); Universities (HafenCity University Hamburg, Kassel University, Belgrade University, etc.); Cultural institutions (Hamburg Museum, Goethe Institute Belgrade, Goethe Institute Bangalore, MOD Institute, and etc.).
	What has failed that can be shared to educate others?	One of the first and most significant findings is that online citizens' engagement should be conceptually intertwined with offline activities. Even though crowdsourcing helps to attract groups of citizens, often missing in traditional methods of public participation (young and middle aged people), it does not automatically pull in weak social groups, such as people with migrant backgrounds. Particular activities are needed to address this group specifically, and they must be organically embedded in the co-creation concept beforehand.
	Could the work you do benefit from structural reforms? If so, what?	The reservation of more space for urban co-creation in legal frameworks would significantly support citizens' engagement and allow citizens' initiatives to be taken more "seriously". Consequently, the education of city officials on how to treat citizens' contributions, integrating them into the work, would result in smoother processes of interaction between diverse stakeholders.
	Are there privacy issues associated with your project and citizens?	By its idea, Nexthamburg functions on the principle of open innovation and collaboration. The community is open for everyone, and all contributions can be

Commitment: 5305 - NEXTHAMBURG

	What is at stake? Who is involved?	modified by any community member.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	One of the strongest barriers is the lack of funding, hindering Nexthamburg from shaping and implementing more experimental activities for the sake of securing its financial sustainability in the short term. The second factor is the conservatism of city authorities, who tend to see public participation as a means of communicating already approved spatial plans rather than a way to actively engage citizens in their development. That is why structural reforms are needed to stimulate urban co-creation.
	Is your project economically sustainable?	At the moment, no. Stadtmacher is going to be organised as a social business, providing self-sustainability for Nexthamburg and its activities.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	For some projects - grants from foundations, for others - payments for services from public and private institutions.

5.4.2 SMART POSTCARD

Commitment: 2025 – Smart Postcard

Intro & Key points	**Two-sentence description including main location (s).**	The smart postcard 2025 (early tested in the Moncalieri City in 2012) is conceived as a bottom up engagement "easy-to-use" tool aimed at fostering the dialogue among citizens, enterprises and policy makers in a local context. Due to its high replicability level, this "imaginative/pretend game" (early designed by the Moncalieri Municipality together with the SiTI research Institute of Turin and the European Association AICCRE) can match the needs of different urban contexts, especially in those such as Moncalieri, within a major metropolitan district (in this case Turin which is an example of a ex one company town that has recently started a re-design governance process needed to widen its leading role and sustainability polices together with its nearby municipalities).
	What do you most want to share with others and why?	The postcard focuses on future *desiderata* smart goals that citizens imagine. The tool invites the citizens to fill in pre-defined fields (a main 2025 objective, a metaphoric suggestion from the "future city" and which actions could have guided the changes). The responses, coming from different cities in similar contexts, may strategically inform the existence of common feelings or stimulating differences in the way citizens imagine their future "smart local context". These hints could be conveyed in an on-line hub to be shared by other cities.
	Who needs to hear what you have to say the most?	□ Decision makers of the engaged cities □ Other Cities □ Private partners □ Citizens
	What particular topic/area have you gained knowledge about through your project?	□ Bottom up approach at different levels of governance.
Overview	**What vertical does your project target?**	□ ICT □ Mass data

Commitment: 2025 – Smart Postcard

Results	**Project scope and explanation provides**	The scope of the project is: (1° - short term) to share knowledge of the citizens needs, stimulating their imaginative positive potential instead of asking them what the city should change. The tool allows the decision makers (within each local context) to: □ indirectly understand the citizens' needs; □ stimulate citizen participation; □ ppen up a dialogue between cities adopting the same tool (to enhance international cooperation); □ enhance the citizens' consciousness of their active role. As a consequence, the results should be immediately helpful for policy makers, private stakeholders, etc., to set a road map towards better "focused on targets" governance. □ (2° - mid-long term) to gather ideas, initiatives from civil society in order to stimulate crowdfunding & crowdsourcing initiatives paving the way for citizens direct involvement in the smart transition of the cities.
	What are your achievements so far? How do you measure success?	On the basis of a first pre-test in Moncalieri in 2012, the "smart postcard" seems to achieve the expected results. The participants offer a future vision of the City based on unusual and creative suggestions. An interesting achievement carried out concerns the "who did what" section of the postcard: the citizens seem to underestimate their potential active role. A huge direct top down model still represents the Moncalieri *imaginarium* to drive change.
	What are your achievements so far? Innovation: what is new and different about your approach?	Similar tools have already been successfully tested in the past. We recall the representative case of Glasgow (2006) tested in schools. What is new is our application modality is able to address the tool (intended as a "research-action") to all citizens (public body included) thanks to the use of on line services that can also support the data collection, thereby facilitating the comparison of results from applications in different local contexts.
	Replication: in what ways has your project replicated?	The interactive, creative "smart postcard" tool is highly replicable thanks to the following reasons: □ it points out issues of general "strategic importance" for municipalities; □ it can be easily spread/administered on-line. At the moment, the Moncalieri Municipality has opened a dialogue with its 25 year twin town Baden Baden Municipality to share the tool.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	The project naturally expresses a high degree of integration among the different sections of the cluster as it, in line with the Smart Cities & Communities EIP and the triple bottom line gain for Europe, focuses on "sharing knowledge" between citizens and their institutional representatives, as well as between different municipalities. Depending on the emerging results, the specific discussed themes could change by single reality.
Learning points	**What has been your experience with public/private/civil society partners?**	The small to medium municipalities cannot easily speed up administrative procedures or initiatives. Moncalieri, located in the metropolitan area of Turin, suffers from some of the "metropolitan context typical problems" being not adequately sized, from an administrative point of view, to manage its complex local role. The cooperation with research institutes, the private sector, the third sector, and citizens it is of a paramount importance to concretise actions.
	What has failed that can be shared	Since the tool was presented and tested in 2012 we have faced some problems in

Commitment: 2025 – Smart Postcard

	to educate others?	designing the "wide dissemination" of the postcard. The opportunity of involving specific clusters separately - initially preferred (schools, local associations, third sector), seems to have slowed down the process.
	Could the work you do benefit from structural reforms? If so, what?	It could be interesting to share and discuss the contents of the postcard in order to acquire feedback from the Platform as well as to further disseminate it in other countries.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	Not applicable yet.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	The local cooperation is the basis of sustainable growth.
	Is your project economically sustainable?	Could be interesting to find a local promoter, especially for the data collection and elaboration.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	Not applicable yet.

5.4.3 FOCUSS4AGUEDACAMARAMUNICIPAL

Focus4AguedaCamaraMunicipal

	What do you most want to share with others and why?	The Municipality of Águeda implemented a few years ago an integrated Administrative Reform Program. This program has been recognized nationally as a good practice and has integrated a certified Quality Management System (ISO 9001) and is part of the Municipality's Commitment to Excellence under EFQM.
		One of the major results of the reform is treatment significant improvement in terms of quality and response time for licensing applications.
		It is now possible to have a company's licensing application result in only 48 hours.
		A response time has been established and is under an operation control and management system that guarantees all the legal schedules to be accomplished.
		This process required not only a strong commitment from the Mayor but also the empowerment of municipal employees, a committed collaborative work with the Information System suppliers and also Government support. One of the clear innovations in this process of reengineering effort was the digitalization of all the documents and tasks, online application submission and "Licenciamento na Hora" – a measure that allowed time reduction in the licensing processes due to a strong control system put in place that concentrating on post licence controls on works (using a sampling approach). This reform process, that was considered a pilot, has highlighted a lot of legal and practical problems that were solved only after by the Government.
		In terms of citizens' engagement, the municipality launched recently an App that allows citizens to submit suggestions and incidents using smartphones and geolocation in completely end-to-end integrated solution with the Municipality's core Information Systems avoiding information duplication and also any treatment process change.

Focus4AguedaCamaraMunicipal		
		In the future, this platform will allow citizens' engagement and collaborative planning and also give more transparency to the Municipal response.
		In relation to mobility and following the Covenant of Mayors and Mayors' Adapt Initiatives the Municipality acquired a hybrid and electric vehicles fleet dedicated to its use and started an electrically assisted bicycle sharing project – beÁgueda – and started a large public lightning refurbishment project. This project has been development in strong cooperation with SMEs and R&D institutions that are part of the Lightning Living Lab. It's now also working with a set of partners in a nearly Zero-Energy Buildings initiative.
		Águeda is member of ENoLL with two active Living Labs: the Lightning Living Lab and Águeda Living Lab that is related to entrepreneurship promotion, company cooperation and citizens' participation. Both the LL count on strong local SMEs participation.
		One of the major results from Águeda Living Lab is a modular and sustainable housing project (named ÁguedaConcept) that is used as demonstrator and has been present at some exhibitions promoting Águeda's enterprises capacities and competences.
		Águeda has two incubation programs including cultural and company incubators managed in cooperation with Universities and Technology Transfer Institutions.
		The Municipality of Águeda is now working on its transparency. There are two fundamental projects - I4C (Information for Citizens) and I4M (Information for Management) – contributing to this objective.
		I4C is an open-data platform available to citizens and companies where they can find raw information from sensors and other electronic devices in the city but also some processed information related to energy and water providers' invoices, the Municipality's response time to applications, financial situation or several assets (cultural, buildings, etc.). This data and information not only shows to everyone what is really happening in the city but also allows entrepreneurs to develop new services, applications or business models.
		I4M is an information management platform to be used by municipal staff and managers that collects information and performance indicators from different Information Systems and Devices spread over the territory. This platform allows a better decision support and makes every detail transparent to the managers (including its main stakeholder – the Mayor).
		This platform and other services will be migrated to the FI-WARE platform and then integrated in a larger ecosystem in Europe, creating even more opportunities for businesses. This way is providing better and more innovative tools to citizens and entrepreneurs encouraging them to go to the limits of their creativity.
		There is also another information platform available to citizens: a television broadcasting channel publicly available through the Internet and through a cable TV provider. On this channel, the most important events promoted in the Municipality are presented including social and cultural ones organized by different stakeholders and the Municipality's General Assemblies. This channel (and all the assets produced) is now part of the collective memory of the city and its citizens.
	Who needs to hear what you have to say the most?	We think that our work is relevant to other municipalities, business associations, Living Labs, Fab Labs and clusters.
		Regarding municipalities, Águeda has been involved in several benchmarking

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		activities and has been visited by many other municipalities over the past few years. Regarding other entities, we think that most of our collaborative work with businesses (implementing agile PCP practices, for instance) can be used by others and in different situations and challenges.
	What particular topic/area have you gained knowledge about through your project?	We have been working on different projects (and we are now working on social innovation projects) in different fields. We have acquired detailed but also transversal knowledge that can be used as good practice for project management. We think that the most important knowledge we have gained is about change management.
Overview	**What vertical does your project target?**	▫ Mobility ▫ Energy ▫ Infrastructure ▫ ICT
	Project scope and explanation	Águeda wants to lead in the wellbeing and quality of life of its citizens. The plan that we are proposing to develop (and that we are progressively implementing) wants to transform the city and make it smarter and focused on its citizens. ICT is only a means to an end to it work in a more efficient, effective and transparent manner. We believe that this plan will lead to more challenges and more opportunities to sustainable socio-economic development all based on a global and holistic management system over all the axes of city and community development. We think that we are differentiating ourselves from other Smart City initiatives that base their model on mobility, energy efficiency or data. All this change process that we are now planning is included in the strategy sketched in the Covenant of Mayors' plan and includes environment, energy efficiency, transparency, mobility, governance and citizenship, social innovation, culture, creativity and entrepreneurship. By integrating all these axes, Águeda will become a more efficient and, in the medium to long term, a sustainable city. As proposed, in our commitment application we are now working on the strategic plan for "Águeda is a Smart City" and launching several applications and initiatives in the community. Our plan is being developed in cooperation with the Portuguese ICT Cluster (TICE.pt), the Centro Region's Sustainable Construction Cluster (centroHabitat), an ICT consultancy SME (Talents and Treasures) that is managing Águeda Living Lab implementation and the University of Aveiro (in a broad sense). This plan will be submitted for Municipal General Assembly approval during the first semester of 2015 and will be discussed in active citizen and civil society groups. During its preparation, funding models will be identified and all the application elaboration works will be distributed. We intend to apply to the HORIZON 2020 H2020-SCC-1 large-scale lighthouse project call together with relevant European cities identified by clusters that already partner with those working with us and, of course, to Structural Funds. We will also seek private sector funding opportunities and demonstrator projects such as Living Labs and Fab Labs.
Impl...	**What are your achievements so far?**	All our present initiatives are focused on gains both in smart local development,

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	How do you measure success?	citizens' wellbeing and the quality of life and public services quality and availability. Most of them aren't well monitored at the present time but will be with the evaluation model that we are developing and that will enable us to evaluate the performance of projects starting in 2001.
		The Administrative Reform process has allowed citizens and companies to gain more trust once schedules were accomplished, processes made easier and faster, and paper and time reduced in licensing applications.
		These gains were fundamental in supporting entrepreneurship and wealth creation through companies. This process is being replicated in other services allowing substantial cost reductions and better perception of services from citizens.
		The Public Lightning refurbishment process has enabled a group of companies to jointly develop (and with the local University) innovative products that are now being sold all over the world. This development process in the scope of the Lightning Living Lab can be considered a successful Public Pre-Commercial Procurement measure that enabled a problem to be solved both in a better manner and also supporting the collaboration of local companies.
		Águeda Living Lab has been supporting citizens (especially young people) and SME engagement in providing new solutions based on open technologies (e.g. Arduinos and Raspberry Pi) to the community. These solutions are replicable and can provide young entrepreneurs the opportunity to launch their new ventures based on collective creativity.
		The Local Business Incubator (associated with the Parque Empresarial do Casarão) has created an important entrepreneur movement enabling self-employment andnew ventures based on creativity.
		I4C, "A minha Terra" and Public Participation applications are allowing citizens to interact more effectively with the Municipality and thus generate more citizens' contributions to Municipal activities.
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	All the projects have been developed in strong partnerships with public, private, societal and research/education organisations.
	What has failed that can be shared to educate others?	All the change and innovative processes have faced some difficulties. For instance, when we started the Administrative Reform process we went further than the legal framework allowed (despite the full support of the Government). This allowed changes to be suggested and now they are generally available. At that moment information systems were not ready for the process and were built during it in strong partnership with the supplier company. To tackle the reactions to change and to surpass some process obstacles was quite fundamental and required the strong commitment of top management and the empowerment of implementation teams.
	Could the work you do benefit from structural reforms? If so, what?	Yes
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	No. All the data initiatives that may have privacy issues are anonymised.
	What holds you back from doing	All our initiatives all fully backed with strong support from the Mayor and

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what you're doing? What have you learned that can make a difference in overcoming those barriers?	stakeholders' engagement and empowerment. We think this is critical to success in general. The second factor is the conservatism of city authorities, who tend to see public participation as a means of communicating already approved spatial plans rather than a way to actively engage citizens. That is why structural reforms are needed to stimulate urban co-creation.
Is your project economically sustainable?	Yes.
What type of funding have you received? On a spectrum of Risk capital - > grants?	Most of our projects were supported by Structural Funds but we have been concerned with the payback since their design. Most of the initiatives were shown to be fully funded by identified savings.

5.5 URBAN AND RURAL LINKS

5.5.1 BARI SMART CITY & INNOVAGRITECH SRL

Commitment: 7695 - Bari Smart City & Innovagritech Srl		
Intro & Key points	**Two-sentence description including main location (s).**	The goal of this commitment is to build an EIP for bridging urban and rural areas, qualifying existing linkages between urban and rural areas for sustainable development and economic growth, through the use of ICT tools. The area in which we operate corresponds to the Bari Metropolitan Area that since 2015 has replaced the Province of Bari.
	What do you most want to share with others and why?	Our experience in rural development, public-private partnerships and citizens and stakeholder engagement in a deprived European area to develop an integrated strategy for bridging smart cities and their surroundings areas.
	Who needs to hear what you have to say the most?	Within the EIP Smart Cities' AC, we are interested in collaborating with other commitments that share the goals and objectives of our commitment as well as scaling up the commitment thus including more partners, in particular from the ICT sector. We are also interested in building different European clusters or pilot areas which promote citizen engagement to bridge smart cities and their surrounding areas. We would like to share our experience dealing with rural territories and the LEADER approach as well as our vision of developing a model integrating rural-urban partnerships, Living Labs and the smart cities approach. The proposed model is intended to be scalable across European territories characterised by similar urban-rural dynamics.. The consortium could therefore work as a pilot area to test and demonstrate the scalability and adaptability of smarter solutions found across the EU.
	What particular topic/area have you gained knowledge about through your project?	Mainly understanding of citizens and local stakeholders needs in the areas where we operate.
Overview	**What vertical does your project target?**	□ Mobility □ ICT □ Other: research, education and training
	Project scope and explanation	The growing interdependence between urban and rural areas is generally acknowledged. Urban problems are sometimes located in rural areas and vice versa, but also solutions for urban problems can be found in rural areas, and vice versa, too. The proposed commitment originates from the analysis of the heterogeneous social, cultural and economical contexts prevailing in Apulia Region and on the effects of such heterogeneity for the whole innovation capacity of the area. The analysis reveals a non-negligible gap between the innovation capabilities of rural and urban areas. These dynamics are common to most European rural areas surrounding major cities and this will assure the scalability of the project. Bari is the capital city of the region. Over the past few years, the city has experienced an extraordinary development. On the one hand, the rural areas surrounding the city are still characterised by a low capability to innovate. This innovation gap is likely to jeopardise the regional imbalances, thereby transforming the interdependences between rural and urban areas from potential opportunities

Commitment: 7695 - Bari Smart City & Innovagritech Srl

		to risk factors to sustainable development. It is thereby important that all municipalities, included those in rural areas, should be involved in the process of making European cities smarter. The goal of this commitment is to build an EIP to bridge urban and rural areas, improving existing linkages between urban and rural areas for sustainable development and economic growth through the use of ICT tools. Up-to-now we are in a planning phase, evaluating strategies and options within our commitment.
Results	**What are your achievements so far? How do you measure success?**	Project's deliverables: 1. developing a set of indicators to understand the different pattern of innovation processes and the interdependences between the innovation models in urban and rural areas; 2. building innovation clusters through the GIS technology; 3. realizing the platform initially focused on energy, mobility and social innovation initiatives; 4. communication and dissemination - increasing both the number of territories and actors participating in the project, ensuring a pro-active and collaborative participation; 5. realizing a 'Best Practices' handbook to maximise the benefits from the growing interdependence between urban and rural areas. Possible indicators: the number of the platform's active participants; the number of identified innovation clusters; the number and heterogeneity of involved actors, the number of stakeholders participating in workshops for promoting the platform and projects (workshops' signature sheets); the number of best practices identified; the number of best practices implemented in the territories.
	Innovation: what is new and different about your approach?	Integrating rural areas in the process of making European cities smarter.
	Replication: in what ways has your project replicated?	The project can be replicated in all EU cities surrounded by important rural areas.
	Integration: in what ways does your project overlap with other areas and initiatives of the EIP?	▫ Energy: investigate innovative integrated urban farming systems, which can improve the efficiency in the use of heat, water, waste or by-products from urban sources for agricultural production. ▫ Mobility is one of the main problem areas where the linkages between rural and urban areas operate. The scarce road and railway networks connecting rural and urban area are one of the main limits to making rural areas smarter, as citizens in these territories often suffer from isolation, resulting in a competitive disadvantage with regards to urban citizens. Improving the transport sector can help achieve more sustainable energy production and use in both rural and urban areas. ▫ ICT is one of the most effective tools to reduce isolation and the competitive disadvantage of rural actors. ▫ Supporting creative industries to bridge rural and urban areas: Creative industries generate 3.5% of the EU GDP while employing around 3% of the EU population. Large urban areas and capital city regions dominate the creative and cultural industries: one of the current reasons for rural depopulation is the creativity gap between these areas and the bigger cities. In addition, bigger companies rely on creative SMEs to discover new opportunities and ventures.

Commitment: 7695 - Bari Smart City & Innovagritech Srl

Learning points		
	Partnerships **What has been your experience with public/private/civil society partners?**	Mainly in the framework of the LEADER Programme: Local Action Groups (LAGs) are made up of public and private partners from the rural territory, and must include representatives from different socio-economic sectors. They receive financial assistance to implement local development strategies by awarding grants to local projects. Five Apulian LAGs are members of this commitment.
	What has failed that can be shared to educate others?	Still in a planning phase.
	Could the work you do benefit from structural reforms? If so, what?	The full implementation of broadband in the whole area could surely result in important benefits for our project and activities.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	Not at this stage.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	▫ **1.** Lack of data and information on best practices. Possible solution: building our own database from stakeholder and citizen interviews and surveys. ▫ **2.** Capacity building and lack of engagement/active participation among citizens. Possible solution: promoting citizen engagement in less innovative cities and areas is a crucial point in order to achieve a better understanding of innovation processes since these dynamics differ among different areas and contexts. The living lab approach can be an interesting solution especially if integrated with training/education activities and the involvement of the creative industries. ▫ **3.** Lack of trust. Possible solution: building trust is a long-term process and we are moving in the right direction. Transparency in administration and decision-making and the involvement of public authorities are two crucial factors.
	Is your project economically sustainable?	Yes, in the long term. The starting phase would probably need to be funded.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	No.

5.5.2 NECADA

Commitment: 7362 - NECADA

Intro & Key points		
	Two-sentence description including main location (s).	The objective is to scale-up, test and demonstrate a sustainability optimization decision support system to improve urban planning, policies, and processes related to construction of new near zero buildings and refurbishment of existing ones.
	What do you most want to share with others and why?	We want to show the availability of this tool to improve and test his capabilities.
	Who needs to hear what you have to say the most?	Urban planners, architects, designers, politicians, energy managers…

Commitment: 7362 - NECADA

Overview		
	What particular topic/area have you gained knowledge about through your project?	▫ NZEB ▫ Optimization ▫ Simulation ▫ Energy ▫ Urban-planning
	What vertical does your project target?	▫ Simulation ▫ Optimization ▫ Urban planning ▫ Co-simulation ▫ Energy grids Normative generation
	Project scope and explanation	The objective of the project is to scale-up, test and demonstrate a sustainability optimization and decision support software tool that will contribute to improve urban planning, policies, and processes related to construction of new near zero buildings and refurbishment of existing ones. The decision tool will consider environmental, social and economic criteria, according to nearly-zero energy buildings standards and regulations. Sustainability factors to be considered will not only include energy consumption, but also life cycle analysis of materials, used natural resources, transport costs, etc. The decision tool will be based on an optimization and co-simulation software developed by inLab FIB (An innovation and research lab integrated in CIT UPC) which is currently being used to assess companies and administrations in building and refurbishment regulations and processes. This tool is able to automatically consider thousands of different possibilities, by means of integrating existing open source calculus engines, and will be prepared to scale and be easily parameterized or extended to furthermore support options and complexity.

5.6 PRIVACY & RIGHTS

5.6.1 UNIVERSITAT DE GIRONA

Commitment: 7353 - Universitat de Girona

Intro & Key points		
	What do you most want to share with others and why?	Citizenship Indicators based on the European Charter for the Safeguarding of Human Rights in the City.
	Who needs to hear what you have to say the most?	ICT companies able to automatically capture data to feed the proposed citizenship indicators.
	What particular topic/area have you gained knowledge about through your project?	Social metrics and monitoring.

Overview	**What vertical does your project target?**	ICT, social sustainability.
	Project scope and explanation	We have elaborated a set of 78 indicators measuring the 28 citizens' rights described in the European Charter and have prepared a summary of the most essential indicators that would measure the Global Charter Agenda for the Safeguarding of Human Rights in the City, a more universal and basic version of the European Charter. Now, we are sharing the indicators with standardization bodies, such as ISO, for the sake of the revision of sustainable smart cities and communities standards already in place, such as ISO 37120.
Results	**What are your achievements so far? How do you measure success?**	By proving that the indicators can measure a given citizens' right, we are able to measure the performance of cities in the provision of services and procedures that would safeguard citizens' rights.
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	In some of the indicators we need data from all these stakeholders and they are usually willing to collaborate.
	What has failed that can be shared to educate others?	We had to simplify some of the indicators because of the non-availability of data.
	What type of funding have you received? On a spectrum of Risk capital - > grants?	The costs for conducting the pilots have been covered by piloting cities.

5.6.2 PRIPARE

Commitment: 7001 - PRIPARE		
Intro & Key points	**What do you most want to share with others and why?**	The need for privacy. Informing on European moves for standardisation of Privacy-by-design.
	Who needs to hear what you have to say the most?	All management stakeholders for the risk analysis part of Privacy-by-design. All ICT developer stakeholders for the solution analysis part of Privacy-by-design.
	What particular topic/area have you gained knowledge about through your project?	Integration of privacy in the requirements, design, deployment, operation, maintenance and withdrawal of any smart city capability. See the project's website (pripareproject.eu).
Overview	**What vertical does your project target?**	□ ICT
	Project scope and explanation	Provision of guidelines for privacy-by-design and involvement in standardisation: □ Results to-date: deliverable on privacy-by-design methodology □ March 2015: first training □ September 2015: final guidelines
Results	**What are your achievements so far? How do you measure success?**	Gains made on citizen empowerment concerning privacy. Success measured in involvement in OASIS, ISO SC27 and European Mandate for standardisation.

Commitment: 7001 - PRIPARE		
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Multiple contacts in dedicated conferences (e.g. CPDP conference).
	What has failed that can be shared to educate others?	The integration of privacy-by-design.
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	The commitment only focuses on how to solve privacy issues.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	□ Lack of awareness. □ Stronger policies mandating training, and application of privacy-by-design.

5.6.3 MANDAT INTERNATIONAL - IOT LAB AND PRIVACY FLAG

Commitment: 4025 - Mandat International		
Intro & Key points	**Two-sentence description including main location (s).**	MI is coordinating European projects developing privacy-by-design crowd sourcing and crowd sensing technologies (www.iotlab.eu), as well as privacy risk area assessment tools. MI is based in Geneva with a strong expertise in the Internet of Things (IoT), IoT interoperability, IoT scalability, IPv6, deployment, control and monitoring,- and is committed to promoting sustainable development and Privacy friendly ICT technologies for crowd sourcing, citizens' participation, Internet of Things deployments, energy efficiency, environmental protection, etc.
	What do you most want to share with others and why?	A tool enabling crowd sourcing and crowd sensing tool based on privacy-by-design (IoT Lab: htt://www.iotlab.eu) in order to test it and validate it in new cities, and a Privacy risk assessment tool and service http://www.europrivacy.org.
	Who needs to hear what you have to say the most?	Smart cities, stakeholders concerned by personal data protection, and risk analysis of Privacy-by-design. All ICT and IoT developers and deployers
	What particular topic/area have you gained knowledge about through your project?	Integration of privacy in the requirements, design, deployment, operation, maintenance and withdrawal of any smart city capability. See the project's website (pripareproject.eu).
Overview	**What vertical does your project target?**	▫ ICT, Privacy
	Project scope and explanation	Tools for privacy-by-design crowd sourcing and crowd sensing Tools for privacy risk analysis ▫ Results to-date: privacy-by-design tool and methodology ▫ Privacy Risk Assessment Tool developed
Results	**What are your achievements so far? How do you measure success?**	Privacy-friendly crowd sourcing tool. Compliance with European and international personal data protection norms. Privacy risk assessment tool already used in Santander Improved privacy compliance for IoT deployments
	Innovation: what is new and different about your approach?	Integration of crowd sourcing and crowd sensing with IoT deployments User-friendly privacy risk assessment tool.
	Replication: in what ways has your project replicated?	Replicable by design
Learning points	**Partnerships** **What has been your experience with public/private/civil society partners?**	Positive, but requiring to educate stakeholder on privacy risks, on both technological and legal dimensions
	Are there privacy issues associated with your project and citizens? What is at stake? Who is involved?	Personal data protection is at the core of your technological approach and is sensitive for most IoT deployment in smart city.
	What holds you back from doing what you're doing? What have you learned that can make a difference in overcoming those barriers?	▫ Lack of awareness on privacy risks. ▫ Large scale pilots to test and demonstrate the emerging technologies ▫ Stronger policies mandating training, and application of privacy-by-design.
	Is your project economically sustainable?	Yes it is.
	What type of funding have you	Different sources of funding.

Commitment: 4025 - Mandat International

	received? On a spectrum of Risk capital - > grants?	